



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7

11201 Renner Boulevard
Lenexa, Kansas 66219

MEMORANDUM

SUBJECT: Request for Approval of the Third Five-Year Review Report, Cornhusker Army Ammunition Plant, Grand Island, Nebraska

FROM: Bill Gresham, Remedial Project Manager *Bill Gresham*
Iowa/Nebraska Remedial Branch

THRU: Jim Stevens *JS*
Office of Regional Counsel

Diana Engeman, Acting Chief *Diana Engeman*
Iowa/Nebraska Remedial Branch

TO: Mary Peterson, Director
Superfund Division

This memorandum is to transmit the Third Five-Year Review Report on the Former Cornhusker Army Ammunition Plant, Hastings, Nebraska, prepared by the U.S. Army Corps of Engineers, Kansas City District. This report was prepared in accordance with section 121 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and 40 Code of Federal Regulations § 300.430(f)(4)(ii).

The triggering action for this review was the completion of the Second Five-Year Review Report on September 14, 2010. The Five-Year Review is required because the selected remedies do not allow for unlimited use and unrestricted exposure. This review evaluates protectiveness of the remedies for OUs 1, 2, 3 and 4. Pursuant to Records of Decision in 1994, 1998, 1999, and 2000, an Explanation of Significant Difference in 1996, and a ROD Amendment in 2001, the remedies included: extraction and treatment of explosives-contaminated groundwater with discharge to onsite streams; excavation of contaminated soils at OU3; monitored natural attenuation of volatile organic compound contamination in groundwater; institutional controls to prevent residential use of groundwater; and deed restrictions to prevent residential use of OU4 areas of concern.

A draft version of the report was previously reviewed by the EPA and NDEQ, and comments were forwarded to USACE. USACE and the EPA revised the report to address the EPA's comments.

The EPA concurs with USACE that the remedies are protective. During the review process, there was significant attention given to the fact that institutional controls have been inconsistently applied/enforced, which could theoretically affect the long-term protectiveness of the remedy. USACE maintains they have "no authority to take an enforcement action for deed restriction violations" and that

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such action "is a regulatory function and if requested or required will have to be addressed by the EPA or the State". The EPA disagrees with USACE on this issue, and states that the transferring agency which creates the restrictions has the authority and responsibility to enforce deed restrictions (absent language in the deed to the contrary), and reiterates that USACE has responsibilities to ensure that the land use controls are maintained over time. However, both organizations have agreed to jointly develop a memorandum which will address ICs and LUCs specifically, ensuring consistent future enforcement.

Also during the review process, the EPA brought up the fact that there has never been sampling for perchlorate at the Cornhusker site. Perchlorate is associated with the kinds of munitions produced at Cornhusker, in the timeframes during which munition production occurred. Although there is no record of its use at Cornhusker, the EPA considers it prudent to conduct some sampling to confirm whether perchlorate is present as a contaminant. USACE disagrees, stating that it does not intend to conduct such sampling. Given USACE's resistance to agreement on perchlorate sampling, the EPA is considering options for conducting such sampling ourselves. For the purpose of this document, the lack of perchlorate data should not be considered an issue preventing acceptance.

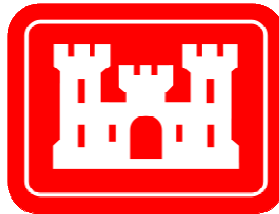
Attached is a copy of the report for your consideration and approval. The final signed report and the supporting information will be added to the Administrative Records file for the site.

Attachment

Third Five-Year Review
For
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

June 2015

Prepared By:



U.S. Army Corps of Engineers
Kansas City District
Kansas City, Missouri

**THIRD FIVE-YEAR REVIEW REPORT
CORNHUSKER ARMY AMMUNITION PLANT
GRAND ISLAND, NEBRASKA**

Approved by:

M. P. D. H. LTC 30 JUN 2015
Signature Date
DEPUTY COMMANDER

FINAL
FIVE-YEAR REVIEW REPORT

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Prepared by:
U.S. Army Corps of Engineers, Omaha District
Omaha, Nebraska

Prepared for:
Department of the Army
June 2015

Approved by:

Mary P. Peterson

Date:

8/13/2015

Executive Summary

The United States Army Corps of Engineers (USACE) has conducted the third five-year review of the remedial actions for the former Cornhusker Army Ammunition Plant (CHAAP) located near Grand Island, Nebraska. The purpose of this five-year review is to determine if remedial actions implemented at the site remain protective of human health and the environment. Five-year reviews are required at CHAAP because hazardous substances, pollutants, or contaminants remain on-site above levels that would allow unlimited use and unrestricted exposure. The triggering action for this third five-year review was the completion of the second five-year review report on September 14, 2010.

CHAAP was a government-owned, contractor-operated (GOCO) facility constructed in 1942 to produce artillery shells, mines, bombs, and rockets for World War II and the Korean and Vietnam conflicts. CHAAP was operated intermittently for 30 years, with the most recent operations ending in 1973. Explosives wastes and residues associated with plant operations have resulted in soil and groundwater contamination on-site and groundwater contamination off-site to the northeast of the site. Areas of environmental concern at CHAAP have been designated as five individual Operable Units (OUs) as described below.

- OU1 includes both the on-site and off-site explosives-contaminated groundwater plumes.
- OU2 includes the Administrative and Base Housing Areas, Abandoned Burning Area, Drainage Ditches, Magazine Areas, Miscellaneous Storage Areas, and Sewage Treatment Plants.
- OU3 includes the Pistol Range (three of the four subsites), Nitrate Area, Shop Area, and Sanitary Landfill.
- OU4 includes the unsaturated zone of Load Lines 1 through 5 and the Gravel and Clay Pit Area.
- OU5 includes the Pistol Range Area Sites (Firing Range and Static Ejection Test Site), the Burning Grounds, and the Fuze Destruction Areas on Tracts 19B and 20B. At the end of fiscal year (FY) 2004, OU5 was reassigned to the Military Munitions Response Program (MMRP).

Individual Records of Decision (RODs) were prepared to evaluate and select remedies for OUs 1 through 4. A ROD has not been prepared for OU5, which has been redesignated Munitions Response Site (MRS) CAAP-005; therefore, OU5 was not evaluated as part of this review. The selected remedies for OUs 1 through 4 are as follows:

- OU1: Groundwater extraction and treatment for the on-site plume, monitored natural attenuation (MNA) for the off-site plume, and institutional controls to limit public exposure to contaminated groundwater both on-site (in the form of deed restrictions) and off-site (in the form of a City Ordinance).
- OU2: No further action/no response action.
- OU3: Excavation and off-site disposal of contaminated soils, MNA of volatile organic compounds (VOCs) in groundwater at the Shop Area, and deed restrictions to prevent residential use in the form of proprietary institutional controls restricting future use of the property.
- OU4: Institutional controls in the form of deed restrictions to prevent residential use.

To implement the selected remedies, a groundwater treatment plant (GWTP) was constructed to treat the on-site portion of the explosives plume at OU-1 along with long-term monitoring (LTM) of groundwater contamination associated with the off-site portion of the explosives plume. From December 2006 to the present an optimization effort to include a voluntary injection program has been conducted at OU1. The injections were initiated in an attempt to enhance anaerobic in-situ bioremediation and cometabolic biodegradation processes at the primary OU1 source areas. The injections were expected to reduce the overall timeframe for closure of the GWTP. Because these injection activities are not a remedial requirement of the OU1 ROD and have been conducted as an optimization effort, technical evaluation of the injections was not included in this five year review.

At OU-3 the excavation and removal of contaminated soils has been completed and LTM is in place to monitor the VOCs in groundwater. Deed restrictions and other institutional controls specified in the ROD documents for OU1, OU3, and OU4 have been implemented in order to prevent human exposure to contaminated soil and groundwater.

A site visit was conducted on July 30 and 31, 2014 as part of this five-year review. The OU1 groundwater treatment plant was operating and plant equipment appeared to be in good condition. The well house for the only operational extraction well (EW-7) was inspected and the equipment inside appeared to be well maintained. There were no private residences observed at the site, and the majority of the land was observed to be under agricultural use with a smaller portion of the land under industrial use.

Based on data from the plant and the monitoring wells, the groundwater treatment portion of the OU1 remedy is functioning as designed. The OU1 institutional controls portion of the remedy

require further evaluation as they are not being consistently enforced per the following observations: domestic and high yield irrigation wells have been installed and screened within the contaminated aquifer, and well restriction language has not been consistently incorporated into deeds for excessed property. However, modeling was performed to determine whether the installation of irrigation wells screened within the contaminated aquifer has introduced risks associated with this exposure pathway. The model concluded that this exposure pathway was not a risk and did not impact the protectiveness of the remedy. Furthermore, it was determined that groundwater from the domestic wells installed within the vicinity of the OU1 plume was not being used for human consumption. Based on this information the OU1 remedy is functioning as designed.

No changes in land use patterns have occurred at OU2 since the last five-year review. Thus, the selected remedy for OU2 is functioning as designed.

The selected soil remedies for OU3 of soil excavation and groundwater MNA are functioning and achieving the desired results as intended in the associated ROD document. However, the groundwater use institutional controls do not appear to have been consistently enforced per the observation that domestic and high yield irrigation wells have been installed and screened within the contaminated aquifer. However, modeling was performed to determine whether the installation of irrigation wells screened within the contaminated aquifer has introduced risks associated with this exposure pathway. The model concluded that this exposure pathway was not a risk and did not impact the protectiveness of the remedy. Furthermore, it was determined that groundwater from the domestic wells was not being used for human consumption. Based on this information the OU3 remedy is functioning as designed.

The selected remedy for OU4 of institutional controls to prevent residential use is functioning as designed. The selected remedy is achieving the desired results as intended in the associated ROD document.

This third five-year review provides an assessment of these remedial actions to determine if they remain protective of human health and the environment. Based on the findings of this five-year review, the remedies at OU1, OU2, OU3, and OU4 are protective of human health and the environment.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site Name: Cornhusker Army Ammunition Plant		
Region: 7	State: NE	City/County: Grand Island/Hall County
SITE STATUS		
NPL Status: Final		
Multiple OUs? Yes	Has the site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: Other Federal Agency Department of the Army		
Author name (Federal or State Project Manager): United States Army Corps of Engineers		
Author affiliation: United States Army Corps of Engineers Kansas City District		
Review period: 04/30/2014 – 9/15/2015		
Date of site inspection: 07/31/2014		
Type of review: Statutory		
Review number: 3		
Triggering action date: 09/14/2010		
Due date (five years after triggering action date): 09/15/2015		

OU1 Protectiveness Statement

Operable Unit:	Protectiveness Determination:	Addendum Due Date:
1	Protective	n/a

Protectiveness Statement: The remedy at OU1 is protective of human health and the environment; however, the OU1 institutional controls portion of the remedy require further evaluation as they are not being consistently enforced per the following observations: domestic and high yield irrigation wells have been installed and screened within the contaminated aquifer, and well restriction language has not been consistently incorporated into deeds for excessed property. It is recommended that the installation generate a memorandum clarifying the OU1 institutional controls.

OU2 Protectiveness Statement

Operable Unit:	Protectiveness Determination:	Addendum Due Date (if applicable):
2	Protective	n/a

Protectiveness Statement: The remedy at OU2 is protective of human health and the environment.

OU3 Protectiveness Statement

Operable Unit:	Protectiveness Determination:	Addendum Due Date (if applicable):
3	Protective	n/a

Protectiveness Statement: The remedy at OU3 is protective of human health and the environment.

OU4 Protectiveness Statement

Operable Unit:	Protectiveness Determination:	Addendum Due Date (if applicable):
4	Protective	n/a

Protectiveness Statement: The remedy at OU4 is protective of human health and the environment.

Overall Site Protectiveness Statement

Operable Unit:
1, 2, 3, and 4

Protectiveness Determination:
Protective

*Addendum Due Date
(if applicable):*
n/a

Protectiveness Statement: The remedy for the site is protective of human health and the environment.

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List of Acronyms and Abbreviations

1,1,2-TCA	1,1,2-trichloroethane
1,2-DCA	1,2-dichloroethane
1,3,5-TNB	1,3,5-trinitrobenzene
2-Am-DNT	2-amino-4,6-dinitrotoluene
2,4-DNT	2,4-dinitrotoluene
2,6-DNT	2,6-dinitrotoluene
4-Am-DNT	4-amino-2,6-dinitrotoluene
µg/kg	micrograms per kilogram
AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirement
AST	Aboveground Storage Tank
bgs	below ground surface
CAPE	Cape Environmental Management, Inc.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CET	CET Environmental Services, Inc.
CFR	Code of Federal Regulations
CHAAP	Cornhusker Army Ammunition Plant
CHPPM	Center for Health Promotion and Preventative Medicine
COC	Chemical of Concern
COPC	Chemical of Potential Concern
CPNRD	Central Platte Natural Resource District
CRQL	Contract-Required Quantitation Limit
CSF	Cancer Slope Factor
DoD	Department of Defense
DNX	hexahydro-1,3-dinitroso-5-nitro-1,3,5-triazine
DTE	Detroit Edison Rail Services
EA	Excessing Assessment
EDC	Economic Development Corporation
EEI	Envirodyne Engineers, Inc.
EFH	Exposure Factor Handbook
EPIC	Environmental Photographic Interpretation Center
ERA	Ecological Risk Assessment
ESD	Explanation of Significant Difference
EW	Extraction Well
FFA	Federal Facility Agreement
Freon 113	1,1,2-trichloro-1,2,2-trifluoroethane
FS	Feasibility Study
Ft	Feet
FY	Fiscal Year

GAC	Granular Activated Carbon
GIS	Geographic Information System
gpd	gallons per day
gpm	gallons per minute
GOCO	Government-Owned, Contractor-Operated
GWTP	Groundwater Treatment Plant
HAL	Health Advisory Level
HHRA	Human Health Risk Assessment
HI	Hazard Index
HMX	Cyclotetramethylenetetranitramine
HydroGeoLogic	HydroGeoLogic, Inc.
ICF KE	ICF Kaiser Engineers
IRA	Interim Removal Action
IRIP	Installation Restoration Incineration Program
IRIS	Integrated Risk Information System
IT	IT Corporation
LAP	Load, Assemble, and Pack
LTM	Long-Term Monitoring
Mason & Hangar	Mason & Hangar-Silas Mason Company
MCGLs	Maximum Contaminant Level Goals
MCL	Maximum Contaminant Level
MEC	munitions and explosives of concern
mg/kg	milligrams per kilogram
µg/L	micrograms per liter
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
MNX	hexahydro-1-nitroso-3,5-dinitro-1,2,5-triazine
MRS	Munitions Response Site
NCEA	National Center for Environmental Assessment
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NDEQ	Nebraska Department of Environmental Quality
NMAG	North Magazine Area
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O&M	Operation and Maintenance
OB/OD	Open Burning/Open Detonation
OHHRAAF	OSWER Human Health Regional Risk Assessors Forum
OU	Operable Unit

ORD	Office of Research and Development
OSWER	Office of Solid Waste and Emergency Response
PAH	Polynuclear Aromatic Hydrocarbon
PPRTV	Provisional Peer Reviewed Toxicity Value
PUC	Potential Unit of Contamination
RAO	Remedial Action Objective
RBC	Risk-Based Concentration
RDX	Cyclotrimethylenetrinitramine
RfDs	Reference Doses
RI	Remedial Investigation
RKG	RKG Associates, Inc.
ROD	Record of Decision
RSL	Regional Screening Level
SCD	Site Characterization Document
SDEF	Standard Default Exposure Factor
SMAG	South Magazine Area
SQL	sample quantitation limit
SVOC	semi-volatile organic compound
TBC	To Be Considered
TNT	2,4,6-trinitrotoluene
TNX	hexahydro-1,3,5-trinitroso-1,3,5-triazine
TRV	Toxicity Reference Value
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
USAEC	U.S. Army Environmental Center
USATCES	U.S. Army Technical Center for Explosives Safety
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USEPA	U.S. Environmental Protection Agency
UST	Underground Storage Tank
UU/UE	Unlimited Use/Unlimited Exposure
UV	ultraviolet
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound

1.0 Introduction

The Kansas City District of the United States Army Corps of Engineers (USACE) has conducted the third five-year review of the Cornhusker Army Ammunition Plant (CHAAP) located near Grand Island, Nebraska. The purpose of this five-year review is to determine if remedial actions implemented at the site remain protective of human health and the environment. This five-year review is required because hazardous substances, pollutants, or contaminants remain on-site above levels that would allow unlimited use and unrestricted exposure. The methods, findings, and conclusions of the review are documented in this report. In addition, this report summarizes issues identified during the review and includes recommendations and follow-up actions to address them.

1.1 Purpose and Scope

This five-year review is being conducted pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 121 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA §121(c) states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The U.S. Environmental Protection Agency (USEPA) interpreted this requirement further in the NCP. 40 Code of Federal Regulations (CFR) § 300.430(f)(4)(ii) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action.

The purpose and focus of five-year reviews are further defined in USEPA Office of Solid Waste and Emergency Response (OSWER) Directive 9355.7-03B-P (USEPA, 2001).

This is the third five-year review for CHAAP. The triggering action for this review was the completion of the second five-year review report on September 14, 2010. Statutory review is required for sites where the selected remedies do not allow unlimited use and unrestricted exposure after the Record of Decision (ROD) remedial actions are completed. The selected remedies for the site include remedies which will not allow for unlimited use of the site in the future, even if the completion of the remedial action satisfies the clean-up goals described in the RODs.

1.2 Five-Year Review Site List

Sites addressed in this FYR are:

- Operable Unit (OU) 1 includes both the on-site and off-site explosives-contaminated groundwater plumes.
- OU2 includes the Administrative and Base Housing Areas, Abandoned Burning Area, Drainage Ditches, Magazine Areas, Miscellaneous Storage Areas, and Sewage Treatment Plants.
- OU3 includes the Pistol Range (three of the four subsites), Nitrate Area, Shop Area, and Sanitary Landfill.
- OU4 includes the unsaturated zone of Load Lines 1 through 5 and the Gravel and Clay Pit Area.

CHAAP is a site that is divided into several areas of environmental concern. The remedial actions being implemented at each OU are site-specific, although many sites have similar remedial actions in place. The remedies selected for each OU were selected to ensure that they were protective of human health and the environment and comply with Federal and State requirements that are legally applicable or relevant and appropriate (ARAR) to the remedial action.

1.3 Report Organization

The remainder of this report is organized as follows:

Section 2 – CHAAP Operational Chronology: This section lists important facility regulatory and operational events and associated dates.

Section 3 – CHAAP Background: This section describes fundamental aspects of the facility including facility location, physical characteristics (climate, topography, surface hydrology, soils, geology, and hydrogeology), remedial action decisions, and long-term land-use plan and cleanup standards.

Section 4 – Review Process: This section describes the general five year review process that was followed during preparation of this report.

Section 5 – OU1: This site has an implemented remedial action. This section discusses the background, use, history of contamination, initial response, remedial actions taken, current status of the remedial action, and recommendations for the Site.

Section 6 – OU2: This site has an implemented remedial action. This section discusses the background, use, history of contamination, initial response, remedial actions taken, current status of the remedial action, and recommendations for the Site.

Section 7 – OU3: This site has an implemented remedial action. This section discusses the background, use, history of contamination, initial response, remedial actions taken, current status of the remedial action, and recommendations for the Site.

Section 8 – OU4: This site has an implemented remedial action. This section discusses the background, use, history of contamination, initial response, remedial actions taken, current status of the remedial action, and recommendations for the Site.

Section 9 – Next Review: This section describes when the next five year review will be performed.

Section 10 – References: This section lists the references cited in this five year review.

2.0 Cornhusker Army Ammunition Plant Operational Chronology

CHAAP was a government-owned, contractor-operated (GOCO) facility constructed in 1942 to produce artillery shells, mines, bombs, and rockets for World War II and the Korean and Vietnam conflicts. CHAAP was operated intermittently for 30 years, with the most recent operations ending in 1973. Explosives wastes and residues associated with plant operations have resulted in soil and groundwater contamination on-site and groundwater contamination off-site to the northeast of the site.

Individual RODs were prepared to evaluate and select remedies for OUs 1 through 4. A ROD has not been prepared for OU5, which has been re-designated as Munitions Response Site (MRS) CAAP-005; therefore, OU5 was not evaluated during this review. The selected remedies for OUs 1 through 4 are as follows:

- OU1: Groundwater extraction and treatment for the on-site plume, monitored natural attenuation (MNA) for the off-site plume, and institutional controls to limit public exposure to contaminated groundwater both on- and off-site.
- OU2: No further action/no response action.
- OU3: Excavation and off-site disposal of contaminated soils, MNA of volatile organic compounds (VOCs) in groundwater at the Shop Area, and institutional controls to prevent residential use.
- OU4: Institutional controls to prevent residential use.

To implement the selected remedies, a groundwater treatment plant (GWTP) was constructed to treat the on-site portion of the explosives plume at OU-1 along with long-term monitoring (LTM) of groundwater contamination associated with the off-site portion of the explosives plume. At OU-3, the excavation and removal of contaminated soils has been completed and LTM is in place to monitor the VOCs in groundwater. Deed restrictions and other ICs specified in the ROD documents for OU1, OU3, and OU4 have been implemented in order to prevent human exposure to contaminated soil and groundwater and to protect the integrity of the remedy.

Significant events in the operational and regulatory history of CHAAP are presented in **Table 2-1**. OU specific regulatory and operational events are outlined in Sections 5, 6, 7, and 8.

Table 2-1: Chronology of Cornhusker Army Ammunition Plant Events

Event	Date
CHAAP became fully operational as a GOCO facility.	1942
Various bombs, boosters, shells, and supplementary charges were produced to support functions during World War II.	1942 - 1945
Artillery shells and rockets were produced to support the Korean conflict.	1950 - 1957
Various bombs, projectiles, and gravel mini-mines were produced to support	1965 - 1973

Event	Date
the Vietnam conflict.	
Plant operations ceased.	1973
An Installation Assessment was completed to assess environmental quality.	March 1980
Explosives contamination was identified in groundwater outside of the facility boundary.	1981
Groundwater monitoring was conducted to identify the nature and extent of the off-site contamination.	1981 - 1987
Environmental photographic interpretation was completed to provide historical analysis of the facility.	March 1982
A Preliminary Contamination Survey was completed. As part of the survey, 33 monitoring wells were installed to assess the water table configuration, estimate groundwater flow velocities, and serve as a groundwater sampling network.	August 1982
The public water supply was extended to residents of the City of Grand Island, and to residents of Capital Heights (west of Grand Island) who were utilizing private wells for drinking water.	December 1985
CHAAP was placed on the National Priorities List (NPL).	July 22, 1987
An incineration project was conducted by the Army to excavate and treat soils beneath unlined leach pits and cesspools of the load lines. Approximately 45,000 tons of contaminated soils were treated by incineration during this time.	August 1987 - July 1988
A Federal Facility Agreement (FFA) between the Department of Defense (DoD), the USEPA, and the Nebraska Department of Environmental Quality (NDEQ) was signed, setting terms under which the Army is responsible for investigation and remediation of CHAAP.	September 4, 1990
An Excessing Assessment (EA) was conducted to determine the existence of, or potential for, environmental contamination, and to assess human health and environmental risks associated with excessing the installation.	1989 - 1991
Environmental photographic interpretation was conducted a second time to provide additional historical analysis of the facility.	September 1991
A Site Characterization Document (SCD) was completed to study on-site Areas of Concern (AOCs) and off-site areas to the east that have been impacted by contaminants from the facility.	1993
The interim OU1 ROD was signed. The ROD established Remedial Action Objectives (RAOs) for explosives in groundwater and established goals to construct on-site and off-site GWTPs.	September 29, 1994
An Interim Removal Action (IRA) was conducted to excavate over 5,000 tons of contaminated soils from 25 sites on the facility.	November - December 1994
An Explanation of Significant Difference (ESD) was prepared to amend the	1996

Event	Date
interim OU1 ROD. The ESD changed the GWTP discharge location from the Platte River to Silver Creek.	
A site wide Remedial Investigation/Feasibility Study (RI/FS) was conducted to fill data gaps associated with the 1993 SCD. A streamlined risk assessment was included in the RI. Soil and groundwater data were used to determine the nature and extent of contamination and to determine the potential impact to human health and the environment.	November 1996
A Comprehensive Reuse Plan was adopted by the Hall County Reuse Committee to transition CHAAP property from military to private use.	December 1997
The OU2 ROD was finalized. The OU2 ROD established a selected remedy of no further action/no response action based on current and anticipated future land use as industrial or agricultural.	September 1998
The OU3 ROD was signed. The OU3 ROD established a selected remedy of excavation of contaminated soils at OU3, MNA of VOCs in groundwater at the Shop Area, and institutional controls to prevent residential use.	December 1999
The OU4 ROD was signed. The OU4 ROD established a selected remedy of deed restrictions to prevent residential use at the OU4 AOCs (i.e. the Unsaturated Zone at Load Lines 1 through 5 and the Gravel and Clay Pit Area).	February 2000
The OU1 ROD Amendment was finalized. The OU1 ROD Amendment included the addition of the seventh on-site extraction well (EW-7) to improve the effectiveness of the on-site GWTP and the substitution of the originally planned off-site GWTP with MNA of the distal groundwater plume. The OU1 ROD Amendment also included institutional controls to limit public exposure to contaminated groundwater on- and off-site.	September 26, 2001
CHAAP First Five Year Review signed	September 17, 2004
CHAAP Second Five Year Review signed	September 14, 2010

3.0 Cornhusker Army Ammunition Plant Background

This section describes the physical characteristics of the site and provides summaries of land and resource use. It also outlines the operation and contamination history, the initial response actions for each OU, and provides a summary of site risks. Much of the background information presented in this section was summarized from information provided in the first five-year review (HydroGeoLogic, Inc. [HydroGeoLogic], 2004).

3.1 Site Location

CHAAP is located on a 12,019-acre tract (original area) approximately two miles west of the City of Grand Island, in north-central Hall County, Nebraska (**Attachment A**). The site also includes off-site areas to the northeast that have groundwater contaminated with explosives compounds from activities at CHAAP. The location and site boundaries of the CHAAP facility are illustrated in **Attachment A**.

3.2 Physical Characteristics

The general geologic units underlying CHAAP, in descending order, include the following:

- Alluvial silty clay and topsoil near the surface (from approximately 1 to 5 feet (ft) below ground surface (bgs))
- Alluvial sands and gravels of the Grand Island Formation (approximately 50 to 60 ft in thickness)
- A low-permeability, alluvial silty clay unit of the Fullerton Formation (approximately 5 to 15 ft in thickness), also referred to as the “blue clay” unit
- Alluvial sands and gravels of the Holdrege Formation (reported up to 200 ft in thickness)

These geologic units are laterally extensive across the CHAAP facility and the northwestern part of the City of Grand Island. The deepest monitoring wells are located off-site and extend 10 to 20 ft into the Holdrege Formation.

The Grand Island Formation aquifer is a shallow water table aquifer within the alluvial sands and gravels of the Grand Island Formation. Historically, the water table has been less than 10 ft bgs; however, due to recent low recharge conditions and seasonal irrigation pumping from multiple high-yield wells, groundwater has dropped across the site. The thickness of the aquifer ranges from 50 to 60 ft within the study area. Hydraulic conductivity values range up to 670 ft per day. Groundwater flow within the Grand Island Formation aquifer is to the northeast towards the City of Grand Island. The Grand Island Formation aquifer is used regionally as a source for irrigation and potable water. Locally, there are a number of active irrigation wells near and on the facility.

The underlying Fullerton Formation is a relatively low-permeability clay unit that appears to act as a barrier to vertical groundwater flow. No contamination has been identified below the Fullerton Formation at locations where contamination is present at the base of the Grand Island

Formation aquifer. Additional justification for this interpretation is the presence of head differences across the Fullerton Formation as measured between the Grand Island Formation aquifer and the Holdrege Formation aquifer.

The sands and gravels of the Holdrege Formation act as a confined aquifer unit (confined by the overlying Fullerton Formation) in the CHAAP area. Based on water level data from the deep monitoring wells, the general groundwater flow direction in the Holdrege Formation appears to have a northeasterly component, similar to the overlying Grand Island Formation aquifer.

Surface water drainage at CHAAP occurs via three man-made drainage ditches, which run north and south across the site and discharge into Silver Creek. Silver Creek is an intermittent stream, which is generally dry most of the year except after rainfall. Silver Creek flows into Prairie Creek, which in turn flows into the Platte River. The Platte River runs approximately five miles south of CHAAP (USEPA, 1989).

3.3 Land and Resource Use

In 2013, the population of Hall County was estimated at 60,720, of which 50,550 individuals resided in the City of Grand Island. The economy of the area is based primarily on agriculture, with some commerce related to manufacturing, retail and wholesale trade, services, and government. The City of Grand Island serves as a trade center for agriculture and livestock produced on ranches and farms in the area. The land surrounding the CHAAP facility is intensely cultivated, and row crops such as corn and alfalfa have replaced most of the original prairie grass and other vegetation. Most of the land between CHAAP and Grand Island is used for farming, predominately for hay or pasture, dry land crops, and irrigated corn, alfalfa, and soybeans (ICF Kaiser Engineers [ICF KE], 1996). In addition, a large cattle feedlot is located adjacent to the northeast boundary of CHAAP.

In December 1997, a Comprehensive Reuse Plan was adopted by the Hall County Reuse Committee in order to transition CHAAP property from military to private use. In accordance with Public Law 103-337, Section 2836, after completion of environmental restoration of areas on CHAAP, the Army may convey the real estate parcels to the Hall County Board of Supervisors or their designees, and the transferees may only use the property consistent with the uses allowed in the CHAAP Reuse Committee Comprehensive Reuse Plan (RKG Associates Inc. [RKG], 1997). According to the reuse plan, CHAAP land was zoned for agriculture, recreation, conservation, warehousing, industry, and special events. This zoning also includes restriction of sites against residential use. Although this plan has been subject to change, the major land use assumptions presented were considered to be realistic and likely of future scenarios (RKG, 1997).

Four general land use categories are identified in the reuse plan; however, it should be noted that the proposed reuse plan may not be fully realized as originally described. The areas of these general land use categories are described as follows:

- Agriculture/Recreation/Conservation – The majority of the northern third of CHAAP as well as the southeast corner of the installation is planned to be developed as a shooting club by the City of Grand Island. The northernmost area of the installation is intended for agricultural use combined with walking and riding trails.
- Agriculture/Warehouse – The north and south storage magazine areas are designated for a combination of agricultural activities and storage-type uses.
- Industrial/Agriculture – This use designation intended to capitalize on CHAAP's largest private sector employer, Detroit Edison Rail Services (DTE), and on the availability of support facilities, including existing rail lines. The majority of the buildings (excluding storage magazines) are included in this area, together with a substantial amount of land that could be developed for rail/industrial utilization or could revert back to agricultural activities. Given the potential demand for industrial tracts, specifically near existing rail lines, an overlay district has been included. The industrial/agricultural overlay is designed to allow for expansion of rail-related industrial activities, if certain conditions are met, onto portions of adjacent sites.
- Husker Harvest Days/Agriculture/Special Events – This land use designation intended to allow for the continued support and retention of the Husker Harvest Days program, and provide an opportunity for additional support activities on adjacent sites. The Agriculture/Special Events sites could be used to expand Husker Harvest Days, to provide for other activities relating to the shooting club or similar activities requiring a large land area, or could revert back to agricultural purposes.

Present land use at CHAAP is primarily limited to irrigated crop land (former Load Lines 1, 2, 4, and 5), railcar maintenance operations, Hornaday Manufacturing operations (former Load Line 3), leasing of property for agricultural purposes and livestock grazing, leasing of storage buildings, and wildlife management.

As of September 2009, approximately 97 percent of the property at CHAAP had been excessed. Potential buyers have been identified for the remaining tracts of land, with the exception of the GWTP property.

All property excessed to date has been consistent with the intentions specified in the 1997 Comprehensive Reuse Plan. The land that has not been excessed at CHAAP is currently used for wildlife conservation and for GWTP operations.

3.4 History of Contamination

CHAAP was operated from 1942 through 1945 by Quaker Oats Ordnance Corporation, a subsidiary of Quaker Oats Company, which produced bombs, shells, boosters, and supplementary charges. The plant was placed on standby status for munitions production from 1945 through 1950. From 1945 through 1948, the ammonium nitrate area (Nitrate Area), formerly used for explosives production, was used for the production of fertilizer. During the standby period, many of the buildings were also used for grain storage (ICF KE, 1996).

CHAAP was reactivated in 1950 to produce artillery shells and rockets to support the Korean conflict. These operations were directed by Mason & Hangar-Silas Mason Company (Mason & Hangar) until 1957, when the plant was again placed on standby status. In 1963, a total of 809 acres from three parcels of land situated in the northeast, northwest, and southeast corners of the facility were sold to the State of Nebraska as wildlife management areas. CHAAP was reactivated from 1965 through 1973 for the production of bombs, projectiles, and microgravel mines used in the Vietnam conflict. Mason & Hangar was retained as the operator during this period. In 1973, operations ceased and CHAAP was again placed on standby. It was never reactivated (ICF KE, 1996).

The principal activities conducted at CHAAP during periods of active production included load, assemble, and pack (LAP) activities for conventional munitions, associated support functions, and the production of ammonium nitrate fertilizer from 1945-1948. At the time of operation, the major components of the facility were:

- Five major load line production areas where LAP activities were conducted
- A fertilizer production area (Nitrate Area)
- Two major storage facilities associated with munitions production (North Magazine Area [NMAG] and South Magazine Area [SMAG])
- A landfill
- A burning ground used for the open burning of explosives-contaminated materials (Burning Grounds)

During periods of munitions production, wastewater contaminated with explosives was deposited into 58 earthen surface impoundments, which were located near the five load lines. Dried solids were periodically scraped from the bottom of these surface impoundments and ignited at the Burning Grounds (USEPA, 1989b). The Army estimated that 9.5 billion gallons of groundwater were contaminated by explosives compounds originating from activities conducted at the CHAAP facility. Groundwater monitoring conducted by the Army from 1981 to 1987 found extensive groundwater contamination beneath the CHAAP facility which extended approximately 4 miles downgradient beyond the eastern boundary of the facility. This contaminant plume affected 246 residential drinking water supply wells in the northeast section of the City of Grand Island (USEPA, 1989b). Contaminants identified in the groundwater include the following compounds:

- Cyclotrimethylenetrinitramine (RDX)
- Cyclotetramethylenetetranitramine (HMX)
- 2,4,6-trinitrotoluene (TNT) and associated degradation products
- 2,4-dinitrotoluene (2,4-DNT)
- 2,6-dinitrotoluene (2,6-DNT)
- 1,3,5-trinitrobenzene (1,3,5-TNB)

As part of a comprehensive environmental investigation and cleanup effort, CHAAP was divided into five OUs based on land use and the extent of remedial action required to protect human health and the environment. The five OU designations at CHAAP are illustrated on **Attachment A** and are described as follows:

- OU1 includes the explosives-contaminated groundwater plumes (both on- and off-site)
- OU2 includes the soils at the Administrative and Base Housing Areas, the Abandoned Burning Area, Drainage Ditches, Magazine Areas, Miscellaneous Storage Areas, and Sewage Treatment Plants
- OU3 includes soils and a small area of groundwater contamination at the Shop Area, and soils at the Pistol Range (three of four subsites), the Nitrate Area, and the Sanitary Landfill
- OU4 includes the unsaturated zone of soils and the buildings at Load Lines 1 through 5 and the Gravel and Clay Pit Area
- OU5 has been transferred to the Military Munitions Response Program (MMRP) Program and redesignated CAAP-OU5. It includes the Pistol Range Area Sites (Firing Range and Static Ejection Test Site), the Burning Grounds, and the Fuze Destruction Areas on Tracts 19B and 20B.

3.5 Initial Response

Following the discovery of a release of contaminants to groundwater in the early 1980s, the Army supplied bottled water to individuals whose wells had been contaminated by explosives. The Army worked with the City of Grand Island to provide a more permanent alternative. This alternative was completed in December 1985 when an extension of Grand Island's water supply system to affected residents and water users was finished (USEPA, 1989).

CHAAP was placed on the NPL on July 22, 1987. Subsequently, the Army, the USEPA, and the NDEQ signed a FFA in April 1990 to address environmental impacts of operations and waste disposal practices at CHAAP (USEPA, 1989). Under the terms of this FFA, the Army is responsible for environmental investigations and remedial activities associated with the CHAAP facility.

Prior to and following CHAAP's listing on the NPL, a series of environmental investigations and IRAs have been completed at the facility in order to determine the nature and extent of contamination. These investigations and activities are summarized below.

3.5.1 Installation Assessment, March 1980

As a part of the Army's Installation Restoration Program, the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) conducted an installation assessment of the CHAAP facility. The objective of this study was to assess the environmental quality of CHAAP with regards to the use, storage, treatment, and disposal of toxic and hazardous materials, and to define any

conditions that could adversely affect human health and welfare, or result in environmental degradation.

The Installation Assessment identified the potential for groundwater contamination and migration from the load line cesspools and leaching pits. The report recommended that a survey be initiated to assess the extent of contamination migration via groundwater (USATHAMA, 1980).

3.5.2 Environmental Photographic Interpretation, March 1982 and September 1991

The Army, the USEPA, and the Environmental Photographic Interpretation Center (EPIC) provided imagery analysis for the USATHAMA Installation Assessment Project first in 1982 (EPIC, 1982), followed by a more comprehensive analysis in 1991 (USEPA, 1991). Both tasks included a detailed historical analysis of CHAAP to identify possible areas of past use, storage, treatment, and disposal of potentially hazardous materials. The studies noted trenched areas, liquids, ground scars, ground staining, and drainages passing through potentially contaminated areas throughout CHAAP.

3.5.3 Preliminary Contamination Survey, August 1982

Envirodyne Engineers, Inc. (EEI), under contract to Mason & Hangar, conducted a Preliminary Contamination Survey of CHAAP in 1982 (EEI, 1982). As part of this survey, 33 groundwater monitoring wells were installed to assess the water table configuration, estimate groundwater flow velocities, and serve as a groundwater sampling network. In addition, soil samples were collected from 15 leaching pits/cesspools.

Analytical results for soil revealed that some of the leaching pits and cesspools were highly contaminated with explosives (TNT and RDX), resulting in groundwater contamination of the shallow aquifer. The highest levels of explosives were found in wells downgradient (northeast) of Load Line 1. It was concluded that contaminated soils at Load Lines 1, 2, and 3 were the main source of groundwater contamination at CHAAP (EEI, 1982). These source areas were designated as OU4, and the resulting groundwater contamination was designated as OU1.

3.5.4 Installation Restoration Incineration Program, 1987-1988

Between August 1987 and July 1988, the Army conducted an on-site CERCLA removal action to incinerate the contaminated soil present in the 58 surface impoundments as a result of munitions manufacturing at CHAAP. During the Installation Restoration Incineration Program (IRIP) activities 44,722 tons of contaminated soils were incinerated, and the remaining ash was deposited into trenches northeast of Load Line 2 and south of the NMAG. The ash disposal trenches were approximately 15 ft wide by 6 ft deep, and were of varying lengths. After the level of the compacted ash within a trench was brought up to grade, a 2-ft cap of topsoil was applied to the surface, and the site was then fertilized and seeded. The IRIP project significantly reduced the soil contamination from the source areas (OU4) of the groundwater contaminant plume; however, high concentrations of dissolved contaminants remained in groundwater (OU1) (IT Corporation [IT], 1999b).

3.5.5 Excessing Assessment, 1991

From 1989 through 1991, the U.S. Army Environmental Center (USAEC) conducted an EA to determine the existence of, or potential for, environmental contamination, and to assess human health and environmental risks associated with excessing the installation property (USAEC, 1991). All of the OUs at CHAAP were investigated with respect to potential environmental contamination. The 1991 EA included geophysical surveys, the installation of monitoring wells, groundwater sampling, and surface and subsurface soil sampling (USAEC, 1991). The results of the 1991 EA were used to supplement the 1996 RI (ICF KE, 1996).

3.5.6 Site Characterization Document, 1993

An SCD was initiated by the USAEC as an RI/FS to gather information to support an informed risk management decision and to define the nature and extent of contamination at the CHAAP OUs (USAEC, 1993). Following review of the Draft RI by USEPA Region VII and NDEQ, data gaps and concerns were identified that required additional investigation in order to fully characterize the nature and extent of contamination. As a result, the risk assessment was removed from the document, and the RI was reissued as an SCD (USAEC, 1993).

The study areas investigated in the SCD included previously identified on-site OUs, as well as groundwater east of the facility that had been impacted by contaminants from CHAAP. The field program included sampling and analysis of soil, groundwater, and surface water. As agreed upon by the USEPA and NDEQ, the results of the 1993 SCD were used where applicable to support the preparation of the RI/FS in 1996.

3.5.7 Interim Removal Action, 1994

USACE performed an IRA in November and December 1994 (ICF KE, 1996). Based on 1993 SCD data, USACE identified 25 sites for soil removal, including 22 sites in the Load Line areas, and one site each at the Burning Grounds, the Sanitary Landfill, and the Gravel and Clay Pit Area. In November 1994, USACE removed approximately 5,000 tons of explosives-contaminated soils based on action levels of 5 milligrams per kilogram (mg/kg) for TNT and RDX in soils. Contaminated soil was removed to a depth of 1 ft bgs at 24 of the 25 IRA sites. At IRA Site 25, within the Gravel and Clay Pit Area, soil removal was conducted to a depth of 11 ft bgs.

After the initial excavation of the 25 areas in November 1994, screening level colorimetric and immunoassay soil samples were collected from each excavation to assess the concentrations of TNT and/or RDX in soils. Based on the screening results, 15 of the excavations were identified as requiring additional soil removal to meet the action level of 5 mg/kg. As a result, in December 1994, an additional foot of soil was excavated from the 15 areas (ICF KE, 1996).

Following excavation, waste classification sampling of the excavated soils was conducted, and all soil was removed off-site to the Highway 36 Land Development Company located near Deer Trail, Colorado. With the exception of the deep excavation at IRA Site 25 (the Gravel and Clay

Pit Area), the excavations were not backfilled in order to allow for confirmation sampling during the following 1996 RI/FS.

3.5.8 Remedial Investigation/Feasibility Study, 1996

The 1996 RI/FS addressed data gaps in the 1993 SCD. In addition, a streamlined risk assessment was prepared (ICF KE, 1996). Previous data collected as part of the 1991 EA, 1993 SCD, 1994 OU1 sampling effort, and the 1994 USACE IRA were evaluated in conjunction with data collected as part of the RI/FS to determine the nature and extent of contamination and to determine the potential impact to human health and the environment. Data and conclusions presented in the 1996 RI/FS and risk assessment were used to prepare the subsequent ROD Amendment for OU1, ROD documents for OUs 2 through 4, and to continue site characterization activities at OU5 (ICF KE, 1996). A summary of the risk assessment findings for CHAAP is presented below. Summaries of RI findings for each OU are presented in **Sections 5.3, 6.3, 7.3, and 8.3.**

Summary of Site Risks

As part of the 1996 RI/FS, a risk assessment was performed for CHAAP (ICF KE, 1996). In agreement with the U.S. Army Center for Health Promotion and Preventative Medicine (CHPPM), the USEPA, and the NDEQ, the risk assessment was performed for the three most contaminated sites at CHAAP: the Pistol Range (three subsites in OU3 and one subsite in OU5), Load Line 1 (OU1/OU4), and the Burning Grounds (OU5). As a result, the risk assessment utilized a streamlined approach to determine site risks. The findings of the human health and ecological portions of the risk assessment are presented in the following sections.

Human Health Risk Assessment

The first component of the Human Health Risk Assessment (HHRA) was the identification of chemicals of potential concern (COPCs) for each site. COPCs were selected based on a comparison of site and background concentrations (inorganic chemicals) and a concentration toxicity screening evaluation for non-carcinogenic chemicals. Any detected carcinogen was automatically regarded as a COPC. COPCs in surface and subsurface soils were selected on an AOC-specific basis. COPCs in groundwater were selected based on facility-wide contamination.

The results of the HHRA indicated that, for groundwater, only the explosives plume (OU1) was associated with an excess cancer risk above the 4×10^{-3} cancer risk and a Hazard Index (HI) of 2,000 for future agricultural residents who use the groundwater for drinking and bathing. The cancer risk exceeds the “acceptable” risk range of 10^{-6} to 10^{-4} and the HI indicates that non-carcinogenic adverse effects associated with explosives in groundwater would likely occur (ICF KE, 1996). The explosives plume was addressed in the OU1 Interim ROD (USAEC, 1994).

The results of the HHRA indicated that the risks from exposure to carcinogenic COPCs in the surface soil were within the target risk range for protection of human health at Superfund sites of 1×10^{-4} to 1×10^{-6} . For non-carcinogenic COPCs, HIs associated with exposures to surface soil

were less than one, with the exception of the HI for a hypothetical future child resident at the Burning Grounds.

Risks associated with exposures to subsurface soil by a future construction worker were determined only for Load Line 1 and the Pistol Range (OU3/OU5). Excess lifetime cancer risks associated with exposures to chemicals in subsurface soils at these AOCs were lower than or equal to 1×10^{-6} for excavation workers. HIs associated with exposures to subsurface soil were not greater than one, indicating adverse non-carcinogenic effects would not likely occur (ICF KE, 1996).

With consent from the CHPPM, NDEQ, and USEPA, risk-based cleanup goals for COPCs in soil were calculated based on exposure to industrial workers because the site use is likely to remain industrial in the future. Concentrations of soil COPCs that were selected in the HHRA were compared to calculated risk-based industrial cleanup levels for soil to determine whether remediation of soil would be necessary. For groundwater, the cleanup levels were the Federal Maximum Contaminant Levels (MCLs). For those COPCs for which no MCLs had been established, the HHRA cited Health Advisory Levels (HALs) for lifetime exposure listed in the USEPA's drinking Water Regulations and Health Advisories (URS Corporation [URS], 2001). Cleanup levels for soil and groundwater at CHAAP are presented in the 1996 RI/FS (ICF KE, 1996).

The Nebraska Health and Human Services System review of the 1996 HHRA concluded that the risk-based industrial cleanup levels would also be protective for agricultural worker exposure pathways. This conclusion was based on an industrial exposure scenario which assumes 50 milligrams per day of incidental ingestion of soil, 250 days per year for 25 years. An agricultural scenario would likely entail a farm worker ingesting larger amounts of soil, 200 to 400 milligrams per day, during soil finishing but for a shorter duration, 30 days per year, for 25 years (ICF KE, 1996).

In addition to expected users of excessed CHAAP property, the HHRA also considered the risks to site trespassers at OU3 (the Pistol Range) and Load Line 1 (OU4). The HHRA concluded that the risk to a trespasser at the Pistol Range was less than 1×10^{-6} and the HI was not greater than one. The HHRA concluded that the risk to a trespasser at Load Line 1 was between 1×10^{-6} and 1×10^{-4} for carcinogenic contaminants and the HI was not greater than one.

Ecological Risk Assessment

In addition to the HHRA, an Ecological Risk Assessment (ERA) was performed as part of the 1996 RI/FS. The purpose of this ERA was to identify those chemicals present in soil, surface water, and sediment at CHAAP that had the potential to harm ecological receptors (i.e., plants and animals). The receptor species and groups that were selected for quantitative analysis at CHAAP include terrestrial plants, earthworms, deer mouse, deer, and American robin (ICF KE, 1996).

Results of the ERA indicated that concentrations of many COPCs in soil and groundwater were above the Toxicity Reference Values (TRVs) protective of the receptor species selected at CHAAP. It was determined; however, that risks associated with exposure to chemicals in soils were considered to be an overestimation because areas where TRVs were generally exceeded were at OUs considered to have poor quality habitat due to past and present uses (i.e., industrial operations) and/or an abundance of manmade structures. As a result of poor quality habitat, extensive use of these areas by terrestrial receptors was not expected. In areas where terrestrial receptors would likely occur, such as cropland areas or shelterbelt areas where habitat quality is better, chemical contamination may be minimal or nonexistent. No groundwater risks were identified for ecological receptors at CHAAP. As a result, cleanup levels for soil and groundwater at CHAAP based on the protection of ecological receptors were not calculated (ICF KE, 1996).

New ecological guidance has been issued since the preparation of the 1996 ERA, and a number of potential ecological screening levels have been developed, changed, or published in new sources. The potential effects of the ERA on the protectiveness of the remedy for all OUs are discussed in Appendix K. While the 1996 ERA was not conducted in accordance with current guidance, it was conducted in accordance with USEPA guidance available at the time. The ERA was found to meet the substantive requirement of a Screening Level ERA with some refinements. Overall, a review of the ERA, including comparison to current ecological screening levels, indicates that ecological risk issues do not affect the protectiveness of the remedy.

Subsequent sections of this report are structured to cover the Five Year Review process for each OU. This structure was adopted in order to make the document easier to read and understand by persons not very familiar with the specifics of the site. All relevant information on an OU is presented before proceeding to the discussion of the next OU in order that the reader not have to go back to earlier portions of the report to find information. OU1 is discussed in Section 5, OU2 in Section 6, OU3 in Section 7, and OU4 in Section 8.

4.0 Five Year Review Process

The following sections summarize activities conducted in preparation of this five year review. Activities initiated during the five-year review include administrative components, community notification, document review, data review, site inspection, and interviews.

4.1 Administrative Components

The five year review team was led by Angela Mason, USACE Kansas City District. Ms. Mason was assisted by USACE, Kansas City District's technical staff with expertise in groundwater hydrology, remedial project technologies, and risk assessment. The CHAAP five-year review team included the following members: David Daniel, Risk Assessor; Greg Hattan, Hydrogeologist; and Julius Calderon, Process Engineer.

The review team established the review schedule with the following components:

- Community Notification
- Document Review
- Data Review
- Site Inspection
- Interviews

4.2 Community Involvement

Activities to involve the community in the five year review were initiated with a Public Notice that appeared in the local newspaper, The Grand Island Independent, on June 21, 2014 and is included in **Attachment I**. The Public Notice included the following information:

- The intent of the USACE to conduct the third five-year review.
- Descriptions of the four OUs.
- The names and telephone numbers of personnel with the USACE that could be contacted in order to allow the public to obtain and/or provide information about the five-year review.

This five year review report will be made available for public review at the CHAAP GWTP environmental archive. The GWTP is located at 102 North 60th Road, Grand Island, Nebraska, 68803. A copy will also be available at the Grand Island Public Library located at 211 N. Washington Street, Grand Island, Nebraska 68802.

4.3 Document Review

This five year review included a review of relevant information contained in a variety of site-related documents. The information review focused on documents that have been produced specifically for the site or contain site related information. A list of site-related documents

reviewed in total or in part during preparation of this five year review is listed in **Attachment H**. Data up through the 2013 groundwater monitoring event was reviewed and is cited in this report. Data from the 2014 sampling event will be documented in the 2014 Annual Sampling Event for the Long Term Monitoring Program Report.

Two articles have been written in reference to CHAAP since the last five year review. These articles have been included in **Attachment I**. The articles outline the intention of the Hall County Board to reactivate the Hall County Reuse Committee in order to hear the land development plans from the Grand Island Economic Development Corporation (EDC), which intended to sell off about 600 acres of land that was originally proposed for an industrial park.

5.0 Operable Unit 1

5.1 Introduction

OU1 includes both the on-site and off-site explosives-contaminated groundwater plume. The selected remedy for OU1 is as follows: Groundwater extraction and treatment for the on-site plume, MNA for the off-site plume, and institutional controls to limit public exposure to contaminated groundwater both on- and off-site.

To implement the selected remedy, a GWTP was constructed to treat the on-site portion of the explosives plume at OU-1 along with LTM of groundwater contamination associated with the off-site portion of the explosives plume. Deed restrictions and other institutional controls specified in the ROD documents for OU1 have been implemented in order to prevent human exposure to contaminated soil and groundwater and to protect the integrity of the remedy.

In December 2006, an optimization effort to include a voluntary injection program was initiated at OU1 (Bay West and URS, 2007). The purpose of the injections was to determine if the remediation of groundwater at CHAAP could be expedited through the use the subsurface injection of amendments in primary source areas to create an anaerobic reducing treatment zone. These injections are not a requirement of the Decision Documents for OU1 and are not intended to address any protectiveness issues of the required remedy. The overall objective of the subsurface injections is to reduce explosives mass (RDX and TNT) by a minimum of 25 percent within the primary source areas in each calendar year over the course of the performance period. The subsurface injections were initiated in an attempt to enhance anaerobic in-situ bioremediation processes and cometabolically biodegrade the explosive contaminants of concern (i.e., TNT and RDX) in on-post, on-site groundwater explosives plumes at the primary source areas (i.e., near EWs 1, 4, 5, and 6). The injections were expected to reduce the overall time frame for the closure of the GWTP from 2029 to 2020. The details of the injection activities have been summarized in annual summary reports (Bay West and URS, 2007, 2008, 2009, 2010, 2011, 2012, and 2014) and starting with the 2014 event, will be included with the annual long-term monitoring report. Because these injection activities are not a remedial requirement of the OU1 ROD and have been conducted as an optimization effort, further technical evaluation was not included in this five year review.

5.2 Site Chronology

Significant events in the operational and regulatory history of CHAAP are presented in **Table 2-1**. Site specific regulatory and operational events for OU1 are outlined in **Table 5-1**.

Table 5-1: Chronology of Cornhusker Army Ammunition Plant OU1 Events

Event	Date
The interim OU1 ROD was signed. The ROD established RAOs for explosives in groundwater and established goals to construct on-site and off-site GWTPs.	September 29, 1994
An ESD was prepared to present a change in the interim OU1 ROD. The ESD changed the GWTP discharge location from the Platte River to Silver Creek.	1996
A contract was awarded for OU1 GWTP construction.	June 13, 1997
Construction was initiated on the OU1 GWTP (first five year ROD review trigger date). The GWTP was one of the RAOs specified in the 1994 interim ROD for OU1.	August 18, 1997
Annual Groundwater LTM Initiated.	June 1998
The OU1 on-site GWTP was activated.	December 18, 1998
The on-site GWTP was optimized and the annual LTM event was conducted. A groundwater fate and transport model was completed which identified the need for an additional extraction well (EW-7) to improve the on-site GWTP.	March 1999
Extraction well EW-7 became operational.	March 2000
Extraction wells EW-1, EW-2, and EW-3 were taken off-line due to non-detection of contaminants.	March 2000
The OUI ROD Amendment was finalized. The OU1 ROD Amendment included the addition of the seventh on-site extraction well (EW-7) to improve the effectiveness of the on-site GWTP and the substitution of the originally planned off-site GWTP with MNA of the distal groundwater plume. The OU1 ROD Amendment also included institutional controls to limit public exposure to contaminated groundwater on- and off-site.	September 26, 2001
CHAAP First Five Year Review signed	September 17, 2004
A voluntary subsurface injection pilot study to accelerate remediation at the Pistol Range was conducted.	November - December 2006
Extraction wells EW-4 and EW-5 were taken off-line due to excessive iron and manganese precipitation in the GWTP. As a result, EW-6 and EW-7 began to operate continuously.	November 2007

Event	Date
Extraction well EW-6 was taken off-line to allow additional injection activities near EW-6. EW-7 became the only operating extraction well. The pumping rate of EW-7 was increased.	July 2009
The 2009 LTM report was submitted	November 2009
CHAAP Second Five Year Review signed	September 14, 2010
The 2010 LTM Report was submitted	November 2010
The 2011 LTM Report was submitted	November 2011
The 2012 LTM Report was submitted	June 2013
The Draft 2013 LTM Report was submitted	October 2013

5.3 Site Background

5.3.1 Land and Resource Use

A more detailed discussion of land use at CHAAP can be found in **Section 3.3**.

5.3.2 History of Contamination

A discussion of the history of contamination at CHAAP can be found in **Section 3.4**.

5.3.2.1 Occurrence of Chemicals of Concern at OU1

The on-site plume originates near Load Lines 1 through 5 and originally extended northeastward approximately 4 miles beyond the eastern boundary of the former facility along the predominant direction of groundwater flow. The more mobile compounds, such as RDX and HMX, have migrated the greatest distance and the compounds more likely to be sorbed onto soils, such as TNT, have migrated the shortest distance (USAEC, 1994). Historic OU1 maximum groundwater concentrations summarized as of the 1996 RI/FS are presented in **Table 5-2** (ICF Kaiser, 1996). A series of OU1 groundwater plume maps is provided in **Attachment B**. Analytical data tables from OU1 groundwater sampling events are provided as **Attachment C**.

Table 5-2
Historic OU1 Maximum Groundwater Concentrations, 1996 RI/FS

Analyte	Concentration On-site (µg/L)	Concentration Off-site (µg/L)
RDX	860	28
TNT	5,700	23
HMX	215	9.54
1,3,5-TNB	2,000	10
2,4-DNT	130	ND
2-Am-DNT	920	12
4-Am-DNT	95	ND

µg/L = micrograms per Liter

ND = Non-detect

Source: (USAEC, 1996)

The Load Lines, designated as OU4, are identified as the source area of the OU1 explosives groundwater plume. Numerous groundwater investigations have been conducted in order to characterize the plume. During the RI process, a total of 96 groundwater monitoring wells were sampled in the explosives plume area.

Initially a total of 46 wells were installed during the 1986 RI/FS, later reissued as the 1993 SCD (USAEC, 1993). Each well was sampled twice and analyzed for a variety of contaminants, including explosives compounds. Evaluation of these analytical results and previous groundwater investigations at the site resulted in the following conclusions (USAEC, 1994):

- The most extensive explosive compound detected in all zones of the Grand Island Formation is RDX. RDX had migrated at least 4.2 miles beyond the CHAAP boundary and HMX had migrated at least 2.2 miles beyond the CHAAP boundary. Although TNT and several of its breakdown products were detected at the installation boundary, they were not detected in the next tier of monitoring wells approximately 1 mile downgradient of the site.
- Only wells located downgradient of former explosives-contaminated wastewater impoundments contained detections of explosives. These wells are located along the groundwater flow paths that emanate from the former locations of these impoundments. This observation suggests that these impoundments were the primary source of explosives contamination detected in these wells. The RDX plume and other explosives plumes are composed of several narrow plumes, each emanating from former areas of explosives-contaminated soil.
- The primary sources of RDX contamination in groundwater are located in Load Lines 1 and 2. Wells located downgradient of Load Lines 3, 4, and 5 yielded little or no RDX in groundwater.

- Explosives have not contaminated the Holdrege Formation. None of the wells screened in this aquifer, all located along the RDX plume axis, yielded detections of any explosives compounds.
- The depth to the maximum concentration of RDX in the plume increases with distance from CHAAP.

At and near CHAAP, groundwater contamination is detected only in the upper and middle part of the Grand Island Formation. At the farthest downgradient portion of the plume, RDX was detected only in the lower part of the aquifer. All chemicals detected in the groundwater during the 1992 groundwater sampling event, including explosives, metals, and other inorganics, were considered as COPCs. The complete list of original COPCs is presented in the interim ROD document for OU1 (USAEC, 1994). However, consistent with the interim ROD document, as more background information was developed for the CHAAP site, the COPCs were screened accordingly to develop a list of Chemicals of Concern (COCs) which were considered in the design of the GWTP.

Additional groundwater characterization data from the 1996 RI/FS and the June 1998, March 1999, and March 2000 LTM events were utilized during the production of the OU1 ROD Amendment (URS, 2001). The nature and extent of contamination for the on-site and off-site portions of the groundwater plume at that time are presented in the following paragraphs.

On-site explosives groundwater plumes at Load Lines 1, 2, and 3 consisted primarily of TNT, RDX, 1,3,5-TNB, and HMX. Maximum concentrations detected on-site during the March 2000 sampling event are presented in **Table 5-3**. The on-site contamination was located mainly on the east sides of Load Lines 1 through 3 near suspected source areas. The highest explosive concentrations were located at Load Lines 1 and 2. No explosives concentrations were detected above HALs at Load Lines 4 or 5 (URS, 2001).

The off-site explosives groundwater plume consisted primarily of RDX and HMX. TNT was detected at only two off-site well clusters. Maximum groundwater concentrations detected off-site during the March 2000 sampling event are presented in **Table 5-3**. The axis of the off-site explosives plume trends from southwest to northeast. The highest explosives concentrations were located near the facility boundary (URS, 2000).

Table 5-3
OU1 Maximum Groundwater Concentrations, March 2000

Analyte	Maximum Concentration On-site (µg/L)	Maximum Concentration Off-site (µg/L)
RDX	130	16
TNT	2,500	25
1,3,5-TNB	550	<0.8
HMX	27	7

Source: (URS, 2000)

5.3.3 Initial Response

A discussion of the initial response actions at CHAAP can be found in **Section 3.5**.

5.3.4 Basis for Taking Action

As discussed in Section 5.3.2, groundwater plumes from the Load Lines on the site contained high concentrations of RDX and TNT as well as degradation products of these two explosives. These explosives caused cancer risk estimates of up to 4×10^{-3} for potential residential exposures, exceeding the acceptable range of cancer risk targets of 10^{-6} to 10^{-4} . These chemicals also caused a HI of 2,000 for the residential exposure scenario. A HI greater than 1 indicates that adverse non-cancer health effects would be possible. Remedial action was undertaken at this site to address these risks.

5.3.4.1 Estimated On-site Groundwater Risks

The 1996 risk assessment estimated groundwater risks for carcinogens and compared them to the NCP acceptable range (e.g., the target risk range of one in one million to one in ten thousand, 1×10^{-6} to 1×10^{-4} , for human health protection at Superfund sites) (ICF Kaiser, 1996). Estimated risks associated with OU1 are summarized in the following paragraphs.

For ingestion of explosives-contaminated on-site groundwater, the risk estimates indicated excess lifetime cancer risks of 4×10^{-3} risk level. In addition, it was determined that the explosives in the groundwater had an HI of 2,000, which indicated they could cause adverse non-carcinogenic effects.

Future cancer risk estimates associated with the ingestion of crops irrigated with on-site groundwater were at the low end of the 1×10^{-6} to 1×10^{-4} risk range, and the non-carcinogenic HIs were below one, indicating that no unacceptable adverse health effects are likely to occur from ingestion of crops exposed to explosives in the on-site groundwater.

There were no estimated ecologic risks because on-site groundwater is considered to be inaccessible to ecological receptors at CHAAP. Risks associated with all other organic and inorganic chemicals in groundwater were estimated to be at acceptable levels.

5.3.4.2 Estimated Off-site Groundwater Risks

Lifetime groundwater risk estimates for off-site residents were all lower than or at the low end of the 1×10^{-6} to 1×10^{-4} risk range and all HIs were less than one except for a child's ingestion of groundwater. This risk to a child from exposure to the groundwater required the elimination of groundwater use for drinking water or bathing.

There were no estimated risks to ecological receptors because off-site groundwater is considered to be inaccessible to ecological receptors near CHAAP and in the City of Grand Island, Nebraska.

5.4 Remedial Actions

5.4.1 Remedy Selection and Implementation

The 1996 risk assessment identified unacceptable risks to human health associated with both the on- and off-site portions of the groundwater plume. Unacceptable concentrations of explosives compounds (RDX, HMX, and TNT) were identified in both the on-site and off-site portions of the plume.

RAOs were established for groundwater at CHAAP (OU1) which include the following:

- Protection of human health and the environment
- Remediation of groundwater to below to the cleanup levels specified for the COCs in the ROD (HALs)
- Containment of high concentrations of explosives in groundwater on-site

An interim ROD was issued in order to achieve the RAOs for OU1. The initial selected remedy consisted of the remedial design and construction of a GWTP to treat contaminated groundwater both on- and off-site. In addition, institutional controls including prohibiting installation of any water supply (drinking water and irrigation) wells on excessed property in the vicinity of the plume were established to eliminate potential exposure to contaminated groundwater on-site. The connection to city water in 1985 eliminated the exposure pathway to off-site residents in affected areas. Two GWTPs were originally proposed in the interim ROD, one on-site and one off-site (distal end), with discharge of the treated effluent to the Platte River (USAEC, 1994).

RAO concentrations presented in the OU1 interim ROD are identified on **Table 5-4**.

Table 5-4
OU1 RAO Concentrations

Explosives Compound	RAO Concentration (µg/L)
TNT	2
HMX	400
RDX	2

Source: USAEC, 1994

After the interim 1994 ROD was signed, an ESD was completed in 1996. The ESD changed the discharge location of the GWTP from the Platte River (15 miles) to Silver Creek (2 miles) due to administrative difficulties associated with the previous location, difficulties in obtaining access for construction, and to decrease the overall construction cost.

Construction of the GWTP began in August 1997. Due to funding constraints, a phased approach was used and initially only the on-site portion of the GWTP was constructed. Official

plant operation began on December 18, 1998. The groundwater extraction system included six extraction wells operating at a combined flow rate of 750 gallons per minute (gpm). The system treated groundwater for explosives using granular activated carbon (GAC) filters. The treated effluent was discharged to existing drainage canals, which were modified into a series of mini-retention cells to minimize surface water discharge off-site to Silver Creek (URS, 2001).

Limitation of the effluent discharge rate was negotiated with the Central Platte Natural Resource District (CPNRD) and required the installation of three electronic recording stream gauges due to seasonal local flooding of Silver Creek downstream at its confluence with the Platte River (35 miles to the northeast). A series of monitoring wells were installed at CHAAP and south of Silver Creek to detect potential groundwater mounding effects (HydroGeoLogic and URS, 2002).

Treatment plant optimization was initiated within 90 days of operation and coincided with the annual LTM event conducted in March 1999. Analytical data were used in a fate and transport groundwater model which identified the need for an additional (seventh) extraction well (EW-7) to improve the on-site extraction system. Extraction well EW-7 became operational in March 2000. The results of the groundwater model indicated that off-site migration of the most contaminated portion of the on-site plume was being contained. In addition, data from the March 1999 LTM event indicated that explosives contaminants were non-detect at extraction wells EW-1 through EW-3. As a result, extraction wells EW-1 through EW-3 were deactivated and extraction rates were redistributed among the remaining four active wells (URS, 2001).

Biofouling of extraction wells EW-1 through EW-3 prior to deactivation required a preventative maintenance procedure to protect extraction wells EW-4 through EW-7. A series of observation wells were installed for the application of a chemical blend (glacial acetic acid, sulfamic acid, and surfactant) to reduce biofouling and to allow the extraction wells to produce at the desired flow rates (URS, 2001).

Based on the groundwater modeling and data, active remediation of the off-site plume was not required. A ROD Amendment was finalized in August 2001 to present the revised remedy for OU1 (URS, 2001). The amended remedy includes the following basic components:

- On-site groundwater extraction and treatment using optimized extraction rates and the additional (seventh) extraction well
- Disposal of treated water to Silver Creek
- MNA of the off-site plume
- Institutional controls designed to limit public exposure to contaminated groundwater on- and off-site

The RAO concentrations for OU1 remained the same as those listed in the original ROD, which were based on the USEPA HALs for explosives. The OU1 ROD Amendment was signed on September 26, 2001 (URS, 2001).

Deed restrictions and other institutional controls specified in the ROD documents for OU1 have been implemented in order to prevent human exposure to contaminated soil and groundwater and to protect the integrity of the remedy. MNA was implemented in accordance with the OU1 ROD Amendment and the LTM plan developed for the CHAAP site (HydroGeologic and URS, 2002). The monitoring requirements of MNA coincide with the LTM program. The objective of the LTM program is to monitor explosives concentrations and migration trends for the on-site and off-site portions of the plume.

5.4.2 Operations and Maintenance

Operations and Maintenance (O&M) activities at CHAAP include the continued operation and upkeep of the GWTP, canal maintenance, inspections and maintenance of security fencing across the site, maintenance of the groundwater extraction and monitoring wells, annual groundwater monitoring, and sampling of the effluent from the GWTP. O&M activities are conducted by on-site personnel, and routine maintenance and monitoring of the various components of the remedies are conducted on a daily basis.

The OU1 GWTP consists of a building that contains an office, an equipment storage room, and a main treatment area. The main treatment area contains the source end flow equalization tank, sand filter tanks, the source end GAC feed tank, two GAC units in a lead/lag configuration, an effluent tank, sludge thickener tank, a filter press, a backwash tank, effluent pumps, air compressors, and an air dryer. Originally, the treatment path for the extracted groundwater was the following: groundwater enters the plant and is first collected at the source end flow equalization tank; it is then ran through the sand filter to remove suspended particles; filtered water then goes to the source end GAC feed tank, where it is pumped through the lead/lag GAC units which remove the explosive contaminants; the treated water is sent to the effluent tank where it is then discharged to one of two canals by gravity (the effluent pumps are not used). The backwash tank, sludge thickener tank and the filter press equipment are used whenever the GAC units needed to be backwashed due to increased differential pressure. The air compressors and dryer supply utility air to operate various equipments such as the air actuator valves for the GAC units.

There are two part-time staff members employed by Bay West at the facility. Both operators work a 4-day, Monday to Thursday, 7 AM to 12 PM work week. Their duties include all general maintenance and oversight of the GWTP and surrounding facility. All personnel entering the OU1 GWTP must sign in and out each time the site is entered. The GWTP operates 24 hours per day, 7 days per week, and is shut down only for change-out of the GAC used to treat the groundwater or to perform major maintenance on the treatment tanks.

Redundant pumps and air compressors are included in the GWTP in order to allow groundwater treatment and routine equipment maintenance to occur simultaneously. A preventive maintenance schedule is maintained for each piece of equipment and maintenance records for all the GWTP equipment are readily available. The GWTP is equipped with dialing alarms which call both operators at home if maintenance issues or emergencies arise. Both operators coordinate with one another to ensure an operator is on call at all times. A back-up operator is also available to substitute when one of the regular operators is sick or on vacation.

System design components, instrumentation, controls, and associated operating instructions for the GWTP are defined in the *Cornhusker Army Ammunitions Depot Instrumentation and Controls Operations Manuals, Volumes I through IV* (CET Environmental Services, Inc. [CET], 1999a). O&M procedures are outlined in the *Operation and Maintenance Manuals, Volumes 1 through 3, Operable Unit I, Groundwater Treatment Plant, Cornhusker Army Ammunition Plant (CHAAP), Grand Island, Nebraska* (CET, 1999b). Complete sets of both documents are kept at the CHAAP site office. All maintenance requirements and procedures specified in the O&M manuals are followed by the GWTP operators.

The treated groundwater is discharged to two on-site canals that discharge to Silver Creek, a tributary of the Platte River. The GWTP discharge is alternated between the two canals. Flows being discharged off-site were measured by weirs equipped with flow gauges. The weirs and flow gauges were maintained by the GWTP operators, but the CPNRD was responsible for the collection and reporting of the data from the flow gauges. This has since been discontinued by the CPNRD. The canals were maintained by monthly mowing during the growing seasons, and by annual removal of sediment within the mini-detention cells in order to maximize retention of water on-site and to retard direct flows to Silver Creek. At the time of sediment removal, the canal banks are reshaped as necessary. As of 2014, canal maintenance is performed only on an “as needed” basis or if requested by the CPNRD.

Initially, six groundwater extraction wells, each housed in a well house, operated as part of the system. As described previously, three extraction wells (EW-1, EW-2, and EW-3) were removed from service following plant optimization in March 1999 and a new extraction well (EW-7) was installed in March 2000. Three more extraction wells were removed from service, two wells (EW-4 and EW-5) in late 2007 and one well (EW-6) in 2009. Thus, only one (EW-7) well is currently operating. Pumps were removed from the six wells not being operated in order to prevent the deterioration of the equipment. Each extraction well is equipped with a flow meter and sampling port. The piping within the GWTP is also equipped with sampling ports, pressure gauges, and flow meters.

5.4.2.1 GWTP and Extraction Well Sampling Program

Originally, the water from each extraction well was sampled on a monthly basis and samples were collected from five locations within the GWTP on a weekly basis. As of 2014, all samples are now collected on a quarterly basis. All samples are submitted for analyses of metals, VOCs, and explosives. In addition, samples of the GWTP effluent are submitted for toxicity testing on a

quarterly basis. The results of the extraction well and GWTP sampling are reported to the NDEQ on a quarterly basis to demonstrate compliance with the National Pollutant Discharge Elimination System (NPDES) requirements. A database of the extraction well and sample results is maintained on-site at the GWTP. These data are used to measure the performance of the GAC being used for explosives and VOC removal, to ensure compliance with the NPDES discharge requirements, and to prevent down time of the GWTP for GAC change-outs.

Figure C5-A (**Attachment C**) shows the sampling results for EW-7 since March 2000, which is tabulated in Table C5-A (**Attachment C**). The last five years (2009-2014) of the EW-7 influent explosives sampling indicate a decreasing trend of all contaminants from EW-7 with now all but TNT below HALs. The TNT groundwater concentration, as of April 2014, is around 11 µg/L. RDX was last found in groundwater at its HAL of 2 µg/L on February 2013.

Figure C5-B (**Attachment C**) shows the explosives influent sampling results for the GWTP since January 2002, which is tabulated in Table C5-B (**Attachment C**). This data shows an overall decreasing trend in explosives concentration. Note that there were slight increases in explosives concentrations when EW-4 and EW-5 were shutdown right before January 2008, and there was another slight increase when EW-6 was shutdown right before July 2009. The last five years (2009-2014) basically mirror the EW-7 explosives sampling.

For historical reference, the influent sampling results of EW-4, EW-5, and EW-6 are shown in **Appendix C**, Figures C5-C, C5-D, and C5-E, respectively. The tabulated influent sampling results for EW-4, EW-5, and EW-6 are shown in Tables C5-C, C5-D, and C5-E, respectively. EW-4 had no detection of RDX and EW-5 had RDX concentrations below the HAL of 2 µg/L when they were taken out of service in December 2007. Both EW-4 and EW-5 had TNT concentrations (2.6 and 8.9 µg/L, respectively) slightly above the HAL of 2 µg/L at this time as well. When EW-6 was taken out of service in June 2009, both RDX and TNT concentrations were slightly above their HALs at 2.5 and 4.0 µg/L, respectively.

5.4.2.2 Observed Changes in Operations

As of July 2014, the GWTP operates with the source end equalization tank, the sand filter, and the backwash tank all used for backwash water capacity. The backwash cycling time averages around every 7 days. Subsurface injections have been restricted to no closer than 1200 ft from EW-7. This helps to prevent reducing conditions in the groundwater near EW-7 that increases dissolved iron and manganese in the groundwater.

Rehabilitation work was performed on EW-7 in 2013/2014 because the specific capacity of EW-7 had decreased 23% from initial installation of the well. In August 2013, a three step process was performed consisting of 1) phosphoric acid and bio-dispersant; 2) clay dispersant; and 3) chlorine disinfection. In December 2013, EW-7 was redeveloped using sulfamic acid and glacial acetic acid. In June 2014, EW-7 was redeveloped using sonic and hydro-surfing. The rehab efforts did not result in an increase in specific capacity for the well; however, modeling done by Bay West indicated that EW-7 is still maintaining capture of the plume at the current specific

capacity of around 500 gpm. A video was taken of EW-7 after the August 2013 rehab event and the well appeared to be clean and in good shape.

5.4.2.3 Costs

O&M costs at OU1 include GWTP component and structure maintenance, sampling and monitoring efforts, monitoring well maintenance, site management, and labor costs. The estimated and actual O&M costs for the GWTP are presented in **Table 5-5**. Annual O&M costs in the OU1 ROD Amendment (URS, 2001) were anticipated to be approximately \$800,000 per year.

Table 5-5
Annual System Operations/O&M Costs for OU1

Fiscal Year (FY)	GWTP O&M	LTM	MW Abandonment/ Installation
OU1 - RDX Groundwater Plume			
FY 2007	\$746,778	\$246,537	\$5,361
FY 2008	\$762,543	\$256,152	\$31,415
FY 2009	\$804,217	\$265,154	\$32,558
FY 2010	n/a	n/a	n/a
FY 2011	n/a	n/a	n/a
FY2012	\$554,595	\$343,335	\$48,815
FY2013	\$571,923	\$351,377	\$49,614

n/a – data was not available

5.5 Progress Since Last Five-Year Review

5.5.1 Protectiveness Statement in Previous Five-Year Review

The following protectiveness statement was included in the second five-year review completed in 2010:

“This second five-year review provides an assessment of these remedial actions to determine if they remain protective of human health and the environment. Based on the findings of this five-year review, the remedial actions at CHAAP as set forth in the various decision documents, have been completed as planned, or will meet the intent of the decision documents when completed. These remedies are achieving the remedial goals as intended, and are expected to remain protective of human health and the environment when groundwater cleanup goals are reached through treatment and MNA.”

5.5.2 Recommendations In Previous Five-Year Review and Actions Taken

See the summary contained in **Table 5-6**.

Table 5-6
Actions Taken Since the Last Five-Year Review

Recommendations and Follow Up Actions	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
Compile lines of evidence to build a case for shutting down the GWTP.	USACE	EPA	September 2011	Continual effort. Annual groundwater modeling is performed and the results of the modeling are discussed in the LTM reports along with recommendations for future operations at the site	on-going
Complete additional follow-on field verification, at a minimum, during the four-month and eight-month performance monitoring events to ensure that capture of the on-site explosives plume is being achieved as specified in the OU1 ROD Amendment. Optimize the pumping rate on EW-7 to ensure that capture is being achieved with minimal drawdown.	USACE	EPA	September 2011	This is verified annually with the groundwater modeling updates. To date, EW-7 continues to maintain capture and is pumping at a rate of approximately 500 gpm.	Annual action
Consider less frequent sampling or abandonment of several upgradient, historically non-detect monitoring wells.	USACE	EPA	September 2010	This is evaluated during preparation of each LTM Report. Sampling frequencies have been changed for some of the wells and many wells have been abandoned. In 2012, 2 wells were abandoned and in 2013 twenty-five wells were abandoned.	Evaluated annually
Incorporate recent changes to the GWTP resulting from the iron and manganese precipitation, into the O&M Manual.	USACE	EPA	September 2011	No changes were made to the O&M manual because when EW-4, EW-5, and EW-6 were taken off-line, the problem with the iron and manganese precipitation within the GWTP were eliminated.	none

Table 5-6
Actions Taken Since the Last Five-Year Review

Recommendations and Follow Up Actions	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
Make the GWTP and the potential future enhanced bioremediation activities more sustainable by:.	USACE	EPA	September 2011	A cost analysis was completed and coupled with the annual groundwater modeling results to determine the most effective way of treating groundwater. The criteria for shut down of the plant is when groundwater leaving the boundary of the site does not exceed cleanup criteria. This criteria is evaluated as part of the annual LTM reports.	Evaluated annually
a.) Exploring the possibility of phasing out operation of the pump and treat system and transitioning to enhanced bioremediation as the sole means of groundwater remediation					
b.) Scaling back the level of effort for future enhanced bioremediation activities.				An evaluation was done and as a result the bioremediation activities are now focused on the source areas. The number of injection points have been increased while the level of baseline and performance monitoring sampling has been decreased. As of 2014, monitoring of bioremediation activities is now done during the LTM event which occurs in August.	2012-2013
c.) Relaxing the criteria for determining when to change-out the activated carbon in order to reduce the rate of activated carbon consumption while still maintaining an adequate margin of safety to guard against breakthrough.				No change was made because frequency of change out was drastically reduced when EW-4, EW-5, and EW-6 were taken off-line. The carbon is changed every 18 months using the same criteria as before.	none
d.) Considering replacing the 25 HP transfer pump with a variable frequency drive pump.				A variable frequency drive pump was installed at EW-7 in 2008.	11/14/2008
e.) Adjusting the settings on the set-back thermostat to reduce the use of the heaters on weekends and evenings.				This has not been implemented as it would take a very long time to heat the plant back up after reducing the thermostat.	none

Table 5-6
Actions Taken Since the Last Five-Year Review

Recommendations and Follow Up Actions	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
f.) Replacing the air dryer with a more energy efficient unit.				The air dryer was replaced in 2010. The old unit used 40% of the compressed air while the new unit uses 5% or less.	3/8/2010
Optimize the GWTP by:	USACE	EPA	December 2014		
a.) Reducing the compressed air usage.				A more efficient air dryer was installed in 2010 that uses 5% or less of the compressed air where the old unit used 40%.	3/8/2010
b.) Utilizing variable frequency drives on centrifugal pumps.				This did not get implemented because the plant runs on a constant rate basis (~500 gpm).	none
c.) Removing effluent pumps.				The pumps were not removed but they have been mothballed. They remain in place in the event that gravity feed of discharge water to the canals does not work.	none
d.) Revising the carbon change-out criteria.				No change was made. Frequency of change out was drastically reduced when EW-4, EW-5, and EW-6 were taken off-line. It is now changed every 18 months using the same criteria as before with only EW-7 on-line.	none
e.) Modifying the discharge structures.				No modifications were made to the discharge structures. There have been no problems to date with discharge of the treated groundwater.	
Provide an updated GIS plume map to CPNRD and the City of Grand Island yearly.	USACE	EPA	December 2014	Maps are provided annually to the CPNRD, the City of Grand Island, and the County. The 2012 map is the most recent map as the 2013 LTM report is still in the draft stages and has not been finalized.	Annual action

Table 5-6
Actions Taken Since the Last Five-Year Review

Recommendations and Follow Up Actions	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
An annual inspection will be performed as part of LTM activities so that any land utilization improvements over the contaminant plume will be documented. The findings of this part of the LTM inspection will be tabulated and presented in subsequent five-year reviews	USACE	EPA	December 2014	This action has been incorporated as part of the LTM activities and is summarized in the LTM reports.	Annual action

5.6 OU1 Five-Year Review Process

5.6.1 Data Review

5.6.1.1 Soil

Because no soil monitoring was required by the ROD, no additional data has been generated since the ROD.

5.6.1.2 Groundwater

Groundwater Data

The OU1 sampling program monitors on-site explosives plume concentrations and migration trends in the off-site monitoring wells, natural attenuation parameters at select OU1 off-site monitoring wells, and natural attenuation trends for the OU1 explosives plume.

HALs for explosives were used as Risk Based Concentrations (RBCs) in the OU1 ROD (URS, 2001). MCLs were established as the regulatory level for VOCs in the OU3 ROD (IT, 1999a). These levels include:

- 2 micrograms per liter (µg/L) for RDX and TNT
- 400 µg/L for HMX
- 5 µg/L for 1,1,2-trichloroethane (1,1,2-TCA) and 1,2-dichloroethane (1,2-DCA)

OU1 Groundwater Sampling Program

In the most recent sampling event for which validated data was available (October 2013), groundwater samples were collected from 65 off-site monitoring wells, 65 on-site monitoring wells, and 16 on-site piezometers at OU1. The primary explosives compounds detected were RDX, HMX, and TNT. Explosives breakdown products 1,3,5-TNB, 2,4-DNT, 2-amino-4,6-dinitrotoluene (2-Am-DNT), and 4-amino-2,6-dinitrotoluene (4-Am-DNT) were also detected (Bay West and URS, 2013). On-site and off-site explosives plume maps generated from the LTM events are included in **Attachment B**. Analytical data tables are provided in **Attachment C**.

5.6.1.2.1 OU1 On-site Plume Extent

The OU1 on-site groundwater explosives plume consists primarily of TNT, RDX, and HMX, with the highest explosives concentrations present east of Load Lines 1 and 2 (**Attachment B**). Maximum concentrations detected during the March 2013 sampling event included 228 µg/L TNT and 30.9 µg/L HMX (PZ012 at Load Line 2), and 69.6 µg/L RDX at monitoring well G0110 located at Load Line 1. The OU1 on-site contamination was located mostly on the east sides of Load Lines 1 and 2 (near the suspected source areas) and at the facility's eastern boundary. No explosive concentrations were detected above the HAL at Load Lines 3, 4, or 5.

In general, explosives concentrations have shown a significant declining trend throughout the on-site area from 1993 to present. In recent years, the rate of decline has been slower but has shown a general decrease over time. These declining explosives concentration trends can best be seen in **Attachment B**, which presents the historical explosives concentrations in graphical form for each on-site and off-site monitoring well.

5.6.1.2.2 *OU1 Off-site Plume Extent*

The OU1 off-site groundwater explosives plume is depleted (see OU1 plume maps in **Attachment B**). The only monitoring well with contamination levels above the HAL is monitoring well CA312 (which is within the city limits for the City of Grand Island) with RDX concentration of 2.1 J µg/L. Per a review of the Nebraska DNR Interactive Map for Registered Groundwater Wells there are no drinking water supply wells within the area surrounding CA312. TNT was detected at 0.7 J µg/L and HMX was detected at 1.7 µg/L at monitoring well NW020. The data indicate that the highest RDX concentrations downgradient of the feedlot have declined over time from 1984 (>100 µg/L) to 1994 (28 µg/L) to 2013 (2.1 µg/L). The highest TNT concentrations have also declined significantly from 1984 (>350 µg/L) to 1994 (23 µg/L) to 2013 (0.71 µg/L).

Possible reasons for the OU1 off-site explosives concentrations declining include capture of the on-site plume by EW-7, anaerobic natural attenuation processes from the feedlot, physical natural attenuation processes, advection, dilution, and dispersion east of the feedlot contaminant source, and the effects of the numerous high yield center pivot irrigation systems located along the former plume footprint. It is quite possible that no COC will be detected above its respective cleanup criteria within the entire off- post plume area during the next sampling event.

5.6.1.2.3 *OU1 Breakdown Products*

Degradation products of RDX include hexahydro-1-nitroso-3,5-dinitro-1,2,5-triazine (MNX), hexahydro-1,3-dinitroso-5-nitro-1,3,5-triazine (DNX), and hexahydro-1,3,5-trinitroso-1,3,5-triazine (TNX). Little is known about the degradation products of HMX. Degradation products of TNT include 2-Am-DNT, 4-Am-DNT, and 1,3,5-TNB. 1,3,5-TNB is also a co-contaminant of 2,4,6-TNT. The breakdown products of TNT have been detected in CHAAP groundwater. Other explosives that have been detected in groundwater historically at OU1 include 1,3-dinitrobenzene, 2,4-DNT, 2,6-DNT, 2-nitrotoluene, 3-nitrotoluene, 4-nitrotoluene, nitrobenzene and tetryl. The RDX breakdown product MNX, which has been included in the explosives analyte list since 2004, was not detected in any of the off-site wells in 2013. In 2013, MNX was detected in eight on-site monitoring wells. TNT breakdown products, including 2-Am-DNT and/or 4-Am-DNT, were detected in 32 on-site monitoring wells and piezometers sampled. HMX has not been detected above the HAL at any of the off-site or on-site locations during any of the LTM events.

5.6.1.2.4 OU1 Groundwater Summary

Table 5-7 summarizes the highest historical OU1 off-site explosives concentrations detected from 2006 to 2013. An explosives plume map showing all 2013 detections is included in **Attachment B**. For complete analytical data tables with all historical sampling results see **Attachment C**.

Table 5-7
Highest OU1 Off-site Explosives Plume Concentrations (2006 to 2013)

Compound Detected	HIGHEST OFF-SITE CONCENTRATIONS (ug/L)							
	March 2013	March 2012	March 2011	March 2010	March 2009	March 2008	March 2007	March 2006
RDX	2.1	2.2	2.4	2.5	4.9	6.6	8.4	8.3
TNT	0.7	0.88	1.1	1.7	3.1	4.1	3.3	6.1
HMX	1.7	2	2.7	3.3	3.2	3.4	3.8	3.6
1,3,5-TNB	0.5	0.38	0.37	0.28	ND	0.74	1.1	0.86
2,4-DNT	ND	ND	ND	ND	0.17	ND	ND	ND
2-Am-DNT	6.5	5.9	7.3	8.9	7.6	9.3	9.5	9.4
4-Am-DNT	3.6	3	3.2	3.4	4.2	6.2	4.6	6

NA = not applicable

ND = not detected

ug/L= micrograms per liter

An evaluation of the OU1 off-site explosives plume indicates the following:

- RDX and TNT concentrations in the off-site plume have decreased steadily over time.
- TNT degradation products are present at the feedlot area. MNX has not been detected in off-site wells since 2005.
- Significant denitrification is occurring in the feedlot area, which may facilitate explosives degradation in groundwater as the plume migrates through this area. The feedlot area subsurface zone is potentially functioning as an in-situ anaerobic/reducing treatment cell. (discussed in each Annual LTM Report in Section 6.3.1.3)
- No further migration of OU1 on-site explosives contamination is expected because current data indicate that explosives-contaminated groundwater is being contained by the on-site GWTP and seasonally by the numerous high yield irrigation wells located on the property .

5.6.2 Site Inspection

The five-year review site inspection took place on July 30 and 31, 2014. The purpose of the inspection was to assess the protectiveness of the selected remedies, including access restrictions, the integrity of the components of the GWTP, and the overall site condition. Site inspection

findings are presented in the following sections. A site inspection checklist is included as **Attachment D**. Site photographs are included as **Attachment E**.

5.6.2.1 Facility Inspection

A site inspection of the CHAAP facility was performed on July 31, 2014. The roads within CHAAP were previously restricted and not open to the public. However, beginning in the spring of 2000, the roads became the property of Hall County and are now open to public use. Site access to the GWTP and the Burning Grounds is restricted by fencing. Access gates are closed and locked on a permanent basis, with the exception of the gate at the GWTP. The gate at the GWTP is open during normal working hours, but access within the GWTP is limited by the presence of the operator. Site fences and gates were inspected and found to be in good condition.

All personnel entering the OU1 GWTP must sign in and out each time the site is entered. Preventive maintenance schedules and maintenance records are used to manage services and repairs performed on each piece of equipment. All schedules and records were readily available during the site inspection activities. The GWTP equipment appeared to be in good condition.

Each of the groundwater extraction wells is housed in a well house and access to each well house is restricted by fencing. Only one of the seven extraction wells is currently operating. The pumps were removed from the six wells not operating in order to prevent deterioration. The extraction wells are connected through underground piping to the GWTP where the water is collected in the source tank. The well house for EW-7 was inspected and the equipment inside appeared to be well maintained.

Each of the extraction wells is equipped with a flow meter and sampling port. The piping within the GWTP is also equipped with sampling ports, pressure gauges, and flow meters. A database of the operating data and sample results is maintained on-site at the GWTP. These data are used to monitor the performance of the GAC used for contaminant removal, to ensure compliance with the NPDES discharge requirements, and to prevent down time of the GWTP for GAC change-outs.

5.6.2.2 Interviews

During the site visit, the USACE team interviewed Gary Carson, Bay West GWTP operator; Patti Thomason, USACE NWO CHAAP lead technical representative; Dave Kachek, USACE NWO CHAAP project geologist; Craig Lewis, City of Grand Island Building Department Director; Randy Gard, President of the Grand Island EDC; and Chad Nabity, Hall County Regional Planning Director. Prior to the site visit, the team attempted to coordinate interviews with CPNRD via phone and email with no response. After the site visit, questionnaires were sent to representatives of the NDEQ and again to the CPNRD. NDEQ returned the completed questionnaire but CPNRD did not respond to our repeated requests for an interview. A list of individuals interviewed and associated interview records are provided as **Attachment G**. What follows is a brief summary of these interviews.

Mr. Carson was interviewed regarding the performance of the treatment system and the status of O&M activities at CHAAP. He stated that the O&M presence has been reduced since the last Five Year Review was conducted. An operator is at CHAAP half time now, typically Monday through Thursday from 7 am until 12 pm. Mr. Carson outlined upgrades that have taken place in recent years as follows: update to SCADA software in 2007, installation of a new air dryer in 2010, replacement of the sensing unit in the air compressor, change-out of air diaphragm pumps, and conversion of lighting in the plant to motion sensors. He explained that LTM events have been moved from spring to summer (August). Per a follow up conversation with the NWO staff, it was explained that the long term monitoring was moved to the fall instead of the spring to evaluate the efficacy of injections being conducted in known hot spots. Injections occur in the spring and long term monitoring samples are collected approximately 6 months later. There is no reason to expect the change in timing of the monitoring events will have any impacts on sampling as groundwater does not show large seasonal fluctuations and there is no contaminant smear zone. EW-7 is inspected annually and is currently pumping at around 500 gpm. Mr. Carson also stated that as of January 2014, process sampling at the GWTP has changed from monthly to quarterly and canal maintenance has changed from annually to as required or when requested by CPNRD. He outlined rehabilitation work that was performed on EW-7 in 2013 and 2014. In August 2013 a three step process was performed consisting of 1) phosphoric acid and biodispersant; 2) clay dispersant; and 3) chlorine disinfection. In December 2013 EW-7 was redeveloped using sulfamic acid and glacial acetic acid. In June 2014 EW-7 was redeveloped using sonic and hydro-surfing. The rehabilitation work was done because the specific capacity of EW-7 has decreased around 23% from initial installation of the well. The rehabilitation efforts did not result in an increase in specific capacity for the well. A video was taken of EW-7 after the August 2013 rehab event and the well appeared to be clean and in good shape.

Ms. Thomason and Mr. Kachek felt the project was running smoothly and staying on schedule. They felt there have been no adverse effects on the surrounding community due to site operations other than an increase in truck traffic during injection events. They feel the community has benefited from work at the site in that much of the former CHAAP land has been sold to farmers and is being used to grow crops. They feel there is a good relationship between CHAAP and the farmers and they work with the farmers to schedule events at the site around their farming schedules.

The former NDEQ Project Manager, Edward Southwick, had a positive impression of the project. He indicated that he felt well informed about the site's activities and progress and that the site was in compliance with state permitting and reporting requirements.

Craig Lewis, the City of Grand Island Building Department Director, felt that the project was going very well and that he was reasonably informed about activities and progress at the site. He has been receiving updated plume maps each year after the LTM reports are finalized. When questioned about zoning requirements, Mr. Lewis stated that the City of Grand Island only looks at a 2 mile radius beyond city limits and enforces the established institutional controls within that radius. Anything beyond that radius would be covered by the county.

Mr. Nabity, the Director of the Hall County Regional Planning Department, felt that the project has progressed in fits and starts because funding makes it difficult to operate continuously. He thinks the RDX/TNT groundwater cleanup has been proceeding well, but the rest of the cleanup seems to be sporadic (i.e., building demolition and soil cleanup). He has been receiving updated plume maps once the LTM reports are finalized; however, he receives PDF files but would prefer to receive ArcView or CADD versions of the files so they can be more easily incorporated into their Geographic Information System (GIS) system. Mr. Nabity stated that no residential homes are allowed to be built on the CHAAP land that has been excessed with the exception of 2 homes that already existed on the land. One of the homes is the groundskeeper's quarters at the shooting park and the other is a vacant/abandoned home on land owned by the Southern Public Power District. He also stated that there is no county licensing procedure for irrigation wells installed as that is handled at the state level. County licensing is required for residential (domestic) wells, but residents in the area of the groundwater cleanup are required to hook up to the city water lines.

Mr. Gard, President of the Grand Island EDC, felt that the project was well run and he feels well informed about the site's activities and progress. He provided us with an update on the land owned by the EDC and the Southern Power District. As of December 2013 the EDC sold all but 260 acres of their land. Most of this land has been converted back to irrigated farm ground but a small section of it was sold to a manufacturer. Mr. Gard provided a breakdown of the current owners of the land where the load lines were formerly located as described in Section 5.7.1.2.2.

5.7 Technical Assessment

This section presents a technical assessment and is formulated based on the answers to Questions A, B and C, presented below. As answers were formulated, consideration was given to the status of the remedial action. For consistency with USEPA Five Year Review guidance, each question is summarily answered yes or no (USEPA, 2001). Supporting information is provided in the previous sections and referenced documents with additional analysis provided, as needed.

Question A: Is the remedy functioning as intended by the decision documents?

Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

5.7.1 Question A: Is the remedy functioning as intended by the decision documents?

Yes, the remedy is functioning as designed. The RAOs for CHAAP groundwater are:

- Protect human health and the environment
- Clean up groundwater to below health advisory levels
- Contain high concentrations of explosives in groundwater on post

The ROD Amendment stated that optimized on-site extraction with EW-7 and off-site natural attenuation would remove contamination from Load Lines 1, 2, and 3, contain the on-site contamination, and naturally attenuate the off-site plume. As such, it appears that the groundwater treatment portion of the remedy is functioning as designed. Contaminated groundwater from the source areas at Load Line 1 and Load Line 2 are being contained and there is a consistent reducing trend in many of the on-site monitoring wells. Natural attenuation is playing a large role in contaminant reduction in the off-site contamination. The feedlot, located directly downgradient, has created a year-round in-situ reducing zone which acts as a denitrification treatment zone for incoming contamination. The downgradient plume, east of the feedlot is dominated by abiotic, physical processes including advection and dispersion. Without an influx from the source areas, this portion of the plume has all but disappeared, with only one monitoring well with RDX levels above the cleanup the cleanup goals (CA312 @ 2.1 ug/L).

The GWTP serves to contain high concentrations of explosives contaminated groundwater on-site.

Institutional controls were included in the ROD Amendment to limit public exposure to contaminated groundwater on and off post. As discussed in Section 5.7.1.2, the institutional controls outlined in the OU1 ROD Amendment have not been consistently applied/enforced.

5.7.1.1 Remedial Action Performance and Operations

A review of site documents, Annual LTM reports, ARARs, risk assumptions, and the results of the site inspection indicate that the remedy implemented at this site is functioning as intended by the ROD. Contamination located on-site has generally been decreasing and off-site contamination is below action levels in all but one monitoring well.

A review of the on-site monitoring well data (included in **Attachment C**) show that there are still source areas in the unsaturated zone associated with the following areas: the east side of Load Line 2 in the vicinity of PZ012 and likely associated with the former melt/pour building (Building 10); the west side of the former Building at Load Line 1 in the vicinity of G0084 and G0085; and the east side of Load Line 1 in the area associated with the former melt/pour building in the vicinity of G0097, G0098, and G0110. The plumes associated with each of these source areas have decreased significantly since 2000 but have remained relatively constant since 2009. With the exception of the source areas, the levels are relatively low (<20ug/L) and there is no indication that contamination is extending past EW-7 at the downgradient end of the on-site property.

A review of contaminant levels and plume size indicates that the plume is stable and or shrinking. This is due to the combination of the earlier excavations and contaminant mass removal, the extraction wells, and natural attenuation. There are 33 irrigation wells located within the OU1 area, 7 of which are located within the plume area of Load Line 1 and Load Line 2, and 9 irrigation wells located within the former footprint of the off-site plume. While this is not part of the designed treatment system, the proximity and pumping rates associated with these

irrigation wells, (>16,000 gpm total Load Lines 1-4) likely contribute to plume capture/stabilization when operating.

There are 67 on-site monitoring wells and 16 on-site piezometers located within the OU1 monitoring network. Analytical results indicate that the monitoring well network is sufficient to monitor the plume and the frequency is acceptable to assess the protectiveness of the remedy and to monitor hydrologic conditions. However, not all of the wells within Load Line 1 and Load Line 2 are monitored annually. It is very difficult to assess the success of the remedial systems without having reproducible and comparable data. It is recommended that a group of monitoring wells located within the plume be selected for annual monitoring in order to make remedial decisions based on reproducible data. It is also recommended that temporary wells not be used for groundwater contaminant monitoring (i.e., modeling mass calculations, etc.).

Another component of the remedial alternative in the ROD is MNA in the off-site area of the plume. MNA consists of two major components, the biological component and the physical components; advection, dispersion, dilution, and sorption. All of these processes play a role in MNA at CHAAP. The area directly downgradient off-site is a livestock feedlot. Analytical and geochemical data in this area confirm that natural attenuation is playing a large role in contaminant reduction. The feedlot, located directly downgradient, has created a year-round in-situ reducing zone which acts as a denitrification treatment zone for incoming contamination. This reducing zone creates an area for anaerobic bacteria to thrive. Although there is no biological data to confirm, it is very likely a contributor. While this immediate area is anaerobic and reducing, downgradient from the feedlot the off-site plume is aerobic. A review of the field water quality parameters taken annually indicate that the aquifer has a high dissolved oxygen concentration and a positive oxygen reduction potential, and is therefore not conducive to anaerobic biological denitrification. In this portion of the plume the physical components likely play an important role, but are very difficult to quantify. This area is clearly a shrinking plume with only one well with contaminant levels above the action levels. Also, irrigation wells located within the former plume areas likely play an important role. The annual monitoring program confirms that MNA is an appropriate remedial alternative at this site.

5.7.1.2 Institutional Controls

The revised remedy for OU1 was established in the ROD Amendment (URS, 2001) dated August 2001 and signed by USEPA on September 26, 2001. The OU1 remedy included institutional controls/actions designed to prevent drinking water exposures to contaminated groundwater until the RAOs are attained throughout the plume area and to protect the integrity of the remedy. Copies of the institutional controls in effect for CHAPP are included as **Attachment F**. The following sections state the institutional controls and the review for each control.

5.7.1.2.1 Off-site Groundwater Explosives Plume Institutional Controls

Per the OU1 ROD Amendment, the institutional controls/actions for the off-site plume were:

- Establishment of a City “Overlay Zone” Ordinance prohibiting drinking water supply well drilling in the plume area to be monitored and enforced by the City through the denial of plumbing permits to hookup residences to private wells in the “Overlay Zone”.
- City of Grand Island continued provision of water supply to all residents in the plume area.
- Communication by the US Army to the public regarding plume locations, concentrations, and drinking water hazards through press releases in the Grand Island Independent newspaper (examples of communications can be found in **Attachment I**).

The City of Grand Island has established a city “Overlay Zone” Ordinance for an institutional control area prohibiting the drilling of drinking water supply wells in the plume area. This ordinance, enacted on July 24, 2001, also applies to and is enforceable by the city within their two-mile extra-jurisdictional area outside the city limits. The city monitors and enforces the ordinance by denying permits to connect residences to private wells in the “Overlay Zone” area near the explosives plume. A review was done of the Nebraska Department of Natural Resources Interactive Map for Registered Groundwater Wells. There were no domestic wells found within the off-site plume area.

The city continues to provide water supply to residents in the plume area. An updated map of the explosives plume is to be provided by the Army to the Hall County/City of Grand Island Cooperative GIS system yearly.

As part of this five-year review, the City of Grand Island Building Department was contacted. The Director of the City of Grand Island Building Department stated that the last known update his office has received of the plume map was dated 2012. This corresponds to the most recently published annual monitoring report since the 2013 annual monitoring report had not been finalized as of the date of our interview.

Based on our review the off-site institutional controls for OU1 have been effectively implemented.

5.7.1.2.2 *On-site Groundwater Explosives Plume Institutional Controls*

During this five-year review, some inconsistencies were noted in how the OU1 ROD Amendment defined the on-post institutional controls. Section 4.3.2 of the ROD Amendment defined them as follows:

- Land use restrictions will be placed on excessed property. The land use restrictions will include: 1) restrictive covenants or easements prohibiting drinking water supply well drilling in the plume vicinity until groundwater is cleaned up to health advisory levels, and 2) Restrictive covenants or easements prohibiting the use of the property for residential purposes.
- The Hall County Reuse Plan will enforce excessed CHAAP land designation for agricultural and industrial zoning.

- For US Army Property, water supply well drilling will continue to be prohibited in the plume area.

Whereas, Table 2 of the ROD Amendment defined the on-post institutional controls as follows:

- Prohibit water supply well drilling in the impacted area
- Deed restrict excessed property to prohibit water supply well drilling in the impacted areas and prohibit residential land use
- Enforce the Hall County Reuse Plan that designates excessed CHAAP property as agricultural and industrial use only.

The inconsistency arises in the phrasing used for well drilling. The text uses the term drinking water supply well drilling when referring to excessed land while Table 2 uses the term water supply well drilling. Water supply well drilling was defined in Section 4.3.1 of the OU1 ROD Amendment as both drinking and irrigation wells.

A well survey was conducted to determine if irrigation wells were in operation prior to and then after the ROD was signed in attempt to resolve the “water supply well” inconsistency in the ROD Amendment. Wells were separated into 1) off-site plume area, 2) wells located within the on-site plume area, and 3) other wells located on-site (i.e., within the former CHAAP boundaries) but not within the plume area.

The irrigation wells located within the off-site plume institutional control area were all installed prior to the ROD. Installation dates range from 1957 to 1992. It is unknown if the wells continued operation throughout the post ROD period; however, recent air photo data indicates they are currently in use.

There are 7 irrigation wells located within the on-site plume area in the former Load Line 1 and Load Line 2 areas. All of these wells were installed after the institutional controls were imposed. Installation dates range from 2003 to 2014. It was stated in the previous five year review reports and each of the LTM reports that the CPNRD agreed that it will not approve the installation of any high capacity industrial processing wells within a zone of influence ranging between 1,000 to 2,500 feet from the outer boundary of the groundwater plume. All of these wells fall within this area.

There are 65 other wells located within the designated on-site institutional control area but not within the immediate plume area. The installation dates range from the 1950’s to 2014. Many have multiple dates which may indicate an inactive period, but the available information will not show if the well was inactive. Recent air photos indicate that most are currently active.

An attempt to correlate irrigation well installation with institutional controls is inconclusive at best. It appears that many of the irrigation wells were active during the time of the ROD/ROD Amendment, and some wells were added later, including all of the wells located in the.

“exclusion zone” from the plume. Therefore, it appears that irrigation well installation may not be prohibited by the OU-1 ROD Amendment.

Hall County Zoning Plan Institutional Control/Action

Public Law 103-337, Section 2836, dated 5 October 1994, provides that property at CHAAP may be conveyed to the Hall County Board of Supervisors or its designee, and must be used consistent with the CHAAP Reuse Committee Comprehensive Reuse Plan. The Army may also impose other terms and conditions on the conveyance of CHAAP property as are in the interest of the United States. The use limitations of the CHAAP Reuse Plan and other deed conditions are enforceable by the United States by virtue of this statute, as well as the deed restrictions. The Hall County Reuse Plan will continue to enforce the designation of excessed CHAAP land for agricultural and industrial zoning.

Army Property Use Controls

As long as CHAAP property that is over or in the vicinity of the OU1 groundwater plume remains in United States ownership and under Army accountability, the Army will exercise control over the uses of the property to prevent water supply well drilling in the plume area, or from using the property for residential purposes.

Additional Well Controls

All new groundwater wells in the area outside of the jurisdiction of the City of Grand Island are subject to permit approval by the CPNRD. In 2002 Army submitted a letter (**Attachment F**) to CPNRD expressing concerns about the possible installation of high capacity irrigation and industrial wells near the explosives plume. Army asked that CPNRD be cognizant of request for permits for any new irrigation and/or industrial wells that could affect the CHAAP groundwater treatment system extraction wells.

It was stated in the previous five year review reports and each of the LTM reports that the CPNRD agreed that it will not approve the installation of any new wells that will be used for domestic water supply. In addition, the CPNRD agreed that it will not approve the installation of any high capacity industrial processing wells within a zone of influence of about 2,000 feet from the outer boundary of the groundwater plume. No documentation was found during this review outlining the agreement Army has with CPNRD regarding installation of irrigation or industrial wells near the groundwater plume. The Army is keeping in contact with the CPNRD regarding surface and groundwater use throughout the CHAAP, and is providing them with updated monitoring information as it becomes available, including plume maps and GIS information.

A review was done of the Nebraska Department of Natural Resources Interactive Map for Registered Groundwater Wells (<http://dnr.nebraska.gov/nebraska-interactive-maps>). Findings indicated that within the designated On-site Groundwater Institutional Control Area for CHAAP there are 82 registered high yield irrigation wells and 17 registered domestic wells. There have been 17 high yield irrigation wells and 7 domestic wells installed within the OU1 treatment zone

(Load Line 1 through Load Line 5) since the OU1 ROD amendment was issued. Figures were created showing the locations of the wells installed within the original CHAAP boundaries and a table was generated for a subset of these wells showing well IDs, total depth, gravel pack, screened interval, yield, and use (**Attachment F**). The contaminated plume at CHAAP occurs within the Grand Island Formation Aquifer (discussed in Section 3.2). As seen in the table included in **Attachment F**, at least three of the domestic wells and most of the irrigation wells are screened within this aquifer. While the installation of these wells does not impact the effectiveness of the OU1 groundwater treatment, they may violate the terms of the institutional controls laid out in the OU1 ROD Amendment prohibiting installation of water supply (drinking and irrigation) wells within impacted areas. Follow up actions were taken to determine what the domestic wells installed within the OU1 treatment zone are used for. Per information obtained from Ms. Mary Wellensiek, CHAAP Chemist, none of these domestic wells are currently being used for drinking water. Information regarding the use of these domestic wells is contained in **Attachment F**.

Institutional Controls/Actions on Excessed Property

As of the date of the five-year review inspection, land within OU1 that has been sold includes all of the load lines and surrounding CHAAP areas that overlie the OU1 groundwater plume. Load Line 1 and adjacent areas (Tract 37C and Tract 37D), were sold to Southern Power District on May 22, 2007 and conveyed in September 2007. The total acreage of this sale was 233.25 acres. The land is currently used for agricultural purposes. Load Lines 2 and 3 and surrounding areas (Tracts 33, 34, 35, 36 and part of Tract 24) were sold to the Grand Island Area EDC and conveyed on October 21, 2008. Total acreage of this sale was 1,335.82 acres. The land is currently used for agricultural purposes. Load Line 4 and Tract 32 (the Gravel and Clay Pit Area) were sold to Grand Island Area EDC on August 20, 2009. This included 366.105 acres. The land is currently used for agricultural purposes.

As of December 2013 the Grand Island EDC had sold all but 260 acres of their land. Most of this land has been converted back to farm ground but a small section of it was sold to a manufacturer. The following is the current status of the land associated with the former Load Lines:

- Load Line 2 was sold by EDC to a private landowner. All remnants of the load line have been removed, two center pivots have been installed since the last five-year review, and the land is now irrigated crops.
- Load Line 3 was sold by EDC to Hornady Manufacturing. A warehouse is in the process of being built on this land.
- Load Line 4 was sold by EDC to a private landowner. All remnants of the load line have been removed and the land is now irrigated crops using center pivots installed since the last five-year review.

- Load Line 1 – the Southern Power District sold most of their land in early 2014 to a private landowner. All remnants of the load line have been removed, a center pivot has been installed since the last five-year review, and the land is now irrigated crops.

The NDEQ maintains an Institutional Controls Tracking System which can be found on their website. Copies of the institutional controls in place at CHAAP were downloaded from this website and reviewed (**Attachment F**). These documents consisted of the city ordinance establishing Groundwater Control Area No. 2 (the “Overlay Zone”, the Comprehensive Reuse Plan for CHAPP, and 11 Quitclaim Deeds. A review of the deeds yielded the following observations:

- Only one of the deeds contained language regarding well restrictions. The restriction stated that no wells could be installed for domestic purposes.
- 3 deeds included restrictions on land use for commercial/agricultural/industrial use only.
- 3 deeds included restrictions on land use for agricultural/conservation/recreational use only.
- All 11 deeds included a reference that the land must be used in a manner consistent with the CHAAP Reuse Committee Comprehensive Reuse Plan.

It was noted that these 11 deeds do not cover all CHAAP property excessed to date; however, it was discovered that Hall County Register of Deeds Department maintains an online database where all deed instruments can be accessed. For purposes of this review, only the deeds downloaded from the NDEQ website were reviewed. Based on this review it appears that the institutional controls outlined in the OU1 ROD amendment have not been consistently applied to the excessed land, mainly in terms of well restriction language prohibiting installation of water supply (drinking and irrigation) wells within impacted areas.

Annual Institutional Controls Inspections

Per a recommendation in the Second Five Year Review Report, annual inspections of institutional controls’ effectiveness were initiated as part of LTM activities beginning in 2009 and the results of the inspections were to be included in subsequent five year review reports. As such, a summary of the LTM Report findings from 2009 through 2013 is included as Table 5-8.

Table 5-8
Summary of Institutional Controls Effectiveness: 2009 – 2013

Area	August 2001 Institutional Control Summary	2009 – 2013 Effectiveness Review Comments
OU1 Off-site Plume		
	City Ordinance that prohibits drinking water supply well drilling in Overlay Zone. Ordinance is enforced through plumbing permits.	No plumbing permits for private well hookups in the Overlay Zone were issued by the City of Grand Island.
	City of Grand Island will continue to provide water supply to all residence in plume area.	The City of Grand Island supplied water to residences in the plume area.
	Communicate plume locations, concentrations, and drinking water hazards to the public through press releases in the Grand Island Independent newspaper.	U.S. Army submitted press releases regarding plume locations, concentrations, and drinking water hazards to the local newspaper.
OU1 On-site Plume		
	U.S. Army placed land restrictions on excessed property that: prohibit drinking water supply well drilling in plume vicinity and prohibit use of property for residential purposes.	Excessed land has not been used for residential purposes. No drinking water supply wells have been drilled in the plume vicinity.
	Hall County Reuse Plan designates/zones all excessed CHAAP property as agricultural and industrial use only.	Excessed CHAAP land is only used for agricultural and industrial purposes.
	Water supply well drilling is prohibited in the plume area on U.S. Army property.	Water supply wells have not been drilled in the plume area on U.S. Army property.
OU3 On-site Area		
	U.S. Army placed land restrictions on excessed property that: prohibit drinking water supply well drilling in plume vicinity and prohibit use of property for residential purposes.	Excessed land has not been used for residential purposes. No drinking water supply wells have been drilled in the plume vicinity.

5.7.1.3 System Operations/O&M

Since adapting the plant to prevent oxidation and precipitation of dissolved iron and manganese, and only running groundwater from EW-07, which is intentionally at least 1200 ft from the nearest subsurface injection, the GWTP has seen less maintenance issues. As of 2014, backwash of the GAC units is conducted approximately every 7 days.

Analytical Data from EW-7 and the GWTP indicate the treatment system is operating successfully. Since the last Five Year Review, influent contaminant concentrations from EW-7 continue to decrease (see **Attachment C**, Table C5-A and Figure C5-A). The GWTP continues to remove explosives from groundwater, meeting HALs and NPDES discharge limits (see Table C5-F). The carbon change-out of the GWTP, which is now being done around every 18 months, is becoming less frequent due to the decreases in influent contaminant concentrations.

Every year over the past five years a groundwater extraction model was conducted to confirm that extraction from EW-7 was capturing the on-site plume. The groundwater model is

calibrated in the winter, which would represent a worst case scenario for the site. If the site obtains full capture in the winter when no irrigation wells are pumping then it would also attain full capture in the summer when the irrigation wells are pumping. The result was that EW-7 is successfully capturing the plume. However, this modeling effort did not include the 24 irrigation wells located within the same radius as EW-7 to Load Line 1 and Load Line 2. If the model shows that EW-7 pumping at 500 gpm can successfully capture the plume, the additional 16,000 gpm (total) from the irrigation wells should have an effect during the growing season. If contaminated groundwater is used from center pivot irrigation wells it is possible that the contamination is hydrolyzed and destroyed before it can infiltrate back into the aquifer. In addition, the sampling program has been shifted to the fall so wells at the site will be gauged around August of each year and the model will be calibrated at that time. Since irrigation wells typically are active during this timeframe, the model calibration moving forward will include the impact of irrigation well pumping on plume capture.

5.7.1.4 Opportunities for Optimization

One potential area for optimization, if in-situ bioremediation injections are not determined to be effective, would be to reactivate and/or relocate EW-5 and EW-6 to areas of relatively higher contaminant concentrations for a more focused groundwater extraction of the plume. Currently EW-7 is the only extraction well in use and is used for containment of the plume from moving off-site. Current plume geometry suggests extraction well locations can be optimized to capture more of the plume as the current locations of the above extraction wells already had contaminant concentrations at or close to HALs (see **Attachment C**, Figures and Tables C5-C, C5-D, and C5-E).

Additional opportunities to improve the overall remedial effort at OU1 which could significantly reduce the time and funding necessary to achieve the remedial goals, include: excavation and off-site disposal of existing source areas at Load Line 1 and Load Line 2; resume groundwater extraction and treatment at former extraction wells (EW-5 and EW-6); and continue allowing operation (with appropriate monitoring) of the existing seasonal irrigation “treatment system”. Natural attenuation, likely with help from the seasonal center-pivot irrigation, would both reduce contaminant mass and aid in plume dispersion; thereby reducing the remaining on-site contamination. Natural attenuation parameters and annual groundwater monitoring would also be eliminated for both the on-site and off-site analytical sampling schedule. As a result of eliminating these items, the size of the LTM reports would be reduced. In addition, several existing wells could be abandoned.

Excavate Source Areas: Remove contaminated soil contributing to groundwater contamination. There appears to still be at least 3 source areas with contamination tied up in the unsaturated zone. These areas likely correspond with the sump/cess pool areas that were previously excavated to 2 feet during the RI phase. These areas likely contain a significant portion of the remaining contaminant mass at OU1 and act as a continual source for groundwater contamination. This can be noted from the contamination level increase in 2009 when groundwater rose due to an unusually wet year. Without excavation these areas will continue to

leach contamination back into the aquifer over time and the site will not clean up until they have been exhausted. The three areas of concern are also the current “hot-spots” of groundwater contamination. The first, the Load Line 2 area is located adjacent to the former melt/pour building (near PZ012) on the Load Line 2 line. The primary contaminant is TNT; however, there is still residual RDX contamination. The second area is located in the area adjacent to G0084 and G0085 along the west central edge of Load Line 1. This area is primarily RDX contamination. The third area is the sump/cess pool area associated with the melt/pour building for Load Line 1. This area is in the vicinity of G0097, G0098, and G0110 and has both RDX and TNT contamination. These areas are identified by the current groundwater “hotspot” but additional characterization should be conducted to confirm excavation dimensions. This could be accomplished through historic locations identified in previous investigations. Soil samples of these areas could be collected via direct push technologies. After the target areas have been identified, they should be excavated, replaced with clean backfill, and the contaminated soils either treated ex-situ on-site or transported off-site for disposal. Cost savings realized by performing excavation of these areas may be significant and the time to reach closure might be significantly reduced

Eliminate MNA sampling: Significant funding is required for the sampling and analysis of MNA parameters. Evaluate the cost-benefit of continued MNA sampling, in particular, for the off-site plume for the biological parameters. Evaluate the benefit of maximizing the use of field analysis in lieu of laboratory analysis. MNA is defined as “the reliance on natural attenuation processes to achieve site-specific remediation objectives within a time frame that is reasonable.” The natural attenuation processes are further described as “a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater.” The mechanisms by which natural attenuation may be achieved include “biodegradation; dispersion; dilution; sorption; volatilization; radioactive decay; and chemical or biological stabilization, transformation, or destruction of contaminants” (USEPA 1999).

The intent of the MNA sampling at this site is to monitor for aquifer conditions that are conducive to anaerobic reduction. All of the analytical trends show that the off-site aquifer, with the exception of the livestock feedlot and the plume area immediately downgradient of the feedlot are highly aerobic and not conducive for anaerobic reduction. As such, all of the off-site plume natural attenuation laboratory analytical should be evaluated for elimination. MNA parameters should be limited to field parameters collected during monitoring well sampling events. The physical processes that are responsible for MNA, dispersion, dilution, and sorption are difficult to quantify and given the extremely low concentrations in this portion of the aquifer are not an issue. Furthermore, there are numerous high yield irrigation wells along the entire length of the plume that are likely to be a major contributor to the elimination of the downgradient portion of this plume.

Frequency of Capture Modeling: Reduce the frequency of groundwater modeling (which is not a requirement of the ROD). A modeling program has been conducted annually in each of the past five years. Currently the plume is diminishing in size, is limited to the Load Line 1 and

Load Line 2 area, and is not migrating off property. While the model shows successful capture with EW-7 the results, given the presence of the irrigations wells (which are not currently part of the model input parameters), capture may be even higher than indicated by the current model.

Abandon Monitoring Wells: Eliminate monitoring wells that are no longer in the plume areas and have been non-detect for the past 5 years. Specific well locations recommended for abandonment will be determined/documented in the annual LTM reports.

5.7.1.5 Early Indicators of Potential Issues

There are no early indicators of potential issues at OU1.

5.7.1.6 Implementation of Institutional Controls and Other Measures

The ICs that are in place include prohibitions on the domestic use of groundwater until cleanup levels are achieved, and prohibitions on any other activities or actions that might interfere with the implemented remedy including drilling any water supply wells. Observations made during the site visit indicate that ICs are being enforced in regard to use of the land. No private residences were observed and the land was found to be used for either industrial or agricultural purposes. However, there are concerns regarding enforcement of the groundwater use ICs which prohibits water supply (drinking and irrigation) well drilling in the on-post plume area. All of the previous LTM Reports indicate that there have not been any new wells drilled within the IC boundary; however, this is not the case. According to the Nebraska Department of Natural Resources Registered Groundwater Wells Database there have been numerous wells drilled in the area since signing of the ROD. Within the designated On-site Groundwater Institutional Control Area for CHAAP there are 82 registered high yield irrigation wells and 17 registered domestic wells. There are currently 17 high yield irrigation wells and 7 domestic wells installed within the OU1 treatment zone (Load Lines 1 through 5) since the ROD amendment in 2000. The domestic wells are all listed as “Domestic” on the drilling permits and are located at businesses within the former CHAAP footprint; however it was confirmed that water from these wells is not currently being used for human consumption. There are also 11 high yield irrigation wells located within the former plume footprint for the off-site plume. In addition, a review of the deeds found on NDEQ’s website indicate that the institutional controls are not being consistently applied to excessed land (mainly in terms of well restriction language prohibiting the installation of water supply wells within the impacted area). This does not affect the treatment, but it does violate the IC’s (**Attachments B, C, and F**).

5.7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes, there have been no changes that bring into question the protectiveness of the remedy. There have been no changes in the To-Be-Considered (TBC) criteria used as the basis of selection of the cleanup goals for OU1. This section also includes information on standards, TBCs, exposure factors, and risk methods that apply across the CHAAP Site impacting multiple OUs. Most of the toxicity factors have not changed, and those that have increased toxicity estimates do not have a significant effect on total risks. Changes in standard default exposure factors used to calculate average daily intakes for cancer and non-cancer health effect characterizations result in decreased estimates for both cancer probability and the likelihood of non-cancer effects. Assumption of ingestion only as an exposure pathway in setting cleanup goals has not had a significant effect on the protectiveness of the remedy.

5.7.2.1 Changes in Standards and To-Be-Considered Criteria

Groundwater ARARs

No Maximum Contaminants (MCLs) or Nebraska Groundwater Standards were identified as ARARs for the three explosives, HMX, RDX, and 2,4,6-TNT, identified as Chemicals of Concern in the OU1 ROD.

MCLs were identified in the OU2 ROD as ARARs for groundwater COPCs in the OU2 ROD for the CHAAP Site. These MCLs are summarized and compared to current values in Table 5-9. These values are shown in Table 5-9 and have not changed.

Table 5-9
Summary of Changes in MCLs for OU2 COPCs

Chemical	MCL, OU2 ROD	MCL, Current	Has There Been a Change in the MCL (Yes/No)
	µg/L	µg/L	
Antimony	6	6	No
Benz(a)anthracene	0.1	0.1	No
Benzene	5	5	No
Beryllium	4	4	No
Chrysene	0.2	0.2	No
1,2 Dichloroethane	5	5	No
Bis(2-Ethylhexyl)phthalate	6	6	No
Indeno(1,2,3-cd)pyrene	0.4	0.4	No
Methylene chloride	5	5	No
Trichloroethane, 1,1,2-	5	5	No
Trichloroethene	5	5	No

Groundwater TBCs

For OU 1, the chemicals for which cleanup goals, identified as Remedial Action Objectives (RAOs), were required in groundwater were reduced in the August 2001 CHAAP OU 1 ROD Amendment (USEPA, 2001) to three compounds. These chemicals and their cleanup goals or RAOs associated with them are:

- Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) 400 µg/L
- Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) 2 µg/L
- 2,4,6-Trinitrotoluene (TNT) 2 µg/L

These chemicals do not have Maximum Contaminant Levels (MCLs), MCL Goals (MCLGs), or Nebraska Groundwater Standards that would be considered as ARAR sources for RAOs. Instead, the RAOs were all set equal to the lifetime Health Advisory Levels (HALs), which are To Be Considered criteria. Both RDX and 2,4,6-TNT are also classified as carcinogens while HMX is not a carcinogen. These two compounds have HALs for 10^{-4} cancer risk at 30 µg/L and 100 µg/L, respectively. Since these HALs are higher than the lifetime HALs, cancer risks are considered to be adequately addressed by the RAOs. These HAs have not changed since the ROD.

Finally, some of the cleanup levels in the OU2 ROD were based on Region III Risk-Based Concentrations (RBCs), which were considered TBC criteria. These Region III RBCs are no longer produced independently, but have been merged with similar tables produced by other EPA Regions into the Regional Screening Level (RSL) Tables. Although the User's Guide for the RSL Table cautions that the RSLs are not to be considered default cleanup levels, the RSLs are back-calculated using the standard risk equations and current toxicity and exposure factors that would be used in a forward risk assessment. These levels are thus the same as would be calculated from a risk assessment that did not use site-specific exposure factors. Table 5-10 shows cleanup levels for groundwater COPCs that did not have MCLs.,

Table 5-10
Summary of Changes in Risk-Based Groundwater Levels

Chemical	Region III RBC, 1998 µg/L	RSL, Current µg/L	Change
2-Amino-4,6-dinitrotoluene	6.1	39	Decreased risk
4-Amino-2,6-dinitrotoluene	6.1	39	Decreased risk
Acrylonitrile	0.53	0.052	Increased risk
2,4-Dinitrotoluene	0.42	0.24	Increased risk
2,6-Dinitrotoluene	0.42	0.048	Increased risk
Nitrobenzene	51	0.14	Increased risk
2-Nitrotoluene	1,022	1.7	Decreased risk
3-Nitrotoluene	1,022	0.31	Increased risk
4-Nitrotoluene	1,022	4.2	Decreased risk

Soils ARARs

For soils in OU2, OU3, and OU4, chemical-specific ARARs were not identified.

Soils TBCs

An NDEQ guidance level of 400 mg/kg, which was a TBC, was used as a cleanup level for lead in soils on the site. This level, intended for the protection of residents and consistent with the current Regional Screening Level (RSL) (USEPA, 2014), is adequate to address lead risks.

One difficulty is that cleanup goals were set for a number of individual PAHs at 33 mg/kg per an NDEQ guidance for non-residential exposures, which is mentioned but not cited in the RODs for OU2 and OU3. This cleanup level is applied to both non-carcinogenic PAHs and carcinogenic PAHs with different cancer potencies as described in the Toxic Equivalency Factor approach.

A possible source for these 33 mg/kg cleanup goals is that the sample quantitation limits (SQLs) for the PAHs may have been adjusted to bring them to the upper bound of the “acceptable” risk range. The SQLs for the PAHs would have been 330 micrograms per kilogram (µg/kg), the Contract-Required Quantitation Limit (CRQL) for semi-volatile organic compound (SVOC) method 8270 in use at the time. A 10^{-6} cancer risk-based cleanup goal for benzo(a)pyrene would have been below this value. The 330 µg/kg value may thus have been used instead of a 10^{-6} cancer risk-based value. The 33 mg/kg cleanup goals for individual PAHs could then have been derived by assuming that these represented 10^{-6} risk based goals and making a 100-fold adjustment to set the risk values at 10^{-4} , the top of the “acceptable” risk range. These cleanup goals would then have been adequate only if single PAHs without other carcinogenic COPCs were present. If the more potent cPAHs benzo(a) pyrene, benzo(b)fluoranthene or dibenz(a,h)anthracene were present together at concentrations exceeding the 33 mg/kg cleanup level, then the ‘acceptable’ range of 10^{-6} to 10^{-4} cancer risk might be exceeded.

5.7.2.1 Changes in Toxicity and Other Contaminant Characteristics

Table 5-11 summarizes changes in cancer toxicity values, presenting oral Cancer Slope Factors (CSFs) at the time of the ROD, the last Five-Year Review, and current values. Most of these CSFs have not changed since the last Five-Year Review, and many have not changed since the ROD. The following changes, which could increase risks at the site, have occurred:

- A new oral CSF for chloroform has been generated by California EPA with a value of $3.1 \times 10^{-2} \text{ (mg/kg/day)}^{-1}$.
- A new oral CSF for DDT of $3.4 \times 10^{-1} \text{ (mg/kg/day)}^{-1}$ is now available from Integrated Risk Information System (IRIS).
- A new oral CSF for *o*-nitrotoluene of $2.2 \times 10^{-1} \text{ (mg/kg/day)}^{-1}$ is now available from IRIS.
- The oral CSF from a Provisional Peer Reviewed Toxicity Value (PPRTV) assessment for 2,6-dinitrotoluene has been increased from 6.8×10^{-1} to $1.5 \text{ (mg/kg/day)}^{-1}$ since the last five-year review.

The only other changes involve withdrawals or decreases in oral CSFs, which would decrease cancer risks. These changes noted in the Table are not expected to bring the protectiveness of the remedy into question with respect to cancer risks.

Table 5-11
Changes in Oral Cancer Slope Factors

COPC	CAS No.	Oral Cancer Slope Factors				Effect on Risk
		ROD	2010 Five-Year Review	Current	Source	
Acrylonitrile	107-13-1	5.4E-01	5.4E-01	5.4E-01	IRIS	No change
Arsenic, Inorganic	7440-38-2	1.5E+00	1.5E+00	1.5E+00	IRIS	No change
Benzene	71-43-2	2.9E-02	5.5E-02	5.5E-02	IRIS	No change
Chlordane, alpha	12789-03-6	3.5E-01	3.5E-01	3.5E-01	IRIS	No change
Chlordane, gamma		3.5E-01	3.5E-01		IRIS	No change
Chloroform	67-66-3			3.1E-02	CalEPA	New value
Chromium(VI)	18540-29-9		5.0E-01	5.0E-01	NJDEP	No change
DDD	72-54-8	2.4E-01	2.4E-01	2.4E-01	IRIS	No change
DDE, p,p'-	72-55-9	3.4E-01	3.4E-01	3.4E-01	IRIS	No change
DDT	50-29-3			3.4E-01	IRIS	New value
Dichloroethylene, 1,1-	75-35-4	6.0E-01				Withdrawn
Dinitrotoluene, 2,4-	121-14-2		6.8E-01	3.1E-01	CalEPA	Decrease
Dinitrotoluene, 2,6-	606-20-2		6.8E-01	1.5E+00	PPRTV	Increase
Heptachlor	76-44-8	4.5E+00	4.5E+00	4.5E+00	IRIS	No change
Hexachlorobenzene	118-74-1	1.6E+00	1.6E+00	1.6E+00	IRIS	No change
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	1.1E-01	1.1E-01	1.1E-01	IRIS	No change
Isophorone	78-59-1	9.5E-04	9.4E-04	9.5E-04	IRIS	No change
Methylene Chloride	75-09-2	7.5E-03	7.5E-03	2.0E-03	IRIS	Decrease
Nitrosodiphenylamine, N-	86-30-6	4.9E-03	4.9E-03	4.9E-03	IRIS	No change
Nitrotoluene, m-	99-08-1		2.2E-01			Withdrawn
Nitrotoluene, o-	88-72-2			2.2E-01	PPRTV	New value
Nitrotoluene, p-	99-99-0		1.6E-02	1.6E-02	PPRTV	No change
Bis(2-ethylhexyl)phthalate	117-81-7		1.4E-02	1.4E-02	IRIS	No change
Aroclor 1254	11097-69-1	2.0E+00		2.0E+00	IRIS	No change
Aroclor 1260	11096-82-5	7.7E+00	Range	2.0E+00	IRIS	Decrease
Benz[a]anthracene	56-55-3	7.3E-01	7.3E-01	7.3E-01	ECAO	No change
Benzo[a]pyrene	50-32-8	7.3E+00	7.3E+00	7.3E+00	IRIS	No change

Table 5-11
Changes in Oral Cancer Slope Factors

COPC	CAS No.	Oral Cancer Slope Factors				Effect on Risk
		ROD	2010 Five-Year Review	Current	Source	
Benzo[b]fluoranthene	205-99-2	7.3E-01	7.3E-01	7.3E-01	ECAO	No change
Benzo[k]fluoranthene	207-08-9	7.3E-02	7.3E-02	7.3E-02	ECAO	No change
Chrysene	218-01-9	-7.3E-03	7.3E-03	7.3E-03	ECAO	No change
Dibenz[a,h]anthracene	53-70-3	7.3E+00	7.3E+00	7.3E+00	ECAO	No change
Indeno[1,2,3-cd]pyrene	193-39-5	7.3E-01	7.3E-01	7.3E-01	ECAO	No change
Trichloropropane, 1,2,3-	96-18-4		3.0E+01	3.0E+01	IRIS	No change
Trinitrotoluene, 2,4,6-	118-96-7	3.0E-02	3.0E-02	3.0E-02	IRIS	No change

Notes:

All values given in (mg/kg/day)⁻¹

COPC = Chemical of Potential Concern

CAS = Chemical Abstract Services

ROD = Record of Decision

(mg/kg/day)⁻¹ = per (milligram per kilogram per day)

CalEPA = California Environmental Protection Agency

PPRTV = Provisional Peer Reviewed Toxicity Value

IRIS = Integrated Risk Information System

ECAO = Environmental Criteria and Assessment Office

NJDEP = New Jersey Department of Environmental Protection

Table 5-12
Changes in Oral Non-Cancer Reference Doses

COPC	CAS No.	Oral Reference Doses				Effect on Risk
		ROD	2010 Five-Year Review	Current	Source	
Acrylonitrile	107-13-1		4.0E-02	4.0E-02	ATSDR	No change
Aluminum	7429-90-5	1.0E+00	1.0E+00	1.0E+00	PPRTV	No change
Arsenic, Inorganic	7440-38-2	3.0E-04	3.0E-04	3.0E-04	IRIS	No change
Barium	7440-39-3	7.0E-02	2.0E-01	2.0E-01	IRIS	No change
Benzene	71-43-2			4.0E-03	IRIS	New value
Cadmium	7440-43-9	5.0E-04	5.0E-04	5.0E-04	IRIS	No change
Chlordane	12789-03-6	5.0E-04	5.0E-04	5.0E-04	IRIS	No change
Chloroform	67-66-3	1.0E-02	1.0E-02	1.0E-02	IRIS	No change
Chromium(III), Insoluble Salts	16065-83-1	1.5E+00	1.5E+00	1.5E+00	IRIS	No change
Chromium(VI)	18540-29-9	3.0E-03	3.0E-03	3.0E-03	IRIS	No change
Copper	7440-50-8	3.7E-02		4.0E-02	HEAST	New value
DDT	50-29-3	5.0E-04	5.0E-04	5.0E-04	IRIS	No change
Dichloroethylene, 1,1-	75-35-4	9.0E-03	5.0E-02	5.0E-02	IRIS	No change
Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	1.0E-02	1.0E-02	1.0E-02	IRIS	No change
Dinitrotoluene, 2,4-	121-14-2	2.0E-03	2.0E-03	2.0E-03	IRIS	No change
Dinitrotoluene, 2,6-	606-20-2	1.0E-03	1.0E-03	3.0E-04	PPRTVS	No change
Dinitrotoluene, 2-Amino-4,6-	35572-78-2	6.0E-05	2.0E-03	2.0E-03	S	No change
Dinitrotoluene, 4-Amino-2,6-	19406-51-0	6.0E-05	2.0E-03	2.0E-03	S	No change
Heptachlor	76-44-8	5.0E-04	5.0E-04	5.0E-04	IRIS	No change
Hexachlorobenzene	118-74-1	8.0E-04	8.0E-04	8.0E-04	IRIS	No change
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	3.0E-03	3.0E-03	3.0E-03	IRIS	No change
Iron	7439-89-6	3.0E-01	7.0E-01	7.0E-01	PPRTV	No change
Isophorone	78-59-1	2.0E-01	2.0E-01	2.0E-01	IRIS	No change
Manganese	7439-96-5	1.4E-01	1.4E-01	1.4E-01	IRIS	No change

Table 5-12
Changes in Oral Non-Cancer Reference Doses

COPC	CAS No.	Oral Reference Doses				Effect on Risk
		ROD	2010 Five-Year Review	Current	Source	
Mercury (elemental)	7439-97-6	3.0E-04	3.0E-04			Withdrawn
Methylene Chloride	75-09-2	6.0E-02	6.0E-02	6.0E-03	IRIS	Increase
Nitrobenzene	98-95-3	2.0E-03	2.0E-03	2.0E-03	IRIS	No change
Nitrotoluene, m-	99-08-1	1.0E-02	9.0E-04	1.0E-04	PPRTVS	Increase
Nitrotoluene, o-	88-72-2	1.0E-02		9.0E-04	PPRTV	New value
Nitrotoluene, p-	99-99-0	1.0E-02	4.0E-03	4.0E-03	PPRTV	No change
Bis(2-ethylhexyl)phthalate	117-81-7	2.0E-02	2.0E-02	2.0E-02	IRIS	No change
Aroclor 1254	11097-69-1	2.0E-05	2.0E-05	2.0E-05	IRIS	No change
Silver	7440-22-4	5.0E-03	5.0E-03	5.0E-03	IRIS	No change
Tetryl (Trinitrophenylmethylnitramine)	479-45-8	1.0E-02	4.0E-03	2.0E-03	PPRTV	Increase
Thallium Sulfate	7446-18-6	8.0E-05	8.0E-05	2.0E-05	PPRTVS	Increase
Trichloropropane, 1,2,3-	96-18-4	6.0E-03	4.0E-03	4.0E-03	IRIS	No change
Trinitrobenzene, 1,3,5-	99-35-4	3.0E-02	3.0E-02	3.0E-02	IRIS	No change
Trinitrotoluene, 2,4,6-	118-96-7	5.0E-04	5.0E-04	5.0E-04	IRIS	No change
Vanadium and Compounds	7440-62-2	7.0E-03	7.0E-05	5.0E-03	V	Decrease

Notes:

All values given in mg/kg/day

COPC = Chemical of Potential Concern

CAS = Chemical Abstract Services

ROD = Record of Decision

mg/kg/day = milligram per kilogram per day

CalEPA = California Environmental Protection Agency

PPRTV = Provisional Peer Reviewed Toxicity Value

PPRTVS = PPRTV Appendix screening value

IRIS = Integrated Risk Information System

HEAST = Human Exposure Assessment Summary Table

S = RfD of 2,4-dinitrotoluene used as surrogate

V = RfD of vanadium oxide used factoring out oxygen

Table 5-12 similarly summarizes changes in oral Reference Doses (RfDs), the relevant toxicity values for assessing the possibility of adverse non-cancer health effects occurring. The vast majority of the oral RfDs have not changed since either the last five-year review or the ROD. The only changes indicating potential increases in hazard are the decreases in the oral RfDs for methylene chloride, *m*-nitrotoluene, tetraethyl, and thallium sulfate and the newly generated RfDs for benzene, copper, and *o*-nitrotoluene. The increase in the vanadium oral RfD and withdrawal of RfDs for chlordane and elemental mercury decrease the hazards that would be estimated for the site.

Overall, the changes in toxicity values do not indicate the effectiveness of the remedy should be called into question.

5.7.2.2 Changes in Exposure Pathways

A human health Baseline Risk Assessment was conducted for the CHAAP site using a number of scenarios for receptors expected to be present on the site and engaged in activities such as trespassing, conducting short-term excavation work, consuming vegetables grown on the site or groundwater from off-site wells. The RODs for OU2, OU3, and OU4 all cite an additional scenario consisting of “resident/workers” engaged in agricultural, light industrial, or “other non-residential activities” as the appropriate scenario on which to base cleanup goals. In defining these cleanup goals, it was determined that the cleanup goals would be derived assuming oral ingestion of soil and groundwater only, eliminating the additional exposure pathways of dermal contact and inhalation of fugitive dusts or vapors from the media. The effect of deleting these additional exposure pathways from the calculation of the cleanup goals was assessed quantitatively by comparing soil industrial RSLs calculated on the basis of the oral ingestion of soil only compared to RSLs calculated using the oral, dermal, and exposure pathways (USEPA, 2014).

Table 5-13 shows that the ratio of the ingestion-only to the all-pathway RSLs for most of the carcinogenic COPCs falls between 1 and 1.6. Thus, the ingestion-only cleanup goals for these chemicals would be 0 to 60 percent higher than if they had been calculated on the basis of all exposure pathways. A few COPCs, VOCs such as acrylonitrile, benzene, and chloroform, did show higher ratios, indicating that cleanup goals would have been relatively lower if all pathways had been considered.

Table 5-13
Ratio of Oral to Total RSLs for Carcinogens

COPC	CAS No.	Oral Only RSL TR=1.0E-6 (mg/kg)	Total RSL TR=1.0E-6 (mg/kg)	Ratio of Oral/Total RSLs
Acrylonitrile	107-13-1	6.1E+00	1.1E+00	5.5E+00
Aroclor 1254	11097-69-1	1.6E+00	1.0E+00	1.6E+00
Aroclor 1260	11096-82-5	1.6E+00	1.0E+00	1.6E+00
Arsenic, Inorganic	7440-38-2	3.6E+00	3.0E+00	1.2E+00
Benz[a]anthracene	56-55-3	4.5E+00	2.9E+00	1.6E+00
Benzene	71-43-2	5.9E+01	5.1E+00	1.2E+01
Benzo[a]pyrene	50-32-8	4.5E-01	2.9E-01	1.6E+00
Benzo[b]fluoranthene	205-99-2	4.5E+00	2.9E+00	1.6E+00
Benzo[k]fluoranthene	207-08-9	4.5E+01	2.9E+01	1.6E+00
Bis(2-ethylhexyl)phthalate	117-81-7	2.3E+02	1.6E+02	1.4E+00
Chlordane	12789-03-6	9.3E+00	8.0E+00	1.2E+00
Chloroform	67-66-3	1.1E+02	1.4E+00	7.9E+01
Chrysene	218-01-9	4.5E+02	2.9E+02	1.6E+00
DDD	72-54-8	1.4E+01	9.6E+00	1.5E+00
DDE, p,p'-	72-55-9	9.6E+00	6.8E+00	1.4E+00
DDT	50-29-3	9.6E+00	8.6E+00	1.1E+00
Dibenz[a,h]anthracene	53-70-3	4.5E-01	2.9E-01	1.6E+00
Dinitrotoluene Mixture, 2,4/2,6-	NA	4.8E+00	3.4E+00	1.4E+00
Dinitrotoluene, 2,4-	121-14-2	1.1E+01	7.4E+00	1.5E+00
Dinitrotoluene, 2,6-	606-20-2	2.2E+00	1.5E+00	1.5E+00
Heptachlor	76-44-8	7.3E-01	5.1E-01	1.4E+00
Hexachlorobenzene	118-74-1	2.0E+00	1.4E+00	1.4E+00
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	3.0E+01	2.8E+01	1.1E+00
Indeno[1,2,3-cd]pyrene	193-39-5	4.5E+00	2.9E+00	1.6E+00
Isophorone	78-59-1	3.4E+03	2.4E+03	1.4E+00
Methylene Chloride	75-09-2	1.6E+03	1.0E+03	1.6E+00
Nitrosodiphenylamine, N-	86-30-6	6.7E+02	4.7E+02	1.4E+00
Nitrotoluene, o-	88-72-2	1.5E+01	1.5E+01	1.0E+00
Nitrotoluene, p-	99-99-0	2.0E+02	1.4E+02	1.4E+00
Trichloropropane, 1,2,3-	96-18-4	1.1E-01	1.1E-01	1.0E+00
Trinitrotoluene, 2,4,6-	118-96-7	1.1E+02	9.6E+01	1.1E+00

Ratios of oral to total RSL greater than 10 indicated in **bold** text.

RSL = Regional Screening Level

CAS = Chemical Abstracts Service

TR = target cancer risk

mg/kg = milligrams per kilogram

Table 5-14 shows that the ratio of the ingestion-only to the all-pathway RSLs for most of the non-carcinogenic COPCs falls between 1 and 1.5. Thus, the ingestion-only cleanup goals for these chemicals would be 0 to 20 percent higher than if they had been calculated on the basis of all exposure pathways. Several volatile COPCs had higher ratios, such as chloroform and 1,1-dichloroethylene. The one volatile COPC 1,2,3-trichloropropane; however, shows that the cleanup goal when dermal contact and inhalation are taken into account in the calculation is 1/220 of the cleanup level based on oral ingestion of soil alone. This chemical was very infrequently detected and not an expected contaminant.

These differences are generally not large, except for the few VOCs rarely detected historically on the CHAAP Site. Thus, they do not call the protectiveness of the remedy into question.

Table 5-14
Ratio of Oral to Total RSLs for Non-Carcinogens

COPC	CAS No.	Ingestion SL HQ=1 (mg/kg)	Total SL HQ=1 (mg/kg)	Ratio of Oral/Total RSLs
Aluminum	7429-90-5	1.2E+06	1.1E+06	1.1E+00
Arsenic, Inorganic	7440-38-2	5.8E+02	4.8E+02	1.2E+00
Barium	7440-39-3	2.3E+05	2.2E+05	1.0E+00
Cadmium (Diet)	7440-43-9	1.2E+03	9.8E+02	1.2E+00
Chlordane	12789-03-6	5.8E+02	5.0E+02	1.2E+00
Chloroform	67-66-3	1.2E+04	1.0E+03	1.2E+01
Copper	7440-50-8	4.7E+04	4.7E+04	1.0E+00
DDT	50-29-3	5.8E+02	5.2E+02	1.1E+00
Dichloroethylene, 1,1-	75-35-4	5.8E+04	1.0E+03	5.8E+01
Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	1.2E+04	9.7E+03	1.2E+00
Dinitrotoluene, 2,4-	121-14-2	2.3E+03	1.6E+03	1.4E+00
Dinitrotoluene, 2,6-	606-20-2	3.5E+02	2.5E+02	1.4E+00
Dinitrotoluene, 2-Amino-4,6-	35572-78-2	2.3E+03	2.3E+03	1.0E+00
Dinitrotoluene, 4-Amino-2,6-	19406-51-0	2.3E+03	2.3E+03	1.0E+00
Heptachlor	76-44-8	5.8E+02	4.1E+02	1.4E+00
Hexachlorobenzene	118-74-1	9.3E+02	6.6E+02	1.4E+00
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	3.5E+03	3.3E+03	1.1E+00
Iron	7439-89-6	8.2E+05	8.2E+05	1.0E+00
Isophorone	78-59-1	2.3E+05	1.6E+05	1.4E+00
Manganese (Non-diet)	7439-96-5	2.8E+04	2.6E+04	1.1E+00
Methylene Chloride	75-09-2	7.0E+03	3.2E+03	2.2E+00
Nitrobenzene	98-95-3	2.3E+03	1.3E+03	1.8E+00
Nitrotoluene, m-	99-08-1	1.2E+02	8.2E+01	1.5E+00
Nitrotoluene, o-	88-72-2	1.1E+03	1.1E+03	1.0E+00

Table 5-14
Ratio of Oral to Total RSLs for Non-Carcinogens

COPC	CAS No.	Ingestion SL HQ=1 (mg/kg)	Total SL HQ=1 (mg/kg)	Ratio of Oral/Total RSLs
Nitrotoluene, p-	99-99-0	4.7E+03	3.3E+03	1.4E+00
~Bis(2-ethylhexyl)phthalate	117-81-7	2.3E+04	1.6E+04	1.4E+00
~Aroclor 1254	11097-69-1	2.3E+01	1.5E+01	1.5E+00
Tetryl (Trinitrophenylmethylnitramine)	479-45-8	2.3E+03	1.6E+03	1.4E+00
Thallium Sulfate	7446-18-6	2.3E+01	2.3E+01	1.0E+00
Trichloropropane, 1,2,3-	96-18-4	4.7E+03	2.1E+01	2.2E+02
Trinitrobenzene, 1,3,5-	99-35-4	3.5E+04	3.2E+04	1.1E+00
Trinitrotoluene, 2,4,6-	118-96-7	5.8E+02	5.2E+02	1.1E+00
Vanadium and Compounds	7440-62-2	5.9E+03	5.8E+03	1.0E+00

Ratios of oral to total RSL greater than 10 indicated in **bold** text.

RSL = Regional Screening Level

CAS = Chemical Abstracts Service

HQ = hazard quotient

mg/kg = milligrams per kilogram

5.7.2.3 Changes in Risk Assessment Methods

A number of exposure factors have been changed in the recent OSWER Directive 9200.1-120 (USEPA, 2014). This guidance updates and replaces certain portions of the previous Interim Final Standard Exposure Factors Guidance (USEPA, 1991) and Risk Assessment Guidance for Superfund (Part E) (USEPA, 2004), previously used in conjunction with the Risk Assessment Guidance for Superfund: Human Health Evaluation Manual (USEPA, 1989) in preparing CERCLA baseline risk assessments. The USEPA's National Center for Environmental Assessment, Office of Research and Development (NCEA/ORD) issued updated environmental assessment recommendations in an Exposure Factors Handbook (EFH)(USEPA,2011), which included revisions of the Child-Specific Exposure Factors Handbook (USEPA, 2008). The 2011 EFH was not a Superfund-specific document, and the OSWER Human Health Regional Risk Assessors Forum (OHHRRAF) subsequently reviewed the EFH and identified Superfund-specific default exposure factors that needed to be updated. OSWER Directive 9200.1-120 revises these default exposure factors from the original 1989 guidance.

For calculating cancer risk-based cleanup goals, the equation is:

$$TR = C_s * \frac{IR * EF * ED * CF}{BW * AT_c} * CSF_o$$

Type equation here.

where TR = target risk

C_s = soil concentration (mg/kg)

IR = soil ingestion rate (mg of soil consumed per day)

EF = exposure frequency (days soil consumed per year)

ED = exposure duration (years)

CF = conversion factor (kg/mg)

BW = body weight (kg)

AT_c = averaging time for carcinogenic effects (70 years*365 days/yr = 25,550 days)

CSF_o = oral cancer slope factor (mg/kg/day)⁻¹

To evaluate the effects of the changes of each exposure factor, it is helpful to look only at the portion of the equation that deals with exposure factors. Looking at this term for the total exposure factor EXP that incorporates all the exposure factors makes it easier to see the overall effect of the changes. For the equation above,

$$EXP = \frac{IR * EF * ED * CF}{BW * AT_c}$$

The only factor that has changed is the body weight of the receptor. As shown in Table 5-15, this change results in a 12.5 percent decrease in the cancer risk estimate.

Table 5-15
Effects of Changes in SDEFs on Soil Cancer Risk Estimates

EXPOSURE FACTOR	UNITS	OLD VALUE	NEW VALUE
Soil Ingestion Rate	mg/day	50	50
Exposure Frequency	days/year	250	250
Exposure Duration	years	25	25
Correction Factor	kg/mg	1.E-06	1.E-06
Body Weight	kg	70	80
Averaging Time	days	25550	25550
Overall Ingestion Exposure Factor	day ⁻¹	1.7E-07	1.5E-07
Percent change	%		-12.5

SDEF = Standard Default Exposure Factor

mg/day = milligrams of soil eaten per day

day/year = days per year

kg/mg = portion of kilogram in 1 milligram

kg = kilograms of body weight

day⁻¹ = per day

For a non-cancer exposure, the averaging time for non-carcinogenic effects (AT_{nc}) is the product of $365 \times ED$, so that the only factor changed as a result of the new Standard Default Exposure Factors (SDEFs) is again the body weight. As shown in Table 5-16, this also results in a 12.5 percent decrease in the hazard quotient.

Table 5-16
Effects of Changes in SDEFs on Non-Cancer HQ Estimates

EXPOSURE FACTOR	UNITS	OLD VALUE	NEW VALUE
Soil Ingestion Rate	mg/day	50	50
Exposure Frequency	days/year	250	250
Exposure Duration	years	25	25
Correction Factor	kg/mg	1.E-06	1.E-06
Body Weight	kg	70	80
Averaging Time (365*25 year)	days	9125	9125
Overall Ingestion Exposure Factor	per day	4.9E-07	4.3E-07
Percent change	%		-12.5

SDEFs = Standard Default Exposure Factors

HQ = Hazard Quotients

mg/day = milligram per day

kg/mg = kilogram per milligram

%= percent

Since the overall effect of the changes in SDEFs is to lower risk estimates, these changes do not call the protectiveness of the remedy into question.

5.7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No. Modeling presented in **Attachment J** shows that potential contamination of soils by contaminated irrigation water will not result in soil contamination high enough to call the protectiveness of the remedy into question. The ecological risk evaluation presented in **Attachment K** concluded that ecological risk issues do not affect the protectiveness of the remedy. The presence of several domestic wells installed since the placement of institutional controls on the CHAAP property could call the protectiveness of the remedy into question; however, the Five Year Review team confirmed that none of the domestic wells installed within the vicinity of the plume are being used for drinking water at this time.

5.7.3.1 Natural Disaster Impacts

There have been no natural disasters that would call into question the protectiveness of the remedy.

5.7.3.2 Any Other Information That Could Call Into Question the Protectiveness of the Remedy

As discussed in Section 5.7.1.2, a substantial portion of land over the plume has been sold to private individuals, who have placed center pivots for irrigation at multiple points on the site that are screened in contaminated groundwater. Thus, contaminated groundwater is being released to surface soil and crops, creating potential new exposure pathways for contaminants that did not previously exist. Individuals performing activities on the site may be exposed inadvertently to ingestion, dermal contact, and inhalation of vapors from water used in irrigation spraying. Water falling to the ground may deposit its contaminants in the surface soil where they may again be contacted by receptors on the surface via inadvertent soil ingestion, dermal contact with soil, and inhalation of vapors or dust rising from the soil.

A model has been developed based on transfer of RDX and TNT in contaminated irrigation water to the surface soil (0-2 ft bgs). This model, which is presented in **Attachment J**, considers the amounts of these explosives that might be deposited during each year of irrigation. The model shows that it would take 3,700 years of continued irrigation at the maximum current RDX groundwater level or 16,000 years for TNT to reach concentrations posing a 10^{-4} cancer risk to a future resident. Thus, contamination of soil via irrigation water is not an issue that calls into question the protectiveness of the remedy.

New ecological guidance has been issued since the preparation of the 1996 ERA, and a number of potential ecological screening levels have been developed, changed, or published in new sources. The potential effects of the ERA on the protectiveness of the remedy for all OUs are discussed in **Attachment K**. While the 1996 ERA was not conducted in accordance with current guidance, it was conducted in accordance with USEPA guidance available at the time. The ERA was found to meet the substantive requirement of a Screening Level ERA with some refinements. Overall, a review of the ERA, including comparison to current ecological screening levels, indicates that ecological risk issues do not affect the protectiveness of the remedy.

5.7.4 Technical Assessment Summary

Overall, the containment and treatment systems are functioning as intended; however, the enforcement of the institutional controls requires further clarification. The review of documents, ARARs, risk assumptions, and the results of the site inspections indicate that the selected remedies for OU1 of containment and treatment of groundwater at CHAAP are functioning and achieving the desired results as intended in the associated ROD documents. Review of groundwater well databases and deeds issued for excessed property indicate that the institutional controls described in the ROD documents are not being consistently enforced, but do not call into question the protectiveness of the remedy. There have been no changes in the ARARs that would affect the protectiveness of the remedy and there have been no changes in standards that would affect existing cleanup levels. Changes in the toxicity factors that were used in calculation of cleanup levels did not result in the need for additional or changed remedies. There has been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy. New ecological guidance has been issued since the preparation of

the 1996 ERA, and a number of potential ecological screening levels have been developed, changed, or published in new sources; however, the ecological risk evaluation presented in **Attachment K** concluded that ecological risk issues do not affect the protectiveness of the remedy. A question raised by the installation of high yield irrigation wells on-site that are screened within the contaminated aquifer about possible significant recontamination of surface soil has been resolved by modeling, which indicates that it would take thousands of years to produce a significant effect.

5.8 Issues

No issues related to current site operations, conditions, or activities were identified during this five-year review that prevents the remedy from being protective now or in the future; however, clarification is needed regarding the OU1 institutional controls.

5.9 Recommendations and Follow-up Actions

No recommendations or follow-up actions were required since no issues were identified during this five-year review that affects the current and/or future protectiveness of the remedy. However, several recommendations were identified that are not related to ‘protectiveness’ issues. These recommendations are as follows:

- Prior to the next five-year review in 2020, the Army should initiate discussions regarding the long term strategy for OU1 to determine if the ROD should be revised/finalized, based on the effectiveness of the remedial activities and the need for continued active treatment (i.e., a reduction in level of treatment may be warranted).
- Generate a memorandum to provide clarity regarding the OU1 institutional controls, including what type of wells can be installed within the vicinity of the plume, what responsibilities are in place for different parties involved with the site, and a summary of the agreement in place between CPNRD and USACE regarding well installation
- Excavate source areas in Load Line 1 and Load Line 2
- Eliminate MNA analytical sampling for Off-site plume area
- Eliminate MNA analytical sampling for On-site plume area if subsurface injections cease
- Eliminate groundwater modeling
- Eliminate monitoring wells that are no longer in the plume areas and have been non-detect for the past 5 years with specific wells targeted for abandonment documented in the annual LTM reports.
- Reduce Off-site sampling from remaining well to once every 5 years
- Dedicate a set of monitoring wells within the plume for annual monitoring in order to make remedial decisions based on reproducible data
- Eliminate the use of temporary wells for groundwater contaminant monitoring (mass calculations, etc.)
- Evaluate bringing EW-5 and EW-6 back online

- Continue annual provision of updated GIS plume map to CPNRD and the City of Grand Island
- Continue annual inspection of land utilization improvements over the contaminant plume and documentation of the inspection findings in annual LTM reports and five-year reviews.

5.10 Protectiveness Statement

The remedy at OU1 is protective of human health and the environment; however, it is recommended that the installation generate a memorandum clarifying the OU1 institutional controls.

6.0 Operable Unit 2

6.1 Introduction

OU2 includes the Administrative and Base Housing Areas, abandoned Burning Area, Drainage Ditches, Magazine Areas, Miscellaneous Storage Areas, and Sewage Treatment Plants. The selected remedy for OU2 is as follows: no further action/no response action

6.2 Site Chronology

Significant events in the operational and regulatory history of CHAAP are presented in **Table 2-1**. Site specific regulatory and operational events for OU2 are outlined in **Table 6-1**.

Table 6-1: Chronology of Cornhusker Army Ammunition Plant OU2 Events

Event	Date
The OU2 ROD was finalized. The OU2 ROD established a selected remedy of no further action/no response action based on current and anticipated future land use as industrial or agricultural.	September 1998

6.3 Site Background

6.3.1 Land and Resource Use

Present activities at CHAAP are limited to maintenance operations, leasing of property for agricultural purposes and livestock grazing, leasing of storage buildings, and wildlife management. A large portion of CHAAP is currently inactive; however, much of the land and buildings have been sold or are leased to various individuals and local concerns. A more detailed discussion of land use at CHAAP can be found in **Section 3.3**.

6.3.2 History of Contamination

A discussion of the history of contamination at CHAAP can be found in **Section 3.4**.

6.3.3 Initial Response

A discussion of the initial response actions at CHAAP can be found in **Section 3.5**.

6.3.4 Basis for Taking Action

OU2 consists of six AOCs including: the Administrative and Base Housing Areas, the Abandoned Burning Area, Drainage Ditches, Magazine Areas, Miscellaneous Storage Areas, and Sewage Treatment Plants. These areas are described in the following paragraphs and shown in site maps included as **Attachment A**.

6.3.4.1 Administrative and Base Housing Areas

The Administrative and Base Housing Areas are located in the southeast corner of CHAAP and encompass approximately one square mile. Some of the land is currently cultivated for growing various crops. Past activities at the site have not been well documented. Records indicate that in addition to administration and housing facilities, there was a hospital, cafeteria, and trap shooting facility. Adjacent to the area is a small fenced area used by the United States Air Force as a satellite tracking station (ICF KE, 1998).

Environmental investigations have included surface soil sampling during the 1991 EA (USAEC, 1991) and the 1993 SCD (USAEC, 1993), and surface soil and groundwater sampling during the 1996 RI (ICF KE, 1996). No soil or groundwater COCs were identified in this area during the associated sampling events. As a result, no further action was recommended for the Administrative and Base Housing Areas (ICF KE, 1998). These properties were sold in March 2001.

6.3.4.2 Abandoned Burning Area

The Abandoned Burning Area is located in the northwest corner of the installation. The area measures approximately 100 ft by 150 ft and is used for wildlife management. Available documentation suggests that this area was used only for a short time and that only small-scale disposal or burning operations may have been conducted. Unexploded Ordnance (UXO) screening of the area found minimal evidence of past burning activities.

Environmental investigations at the Abandoned Burning Area have included a geophysical survey during the 1991 EA (USAEC, 1991) and sampling of surface soil, subsurface soil, and groundwater for the 1996 RI (ICF KE, 1996). No COPCs were detected above risk-based industrial clean-up levels during the 1996 RI (ICF KE, 1996). As a result, no further action was recommended for the Abandoned Burning Area (ICF KE, 1998).

6.3.4.3 Drainage Ditches

At CHAAP, there are three main drainage ditches: the Railroad Drainage Channel, the West Drainage Channel, and the East Drainage Channel. These ditches run north to south along the length of the facility. The Railroad Drainage Channel was constructed in 1942, during initial construction of the CHAAP facility and according to engineering records was designed to

receive runoff from the Nitrate Area, the Shop Area, and Load Line 1. The West and East Drainage Channels were constructed in 1973. The West Drainage Channel receives runoff from Load Line 5, a portion of Load Line 4, the Sanitary Landfill, and the eastern half of the Burning Grounds. The East Drainage Channel receives runoff from Load Lines 2 and 3, and the Magazine Areas. The drainage ditches at CHAAP currently receive effluent from the GWTP (ICF KE, 1998).

Environmental sampling efforts at the Drainage Ditches included surface soil sampling during the 1993 SCD (USAEC, 1993) and the 1996 RI (ICF KE, 1996). All COPCs detected during the 1996 RI were below USEPA Region III residential soil RBCs with the exception of iron. The concentration of iron; however, which was in a soil sample collected from the West Drainage Channel, was well below the industrial RBC (ICF KE, 1996). As a result, no further action was recommended for the Drainage Ditches (ICF KE, 1998).

6.3.4.4 Magazine Areas

Two Magazine Areas are located at CHAAP and are designated as the NMAG and the SMAG. These areas are situated to the north and south of the Load Lines. The magazine areas served as the primary storage facilities for raw materials and finished ordnance during the production periods at CHAAP. Raw materials were received at SMAG Building M-11 on rail cars and then transferred to individual magazines prior to use at the LAP facilities. Finished ordnance was transported on rail cars from the LAP facilities to NMAG Building M-4 and then transferred to individual magazines. After munitions production ceased in 1973, all of the magazines were steam cleaned to remove any explosives residue, and many are currently leased for use as storage areas (ICF KE, 1998).

Environmental investigations at the NMAG and SMAG areas included surface soil sampling for the 1991 EA (USAEC, 1991), surface soil sampling for the 1993 SCD (USAEC, 1993), and surface soil sampling and subsurface soil sampling (NMAG only) for the 1996 RI (ICF KE, 1996). The explosives compound TNT was detected at 29 mg/kg in a surface soil sample collected during the 1993 SCD from the Building M-4 loading area at the NMAG. This concentration of TNT slightly exceeded the USEPA Region III Residential RBC of 21 mg/kg, but was below the calculated risk-based cleanup level of 191 mg/kg. The area was resampled in 1995 and TNT was not detected. At the SMAG area, no COPCs were detected above the USEPA Region III Residential RBCs. As a result, no further action was recommended for the Magazine Areas (ICF KE, 1998). These properties were sold in May 2002.

6.3.4.5 Miscellaneous Storage Areas

The Miscellaneous Storage Areas consist of two buildings at the CHAAP facility identified as Building I-4 and Building F-3. Both buildings are located just north of the SMAG area. Pesticides and fertilizers were mixed and stored in Building F-3, and a drainage ditch is located

approximately 20 ft north and east of the building. Building I-4 is located in a group of buildings known as the Inert Storage Area (ICF KE, 1998).

The environmental sampling program at the Miscellaneous Storage Areas included limited surface soil sampling for the 1991 EA (USAEC, 1991), surface soil and subsurface soil sampling for the 1993 SCD (USAEC, 1993), and interior building wipe sampling and groundwater sampling for the 1996 RI (ICF KE, 1996). No COPCs were detected above risk-based industrial cleanup levels in any of the sampling events conducted. As a result, no further action was recommended for the Miscellaneous Storage Areas (ICF KE, 1998). These properties were sold together with Load Lines 2 and 3 in October 2008.

6.3.4.6 Sewage Treatment Plants

Two inactive Sewage Treatment Plants referred to as the Northwest Sewage Treatment Plant and the Southeast Sewage Treatment Plant are located at CHAAP. The Northwest Sewage Treatment Plant, located just north of Load Line 4, was constructed in 1944 to serve Load Lines 4 and 5 during periods of production. Use of the Northwest Sewage Treatment Plant ended in 1973 when production activities ceased at CHAAP. The Southeast Sewage Treatment Plant, located east of the Administrative and Base Housing Areas, was constructed in 1942 as part of the original facility. The Southeast Sewage Treatment Plant served the Administration Area, Staff Housing Area, and Fire and Guard Headquarters from 1942 to 1974. The Southeast Sewage Treatment Plant was replaced in 1974 by a bentonite-lined circular stabilization lagoon located adjacent to the former leaching lagoon. This new lagoon was never used. Both Sewage Treatment Plants are currently abandoned and are covered with native vegetation, but still retain the man-made depressions and structures that were used while the facilities were in operation (ICF KE, 1998).

Environmental sampling efforts at the Sewage Treatment Plants included surface and subsurface soil sampling for the 1993 SCD (USAEC, 1993), as well as sampling of surface soil, subsurface soil, and groundwater for the 1996 RI (ICF KE, 1996). Arsenic was detected above the calculated risk-based industrial cleanup level of 3.82 mg/kg in surface soil samples collected during the 1996 RI. The maximum concentration of arsenic (11.7 mg/kg); however, was below the upper range of regional background concentrations (12 mg/kg) and the risk-based cleanup level that is associated with a 1×10^{-5} risk (38.2 mg/kg). No other COPCs were detected above the calculated risk-based industrial cleanup levels in site soils, and no COPCs were detected in groundwater samples above their respective MCLs/HALs. As a result, no further action was recommended for the Sewage Treatment Plants (ICF KE, 1998).

6.4 Remedial Actions

6.4.1 Remedy Selection and Implementation

No significant risks were associated with exposures to the low levels of contamination detected at OU2. Based on the minimal levels of contamination present in soil and the lack of contamination in groundwater, a no further action/no response action was selected as the preferred alternative for OU2 in the Final ROD dated September 1998 (ICF KE, 1998). This decision was based upon current and reasonable anticipated future land use and exposure scenarios. Some of the OU2 AOCs, such as the Drainage Ditches and Evaporation Ponds, would not likely be used for residential use. Other AOCs, such as the Magazine Areas, Miscellaneous Storage Areas, and Sewage Treatment Plant areas, will likely remain industrial or agricultural even though current sampling suggests that they might eventually be determined safe for residential use. Therefore, at the time the ROD was published, the no further action/no response action was an appropriate alternative. However, a five-year review was recommended to ensure that the decision of no further action/no response is protective of human health and the environment (ICF KE, 1998). These properties have all been sold to various entities and are generally in either industrial or agricultural use at this time.

6.5 Progress Since Last Five-Year Review

6.5.1 Protectiveness Statement in Previous Five-Year Review

The following protectiveness statement was included in the second five-year review completed in 2010:

“This second five-year review provides an assessment of these remedial actions to determine if they remain protective of human health and the environment. Based on the findings of this five-year review, the remedial actions at CHAAP as set forth in the various decision documents, have been completed as planned, or will meet the intent of the decision documents when completed. These remedies are achieving the remedial goals as intended, and are expected to remain protective of human health and the environment when groundwater cleanup goals are reached through treatment and MNA.”

6.5.2 Recommendations In Previous Five-Year Review and Actions Taken

See the summary contained in **Table 6-2**.

**Table 6-2
Actions Taken Since the Last Five-Year Review**

Issue	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
Make appropriate repairs to eliminate the fall hazard at the Northwest Sewage Treatment Plant.	USACE	EPA	September 2011	This housekeeping recommendation is not considered a recommendation regarding remediation protectiveness. The installation has this information to ensure personnel safety.	none
Compare the levels of remaining soil contamination to residential values to determine if any soil OUs may be returned to unrestricted use and removed from the CERCLA/Five-Year Review process. OUs with soil contamination exceeding residential levels will remain with deed restrictions and/or land use controls.	USACE	EPA	September 2011	No additional soil sampling has been done so there is no data to make this determination at this time.	none

6.6 Five-Year Review Process

6.6.1 Data Review

6.6.1.1 Soil

No new soil sampling has been conducted at OU2 since the last five year review.

6.6.1.2 Groundwater

No groundwater monitoring was required by the ROD, and no additional data has been generated since the ROD.

6.6.2 Site Inspection

Site inspection findings are presented in Section 5.6.2.

6.6.3 Interviews

Interviews were conducted for all the OUs at one time. A summary of the interviews can be found in Section 5.6.3. No additional information was provided during the interviews specific to OU2.

6.7 Technical Assessment

This section presents a technical assessment and is formulated based on the answers to Questions A, B and C, presented below. As answers were formulated, consideration was given to the status of the remedial action. For consistency with Five Year Review guidance, each question is summarily answered yes or no. Supporting information is provided in the previous sections and referenced documents with additional analysis provided, as needed.

Question A: Is the remedy functioning as intended by the decision documents?

Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

6.7.1 Question A: Is the remedy functioning as intended by the decision documents?

Yes, the remedy is functioning as intended.

6.7.1.1 Remedial Action Performance

At OU2, a no further action/no response action was selected as the preferred alternative in the ROD; however, a five-year review was recommended to ensure that this alternative remains protective of human health and the environment. The decision was based on the current and reasonably anticipated future industrial and agricultural land use and exposures. These properties have all been sold to various entities and are generally in either industrial or agricultural use at this time and therefore, the selected remedy for OU2 is functioning and achieving the desired results as intended in the associated ROD document.

6.7.1.2 Early Indicators of Potential Issues

There are no early indicators of potential issues.

6.7.1.3 Implementation of Institutional Controls and Other Measures

There are no institutional controls required by the OU2 ROD. No private residences were observed and the land was found to be used for either industrial or agricultural purposes.

6.7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. Since the same exposure assumptions, toxicity data, and cleanup levels are used across the site refer to Section 5.7.2 for the discussion of Question B; however, it should be noted that the discussion regarding installation of irrigation wells within the plume does not apply to OU2.

6.7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

6.7.4 Technical Assessment Summary

Overall, the remedy was implemented and is functioning as intended. The review of documents, ARARs, risk assumptions, and the results of the site inspections indicate that the selected remedies for OU2 are functioning and achieving the desired results as intended in the associated ROD document. No changes in land use patterns have occurred in subsequent years.

Consequently, the selected alternative for OU2 remains protective of human health and the environment. There have been no changes in the ARARs that would affect the protectiveness of the remedy and there have been no changes in standards that would affect existing cleanup levels. Changes in the toxicity factors that were used in calculation of cleanup levels did not result in the need for additional or changed remedies. There has been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy. New ecological guidance has been issued since the preparation of the 1996 ERA, and a number of potential ecological screening levels have been developed, changed, or published in new sources; however, the ecological risk evaluation presented in **Attachment K** concluded that ecological risk issues do not affect the protectiveness of the remedy.

6.8 Issues

No issues related to current site operations, conditions, or activities were identified during this five-year review that prevents the remedy from being protective now or in the future.

6.9 Recommendations and Follow-up Actions

No recommendations or follow-up actions were required since no issues were identified during this five-year review that affects the current and/or future protectiveness of the remedy.

However, one recommendation was identified not related to ‘protectiveness’ as follows:

- Review OU2 data to determine whether OU2 has achieved unlimited use/unlimited exposure (UU/UE) and can be removed from the Five Year Review process.

6.10 Protectiveness Statement

The remedy at OU2 is protective of human health and the environment.

7.0 Operable Unit 3

7.1 Introduction

OU3 includes the Pistol Range (three of the four subsites), Nitrate Area, Shop Area, and Sanitary Landfill. The selected remedy for OU3 is as follows: Excavation and off-site disposal of contaminated soils, MNA of VOCs in groundwater at the Shop Area, and institutional controls to prevent residential use.

To implement the selected remedy, the excavation and removal of contaminated soils has been completed and LTM is in place to monitor the VOCs in groundwater. Deed restrictions and other institutional controls specified in the ROD document for OU3 have been implemented in order to prevent human exposure to contaminated soil and groundwater.

7.2 Site Chronology

Significant events in the operational and regulatory history of CHAAP are presented in **Table 2-1**. Site specific regulatory and operational events for OU3 are outlined in **Table 7-1**.

Table 7-1: Chronology of Cornhusker Army Ammunition Plant OU3 Events

Event	Date
An IRA was conducted to excavate over 5,000 tons of contaminated soils from 25 sites on the facility.	November - December 1994
Annual groundwater LTM initiated.	June 1998
The OU3 ROD was signed. The OU3 ROD established a selected remedy of excavation of contaminated soils at OU3, MNA of VOCs in groundwater at the Shop Area, and institutional controls to prevent residential use.	December 1999
Soil excavation and confirmation sampling were conducted at the OU3 AOCs in compliance with the OU3 ROD selected remedy.	May - July 2000
A contractor to the City of Grand Island conducted a cleanup of lead-impacted soil at the former Pistol Range Static Ejection Site/Backstop Berm. The NDEQ later approved this action as complete.	July 2003
The thermal decomposition and demolition of Nitrate Area buildings and select buildings in the Shop Area was conducted.	March -September 2004
The fence installation at the Pistol Range was completed.	March - June 2005

Event	Date
A voluntary subsurface injection pilot study to accelerate remediation at the Pistol Range was conducted.	November - December 2006
The 2009 LTM report was submitted	November 2009
The 2010 LTM report was submitted	November 2010
The 2011 LTM report was submitted	November 2011
The 2012 LTM report was submitted	June 2013
The Draft 2013 LTM report was submitted	October 2013

7.3 Site Background

7.3.1 Land and Resource Use

Present activities at CHAAP are limited to maintenance operations, leasing of property for agricultural purposes and livestock grazing, leasing of storage buildings, and wildlife management. A large portion of CHAAP is currently inactive; however, much of the land and buildings have been sold or are leased to various individuals and local concerns. A more detailed discussion of land use at CHAAP can be found in **Section 3.3**.

7.3.2 History of Contamination

A discussion of the history of contamination at CHAAP can be found in **Section 3.4**.

7.3.3 Initial Response

A discussion of the initial response actions at CHAAP can be found in **Section 3.5**.

7.3.4 Basis for Taking Action

OU3 consists of the Nitrate Area, Pistol Range (three of four subsites), Sanitary Landfill, and the Shop Area. The operational histories and site characterization activities conducted in these areas are described in the following sections. Site maps are included as **Attachment B**.

7.3.4.1 The Nitrate Area

The Nitrate Area is located in the southeast part of the installation, between the Shop Area and the Administrative and Base Housing Areas. The Nitrate Area was constructed in 1942 as part of the original CHAAP facility. During World War II, the area was used for the production of nitrate crystals from nitrate liquor and was known as the Ammonium Nitrate Plant. The crystalline nitrate was used in bomb production. In 1946, the plant was modified to produce ammonium nitrate fertilizer. Fertilizer production ceased in 1948 and the Nitrate Area facilities

were placed on standby status. In 1968, Building N-2 was modified and converted for use as a mine test facility in support of operations at Load Line 5. Testing operations began on May 27, 1968 and stopped sometime before mine production ceased near the end of the Vietnam conflict (IT, 1999a). DTE, a railcar refurbishing operation, has leased and operated much of the Nitrate Area since 1979. The leased areas include Building N-17, the railcar loading area, adjacent open storage areas, and rail sidings throughout CHAAP (IT, 1999a). Areas of environmental concern associated with the Nitrate Area include: Building N-17, the Railcar Loading Area, Crystallization Buildings (N-5, N-7, N-9, H-13, and N-15), the Chemical Analysis Laboratory, the Sanitary Waste Leach field, Drum Storage Areas, Marsh and Pond Areas, the General Storage Area/Salvage Yard, and Drainage Ditches.

Environmental sampling programs conducted at the Nitrate Area included surface soil and sediment sampling for the 1991 EA (USAEC, 1991); surface and subsurface soil sampling, groundwater sampling, and limited surface water and sediment sampling for the 1993 SCD (USAEC, 1993); and surface and subsurface soil and groundwater sampling for the 1996 RI (ICF KE, 1996).

Groundwater results from two perimeter wells indicate that operations at the Nitrate Area have not impacted groundwater. However, lead was detected (4,600 mg/kg) in a surface soil sample collected from the General Storage Area/Salvage Yard within the Nitrate Area. This concentration exceeded the level considered to be protective of human health according to the NDEQ TBC guidance of 400 mg/kg, which was cited in the OU3 ROD as protective of human health under non-residential conditions. It should be noted that the NDEQ TBC concentration established as the RAO at OU3 is equal to the concentration subsequently established in 2001 by the USEPA as the residential bare soil screening level for lead in soils in children's play areas (see 40 CFR 745.65). Although the TBC concentration was established as the RAO under non-residential land use, the RAO can also be considered protective of human health when evaluated against the most stringent available federal soil regulations.

The General Storage Area is located within a fenced area, which surrounds Buildings N-1 and N-3. This area was used as a salvage yard for storing unwanted equipment, excess machinery, and other items including lead batteries, transformers, and old fuel storage tanks (IT, 1999a). No other COPCs were detected above industrial risk-based cleanup levels in the soil samples collected within the Nitrate Area. As a result, lead contamination in soil appeared to be confined to one surface soil location, and was not identified as a groundwater contaminant (IT, 1999a). Soil samples also showed concentrations PAHs; however, all concentrations of PAHs were below the NDEQ TBC guidance cleanup concentration of 33 mg/kg, which was established as the cleanup level for PAHs in the OU3 ROD.

7.3.4.2 The Pistol Range (three of four subsites)

The Pistol Range (three of four subsites) is located near the western boundary of CHAAP. The site covers approximately 30 acres and is surrounded by cultivated fields. From 1968 through 1969, the Pistol Range was the site of a destruction area for all the rejected scrap and explosives generated by activities conducted at Load Line 5. Based on aerial photos and historical documents, the following operations were conducted in the area of the Pistol Range: static ejection of mines from canisters; burning of RDX and desensitized lead azide; detonation of mines, canisters, and bulk lead azide; disposal of RDX-contaminated material and explosives-contaminated Freon; and burning of XM45E1 mines. Originally, four potential AOCs were identified in the Pistol Range Area: the Burning Pit Area, Storage Pad Area, Decanting Station and Leaching Pit Area, and Firing Range/Backstop Berm/Static Ejection Test Site (IT, 1999a). Due to the continued use of the firing range by local police authorities, the Firing Range/Backstop Berm/Static Ejection Test Site was separated from OU3 and included in OU5.

The Burning Pit Area, located in the northern portion of the Pistol Range, was used for explosives demolition. Burning and demolition operations took place in a series of eight burning pits measuring 4 ft deep, 2 to 4 ft wide, and 8 to 40 ft long. Desensitized lead azide, microgravel mini-mines, and explosives-contaminated trash were regularly dumped into the burning pits, doused with fuel oil, and ignited. Unexploded mines and bulk explosives scattered over the ground during demolition events were soaked with liquid Freon, transported back to the burning pits, and reignited (IT, 1999a).

Environmental sampling programs conducted at the Pistol Range included geophysical surveying and surface soil sampling during the 1991 EA (USAEC, 1991); geophysical surveying, surface and subsurface soil sampling, test trench excavating, and groundwater sampling during the 1993 SCD (USAEC, 1993); and geophysical surveying, surface and subsurface soil sampling, test trench excavating, and groundwater sampling during the 1996 RI (ICF KE, 1996).

Test Trenches at the Burning Pit Area were identified as areas within the Pistol Range (three of four subsites) where contaminants exceeded levels considered to be protective of human health under industrial conditions. Provided below is a summary of contamination identified in these areas (ICF KE, 1996).

Test Trenches:

- Test Trench PRST07 – Concentrations of lead (480 mg/kg at 1.5 ft bgs and 2,900 mg/kg at 2 ft bgs) were detected above the USEPA soil screening level of 400 mg/kg. Concentrations of RDX (12 mg/kg at 1.5 ft bgs and 1,500 mg/kg at 2 ft bgs) exceeded the calculated non-residential risk-based cleanup level.
- Test Trench PRST08 – Concentrations of RDX (440 mg/kg at 3 ft bgs and 340 mg/kg at 3.5 ft bgs) exceeded the calculated non-residential risk-based cleanup level.

Based on the findings of the 1996 RI, an FS was prepared to address lead and RDX contamination at the Burning Pit Area. Soil samples also showed concentrations of PAHs; however, all concentrations of PAHs were below the NDEQ guidance cleanup concentration of 33 mg/kg, which was established as the cleanup level for PAHs in the OU3 ROD.

7.3.4.3 The Sanitary Landfill

The Sanitary Landfill is located in the northwest section of the installation, southeast of the Burning Grounds, and southwest of the intersection of Ninth Avenue and Tenth Street. The landfill site encompasses an area of 55 acres. The Sanitary Landfill includes the Sanitary Waste Disposal Area, Capped Landfill, Burning Cages, Metals Disposal Area, Flammable Liquids Disposal Area, Fuze Destruction Area, IRA Site 2, and the Explosives Parking Area (IT, 1999a).

Based on previous SIs, the Sanitary Landfill appeared to have been active from 1957 to 1981. Documentation of activities prior to 1957 is limited (ICF KE, 1996). Four potential units of contamination (PUCs) were identified in the Sanitary Landfill area based on analysis of aerial photographs and historical documents. Operations associated with each of the four PUCs are presented in the following paragraphs.

Disposal Area PUC: The Disposal Area PUC includes the Sanitary Waste Disposal Area, the Burning Cage Areas, the Capped Landfill Area, the Flammable Liquids Disposal Area, and the Metal Disposal Area. The Disposal Area PUC was used for disposal of non-explosive wastes. The area covered approximately 1,000 square ft. Rubbish, trash, scrap wood, and construction debris were disposed of in the Sanitary Waste Disposal Area in 6- to 10-ft deep trenches. Explosives-contaminated wood, paper, and foil from TNT boxes were burned in the Burning Cage Area. The Metal Disposal Area was used to stage and dispose of scrap metal. These materials were flashed (burned to remove surficial explosives residue) at the Burning Grounds (OU5) before disposal in the Metal Disposal Area. Acetone, thinner, and other unspecified solvents were disposed of in the Flammable Liquids Disposal Area. These liquids were not poured onto the ground or into trenches, but were allowed to evaporate in long metal troughs (ICF KE, 1996).

Destruction Area PUC: The Destruction Area PUC includes the Fuze Destruction Area and the Explosive Parking Area. Aerial photographs first depicted activity at the site from 1957 until 1978. The Explosives Parking Area was used to temporarily store or stage materials designated for destruction. The Fuze Destruction Area was used to flash defective or obsolete fuzes (ICF KE, 1996).

IRA Site 2 PUC: The IRA Site 2 PUC was a 180 ft by 200 ft area located along Tenth Street and included the northeast corner of the Fuze Destruction Area. The site was described in the 1996 RI/FS as an area containing explosives-contaminated soils (ICF KE, 1996).

Freon-Contaminated Groundwater PUC: 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113) was detected during the 1991 EA (USAEC, 1991) and the 1993 SCD (USAEC, 1993) in 11 wells in the vicinity of the Burning Grounds, the Sanitary Landfill, and the Pistol Range (3 of 4 subsites) at concentrations up to 3,000 µg/L. This concentration of Freon 113 exceeded the USEPA Region VII MCL of 1,200 µg/L. The distribution and concentration of Freon 113 detections suggested the possibility of multiple Freon sources at CHAAP. However, there was no historical record indicating that Freon 113 was used or disposed of in the Sanitary Landfill Area (ICF KE, 1996). In addition to the PUCs listed above, four ditches at the Sanitary Landfill were included in environmental investigations at CHAAP. Two of the ditches are upgradient of the landfill area and two ditches are adjacent to the Explosives Parking Area (ICF KE, 1996).

Environmental investigations associated with the Sanitary Landfill PUCs consisted of a geophysical survey and surface soil sampling for the 1991 EA (USAEC, 1991); geophysical survey, surface soil sampling, subsurface soil sampling, test trench excavation, and groundwater sampling for the 1993 SCD (USAEC, 1993); and surface soil sampling, subsurface soil sampling and groundwater screening and sampling for the 1996 RI (ICF KE, 1996).

Soils associated with the Fuze Destruction Area contained concentrations of COCs above USEPA Region VII industrial RBCs. RDX was detected at the northwestern corner of the Fuze Destruction Area at a concentration of 890 mg/kg. This detection of RDX above the calculated risk-based cleanup level (52 mg/kg) triggered the need for an alternatives analysis at the site. Soil samples also showed concentrations of PAHs; however, all concentrations of PAHs were below the NDEQ guidance cleanup concentration of 33 mg/kg, which was established as the cleanup level for PAHs in the OU3 ROD.

7.3.4.4 The Shop Area

The Shop Area is located in the east-central area of the facility, immediately south of Load Line 1. The Shop Area covers about 3,000,000 square ft and includes 28 buildings and sheds. Shop Area buildings and areas included the installation laundry and a settling basin for laundry wastewater, maintenance facilities for vehicles, equipment and other operations, rail loading and unloading areas, and open storage areas. Areas of environmental concern associated with the Shop Area include the North Ditch, the Paint Shop, the Paint Spray Shop and Pesticide Mixing Building, the Laundry Settling Basin, the West Ditch, the South Ditch Area, the Former Paint Storage Shed Location, the Sanitary Leach field, underground storage tanks (USTs), and aboveground storage tanks (ASTs). Buildings at the Shop Area are currently being leased to various industrial clients for storage purposes and office space (IT, 1999a).

The laundry generated the majority of wastewaters at the Shop Area during periods of ammunition production. According to aerial photographs, leach fields were used in the 1950s for containing and possibly treating wastewaters (IT, 1999a). An area of ground scarring north of

Building SPSS-1 corresponds to the location of the Sanitary Leach field. Five ASTs and five USTs were used at the Shop Area, but have been removed. Tank capacity and contents were presented in the ROD as compiled by Mason & Hangar Tank Inventory Reports (Mason & Hangar, 1982 and 1988). Contents identified in the tank inventories include used oil, road oil, and diesel fuel (IT, 1999a).

The environmental sampling program at the Shop Area consisted of geophysical surveying and surface soil sampling during the 1991 EA (USAEC, 1991); geophysical surveying, surface soil sampling, subsurface soil sampling, groundwater sampling, and sediment sampling for the 1993 SCD (USAEC, 1993); and geophysical surveying, surface soil sampling, subsurface soil sampling, and groundwater sampling for the 1996 RI (ICF KE, 1996).

Environmental investigations revealed lead in surface soils east of Building S-22 at concentrations ranging from 570 mg/kg to 2,400 mg/kg. These concentrations exceeded USEPA guidance for lead of 400 mg/kg in bare soils in children's play areas.

Groundwater COCs exceeded the non-residential cleanup levels during sampling rounds conducted in 1995 and 1996 (IT, 1999a). Soil samples also showed concentrations of PAHs; however, all concentrations of PAHs were below the NDEQ guidance cleanup concentration of 33 mg/kg, which was established as the cleanup level for PAHs in the OU3 ROD. Groundwater sampling results collected in the AST area indicated that groundwater had been impacted by chlorinated solvents. Concentrations of 1,1,2-TCA and 1,2-DCA were detected in samples collected during the 1995 and 1996 sampling efforts. None of the soil samples collected in the AST area contained detections of chlorinated organic solvents. These data indicate that the unsaturated zone in this area is no longer a source of contamination in groundwater (IT, 1999a).

In 1995, wells SHGW02, SHGW03, and SHGW04 were installed and sampled. Concentrations of several chlorinated solvents detected during this sampling event suggested a narrow elongated plume extending to the northeast, in the general direction of groundwater flow. 1,1,2-TCA was detected at its highest concentration (56 µg/L) at the upgradient end of the plume in well SHGW02, and occurred at a decreased concentration (45 µg/L) about 90 feet downgradient in well SHGW03. 1,2-DCA also occurred in well SHGW03 at a concentration of 8.3 µg/L. At the distal end of the plume (well SHGW04), 1,1,2-TCA was not detected, and the concentration of 1,2-DCA was relatively low (0.68 µg/L). This distribution of chlorinated solvent compounds was determined to be indicative of breakdown of 1,1,2-TCA to 1,2-DCA (IT, 1999a).

To further characterize the extent of the chlorinated solvent plume, an additional round of sampling was performed in the AST area in August 1996. The three wells sampled in 1995 were resampled, and 17 additional Geoprobe™ groundwater samples were collected. There were no detections of chlorinated solvents upgradient (SHGP02 and SHGP04) or downgradient (SHGP09 through SHGP12) of the solvents plume encountered during the 1995 sampling round, indicating

that the plume is limited to roughly a 100 ft by 350 ft area. There were no detections of 1,1,2-TCA or 1,2-DCA in 1996, in any of the three wells sampled in 1995. However, 1,1,2-TCA was detected in two of the Geoprobe™ points proximal to SHGW02 (SHGP05 at 6.6 µg/L and SHGP06 at 5.0 µg/L). 1,2-DCA (12 µg/L) and vinyl chloride (10 µg/L) were detected in the shallow Geoprobe™ groundwater sample SHGP08 (about 120 ft downgradient of SHGP05). The only chlorinated solvents detected at the distal end of the plume in 1996 were far below federal MCLs.

The results of the 1996 groundwater sampling round showed a significant reduction in the concentration of 1,1,2-TCA and provided further evidence of the breakdown of 1,1,2-TCA to 1,2-DCA (IT, 1999a). The findings of the 1996 RI triggered the requirement for a remedial alternative analysis for lead contamination in soil and for chlorinated VOCs in groundwater in the vicinity of the AST area.

7.4 Remedial Actions

7.4.1 Remedy Selection and Implementation

The final ROD for OU3 was finalized in October 1999 (IT, 1999a). Selected remedies for each of the four OU3 AOCs included excavation and disposal of contaminated soils, MNA of groundwater (Shop Area only), and institutional controls. Grid sampling conducted for confirmation purposes prior to excavation activities at each AOC resulted in a reduced volume of soils requiring excavation and disposal and a subsequent reduction in costs. Remedy selections and remedial actions conducted at each AOC are discussed in the following sections.

7.4.2 The Nitrate Area

The 1989 risk assessment identified unacceptable risks to human health associated with concentrations of lead identified in surface soils at the site. As a result, the selected remedy in the 1999 ROD was Alternative Two, which included the following actions:

- Excavation of lead-contaminated soil at the General Storage Area/Salvage Yard to levels below the cleanup level for lead (400 mg/kg)
- Transportation of contaminated soil to an off-site disposal facility
- Implementation of institutional controls to prevent residential use

Preparations to excavate the lead contaminated soils within the Nitrate Area were initiated in May 2000. Prior to excavation activities, a 75-ft by 60-ft area located within the General Storage Area/Salvage Yard, where lead-contaminated soils were identified in the 1996 RI, was divided into 20-ft by 20-ft sections for composite sampling. One composite sample was collected from each section at a depth of 6 inches to 1 ft. Each composite sample consisted of four soil samples

collected from locations equally distributed within the grid area. The analytical results of all composite samples were below cleanup level for lead (400 mg/kg). As prior analytical detections of lead-contaminated soils could not be confirmed or replicated, no excavation activities at the Nitrate Area were completed. Details of sampling locations and analytical results of the composite sampling are presented in the Closeout Report for the Soil Investigation and Excavation of OU3 (Cape Environmental Management, Inc. [CAPE], 2001). Based on the results of the composite sampling, concentrations of lead in soil at the Nitrate Area were not confirmed above NDEQ guidance concentrations. As a result, the selected remedy for lead in soil at the Nitrate Area has been achieved.

Beginning in December 2003 and continuing into 2004, most of the buildings in the Nitrate Area underwent thermal decomposition and demolition. All asbestos-containing materials that had remained in these buildings were removed prior to the demolition. As part of this action, sanitary and industrial sewer pipes in the area were removed and disposed. Water supply pipes were field tested for explosive residue. A geophysical survey did not find any munitions. Following demolition, soil beneath the building sites was sampled and it was determined that any chemicals present in the soil occurred at levels that were less than established OU3 cleanup levels. Building N-17 in the Nitrate Area was not demolished. In August and September 2005, use of field test kits for explosives and an inspection of Building N-17 determined that it was safe for DTE Rail (the designated purchaser and lessee of the property) to continue using the building for railroad car repair operations. However, because not all building surfaces or wall cavities could be inspected, U.S. Army Technical Center for Explosives Safety (USATCES) determined that any future major structural modification or demolition of the building must be performed by personnel qualified in explosives removal. This restriction was placed in the deed for the property when the property was transferred to DTE Rail in January 2006. The deed also restricted use of the property to commercial, industrial, or agricultural purposes.

7.4.3 The Pistol Range (Three of Four Subsites)

Concentrations of lead and RDX exceeded levels considered to be protective of human health and the environment at the Pistol Range (three of four subsites) (ICF KE, 1996). Elevated concentrations of lead and RDX were detected in soils at the Test Trenches. Alternative Three was the selected remedy in the final ROD which included the following actions (IT, 1999a):

- Excavation and off-site disposal of RDX- and lead-contaminated soils to or below the cleanup levels of 52 mg/kg and 400 mg/kg, respectively
- Institutional controls to prevent residential use

Preparations to excavate contaminated soils at the Pistol Range (three of four subsites) were initiated in May 2000. Prior to intrusive actions at the site, a magnetic survey was conducted as

the site had a potential for UXO. On May 24 and 25, 2000 the two trenches were excavated and 280 cubic yards of soil were removed from the trenches.

Following the initial excavation activities, confirmation samples were collected and analyzed for lead and RDX. One soil sample exceeded the action level for lead of 400 mg/kg. All other samples collected at the site were below cleanup levels. Approximately two additional cubic yards of soil were excavated from the vicinity of the elevated sample location. A total of three additional confirmation samples were collected to confirm that contaminated soils were successfully removed from the Pistol Range. All confirmation samples were below action levels for lead. On July 12 through 14, fourteen 20-cubic yard roll-off containers of excavated soils were disposed of at the Grand Island Municipal Landfill. Details of the confirmation sampling and analytical results are presented in the Closeout Report for the Soil Investigation and Excavation of OU3 (CAPE, 2001).

Based on the results of the confirmation sampling, concentrations of lead and RDX in soil at the Pistol Range (three of four subsites) no longer remain above screening concentrations (CAPE, 2001). As a result, the selected remedy for lead and RDX in soil at the Test Trenches within Pistol Range has been achieved, and the concentrations of all remaining soil contamination at this site are below the protective levels for industrial use established in the ROD. The selected alternative for the Pistol Range (three of four subsites) also includes the implementation of institutional controls to prevent residential land use. The Pistol Range area is designated for sale to the CPNRD, which intends to use the property for storage of soil excavated from other areas in the construction of detention ponds designed to temporarily hold excess surface water runoff.

Groundwater at the Pistol Range area contains explosives and Freon. Because of concerns that the Freon might indicate the presence of gravel mines, which are undetectable by magnetic survey, or other munitions and explosives of concern (MEC), additional investigation was performed. Groundwater was sampled in November/December 2005 (URS, 2006) and a Freon Site Investigation was completed in 2007 at the former Open Burning/Open Detonation (OB/OD) Burning Area. The 2007 investigation included test pits with MEC avoidance, soil borings, and groundwater sampling. Freon 113 concentrations were below the USEPA Industrial Risk Based Concentration of 59,000 µg/L. Results indicated no evidence of MEC.

Another groundwater investigation was conducted downgradient from the former Decant Station in December 2006. A small plume of low-level RDX was present in the groundwater at the eastern edge of the site, along with Freon 113. Freon 113 concentrations were below the USEPA Industrial Risk Based Concentration of 59,000 µg/L. A voluntary effort to reduce concentrations of RDX in the groundwater was begun in late 2006 using subsurface injection of organic amendments. At the conclusion of the performance monitoring in December 2007, a small (modeled at approximately 200 feet long) plume of RDX remained at the boundary of the site, with two detections of RDX that exceeded the HAL (3.3 µg/L and 4.3 µg/L). A subsurface

injection treatment wall is present directly downgradient from this limited area of contamination. This effort was also used as a pilot study for subsurface injection efforts at OU1.

7.4.4 The Sanitary Landfill

Concentrations of RDX were detected above levels considered to be protective of human health and the environment in surface soil at the Fuze Destruction Area. As a result, the selected remedy chosen for the site in the 1999 ROD was Alternative Three which included the following actions:

- Excavation and off-site disposal of RDX-contaminated soil to or below the risk-based cleanup level (52 mg/kg)
- Institutional controls to prevent residential use

Preparations to excavate RDX-contaminated soils within the Sanitary Landfill area were initiated in May 2000. Excavation was centered on an area identified in the RI measuring 45 ft by 100 ft where RDX concentrations were detected above 52 mg/kg. Prior to any excavation activities, this area was divided into ten 22.5-ft by 20-ft sections for further investigation. One composite soil sample was collected from each section between 0.5 ft and 1 ft bgs and analyzed for RDX. Analytical results from the soil samples indicate that RDX contamination was limited to the area of one prior soil sample, SLF017, which is consistent with the findings in the RI.

Soil excavation activities were performed on June 21, 2000 to remove soils from the site. Soil was removed to approximately 2 to 3 ft bgs, at which point the water table was encountered. Following excavation activities, a total of five soil samples were collected to confirm that all contaminated soils were removed from the Fuze Discharge Area. All confirmation sample results were below the cleanup level for RDX (52 mg/kg), indicating that excavation activities at the site have been completed (CAPE, 2001). Approximately 40 cubic yards of soil was excavated from the area, and two 20-cubic yard roll-off containers were disposed of at the Grand Island Municipal Landfill. Based on the results of the confirmation sampling, concentrations of RDX in soil at the Sanitary Landfill no longer remain above the RAO (CAPE, 2001). As a result, the selected remedy for RDX in soil at the Sanitary Landfill has been achieved, and the concentrations of all remaining soil contamination at this site are below the protective levels for industrial use established in the ROD. The selected remedy for the Sanitary Landfill also includes the implementation of institutional controls to prevent residential use.

The Sanitary Landfill property is designated for sale to the CPNRD, who intend to use the property and surrounding areas as part of an overall plan of temporary detention cells to contain excess surface water runoff.

7.4.5 The Shop Area

Concentrations of lead in soil and VOCs in groundwater pose an unacceptable risk to human health and the environment at the Shop Area. As a result, the selected remedy in the 1999 ROD was Alternative Two, which included the following actions:

- Excavation and off-site disposal of lead-contaminated soil to, or below, the cleanup level (400 mg/kg)
- MNA of VOCs in groundwater
- Institutional controls to prevent residential use

Soils contaminated with lead were identified in the Shop Area, directly east/northeast of Building S-22. On May 22, 2000, nine composite soil samples were collected from areas east and north of Building S-22. Elevated concentrations of lead were detected above the cleanup level at concentrations ranging from 463 mg/kg to 18,300 mg/kg. On May 23, 2000, six additional soil samples were collected to further delineate lead concentrations at the site. Sample results and locations are presented in the Closeout Report for the Soil Investigation and Excavation of OU3 (CAPE, 2001).

Soil excavation activities were performed at the Shop Area on June 20, 2000. A surface area of approximately 1,000 square ft was excavated at the site to a depth of 2 ft bgs. Following excavation activities at the Shop Area, seven soil samples were collected to confirm that contaminated soils were removed. All confirmation samples were below the cleanup level for lead (400 mg/kg) indicating that excavation of lead-contaminated soils was complete. All excavations were backfilled with clean fill (CAPE, 2001). On July 14, 2000, four 20-cubic yard roll-off containers were disposed of at the Grand Island Municipal Landfill (CAPE, 2001).

Based on the results of the confirmation sampling, concentrations of lead in soil at the Shop Area no longer remain above RAO cleanup levels specified in the ROD. As a result, the selected remedy for lead in soil at the Shop Area has been achieved. The concentrations of all remaining soil contamination at this site are below the protective levels for industrial use established in the ROD. The selected remedy for the Shop Area also includes the implementation of institutional controls to prevent residential use.

The selected remedy for the Shop Area also includes MNA of VOCs in groundwater, which is conducted during the LTM groundwater sampling events at CHAAP.

Shop Area Buildings S-4 and S-5 were demolished in March and April 2004. The debris from the demolished buildings was loaded into the Nitrate Area buildings which underwent thermal decomposition in April 2004. The property was sold to DTE Rail, Inc. in January 2006.

7.5 Progress Since Last Five-Year Review

7.5.1 Protectiveness Statement in Previous Five-Year Review

The following protectiveness statement was included in the second five-year review completed in 2010:

“This second five-year review provides an assessment of these remedial actions to determine if they remain protective of human health and the environment. Based on the findings of this five-year review, the remedial actions at CHAAP as set forth in the various decision documents, have been completed as planned, or will meet the intent of the decision documents when completed. These remedies are achieving the remedial goals as intended, and are expected to remain protective of human health and the environment when groundwater cleanup goals are reached through treatment and MNA.”

7.5.2 Recommendations In Previous Five-Year Review and Actions Taken

See the summary contained in **Table 7-2**.

Table 7-2
Actions Taken Since the Last Five-Year Review

Issue	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
Compare the levels of remaining soil contamination to residential values to determine if any soil OUs may be returned to unrestricted use and removed from the CERCLA/Five-Year Review process. OUs with soil contamination exceeding residential levels will remain with deed restrictions and/or land use controls.	USACE	EPA	September 2011	No additional soil sampling has been done so there is no data to make this determination at this time.	none

7.6 Five-Year Review Process

7.6.1 Data Review

7.6.1.1 Soil

No new soil sampling has been conducted at OU3 since the last five year review.

7.6.1.2 Groundwater

Groundwater samples are collected from six monitoring wells at OU3 during each annual LTM event (Bay West and URS, 2013). All samples collected are analyzed for VOCs, nitrate/nitrite, sulfate, and alkalinity. Three of the wells are also sampled for diesel range organics. Historically, 1,1,2-TCA has been detected only in OU3 Shop Area wells SHGW02 and SHGW03. Hydraulically downgradient wells G0069, SAMW1, and SHGW04 have historically been non-detect for 1,1,2-TCA and therefore, the contamination does not appear to be migrating. During the March 2013 LTM groundwater sampling event, 1,1,2-TCA was not detected above the MCL at OU3. The 1,1,2-TCA concentration at SHGW02 decreased from 47 µg/L in 2008 to 1.1 (J) µg/L in 2010 to non detect in 2013. The concentration of breakdown product 1,2-DCA also decreased from 27 µg/L in 2008 to 3.9 µg/L in 2013 at monitoring well SHGW02. All VOC detections were below the MCLs in 2013, as shown on figures in **Attachment B**. Using MCLs as the evaluation criteria, there was not a VOC plume at OU3 in 2013.

7.6.1.2.1 OU3 Natural Attenuation Evaluation

As shown on the OU3 plume map (**Attachment B**) there were no detections of VOCs above the MCLs; thus, it appears there is no plume present at OU3 and a natural attenuation evaluation is not necessary.

7.6.2 Site Inspection

Site inspection findings are presented in Section 5.6.2. A site inspection checklist is included as **Attachment G**. Site photographs are included as **Attachment H**.

7.6.3 Interviews

Interviews were conducted for all the OUs at one time. A summary of the interviews can be found in Section 5.6.3. No additional information was provided during the interviews specific to OU3.

7.7 Technical Assessment

This section presents a technical assessment and is formulated based on the answers to Questions A, B and C, presented below. As answers were formulated, consideration was given to the status of the remedial action. For consistency with Five Year Review guidance, each question is summarily answered yes or no. Supporting information is provided in the previous sections and referenced documents with additional analysis provided, as needed.

7.7.1 Question A: Is the remedy functioning as intended by the decision documents?

Yes. At OU3, selected remedies for each of the four AOCs included excavation and disposal of contaminated soils, MNA of groundwater (Shop Area only), and institutional controls to prevent

residential use and to prevent groundwater use in the Shop Area. The selected soil remedies for OU3 are functioning and achieving the desired results as intended in the associated ROD document; however, the groundwater use institutional controls do not appear to have been enforced consistently. The excavation of contaminated soils has been completed, confirmation sampling has been conducted, and institutional controls remain in place. Most of the buildings in the Nitrate Area underwent thermal decomposition and demolition in 2003 and 2004. Following demolition, soil underneath the building sites was sampled and it was determined that any chemicals present in the soil occurred at levels that were less than established OU3 cleanup levels. A deed restriction was placed on Building N-17, which was not demolished, that any future major structural modification or demolition of the building must be performed by personnel qualified in explosives removal. This restriction was placed in the deed for the property when the property was transferred to DTE Rail in January 2006. The deed also restricted use of the Nitrate Area property to commercial, industrial, or agricultural purposes. The Pistol Range and Sanitary Landfill areas are designated for sale to the CPNRD, which intends to use the property and surrounding areas as part of an overall plan of temporary detention cells to contain excess surface water runoff. Shop Area Buildings S-4 and S-5 were demolished in 2004. The Shop Area property was sold to DTE Rail, Inc. in January 2006.

The selected remedy for the Shop Area also includes MNA of VOCs in groundwater, which is conducted during the LTM groundwater sampling events at CHAAP. In the most recent sampling event in 2013 all VOC detections were below MCLs. The remedy is functioning and achieving the results intended in the associated ROD.

7.7.1.1 Early Indicators of Potential Issues

There are no early indicators of potential issues at OU3.

7.7.1.2 Implementation of Institutional Controls and Other Measures

The institutional controls that are in place include deed restrictions to prevent residential use and deed restrictions to prevent groundwater use in the Shop Area. Observations made during the site visit indicate that institutional controls are being enforced in regard to use of the land. No private residences were observed and the land was found to be used for either industrial or agricultural purposes. However, there are concerns regarding enforcement of the groundwater use institutional controls. All of the previous LTM Reports indicate that there have not been any new wells drilled within the institutional controls boundary; however, this is not the case. According to the Nebraska Department of Natural Resources Registered Groundwater Wells Database there have been numerous wells drilled in the area since signing of the ROD. Within the designated On-site Groundwater Institutional Control Area for CHAAP there are at least 2 registered high yield irrigation wells and 3 registered domestic wells located within OU3; however, it was confirmed that water from the domestic wells is not currently being used for human consumption (**Attachment F**).

7.7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy still valid?

Yes. Since the same exposure assumptions, toxicity data, and cleanup levels are used across the site refer to Section 5.7.2 for the discussion of Question B.

7.7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No. Refer to Section 5.7.3 for the discussion of Question C.

7.7.4 Technical Assessment Summary

Overall, the remedy of soil excavation and groundwater MNA was implemented and is functioning as intended; however, the enforcement of institutional controls requires further evaluation. The review of documents, ARARs, risk assumptions, and the results of the site inspections indicate that the selected remedies for OU3 of soil excavation and groundwater MNA are functioning and achieving the desired results as intended in the associated ROD documents. Review of groundwater well databases indicate that the institutional controls described in the ROD document are not being consistently enforced but do not call into question the protectiveness of the remedy. There have been no changes in the ARARs that would affect the protectiveness of the remedy and there have been no changes in standards that would affect existing cleanup levels. Changes in the toxicity factors that were used in calculation of cleanup levels did not result in the need for additional or changed remedies. There has been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy. New ecological guidance has been issued since the preparation of the 1996 ERA, and a number of potential ecological screening levels have been developed, changed, or published in new sources; however, the ecological risk evaluation presented in **Attachment K** concluded that ecological risk issues do not affect the protectiveness of the remedy. A question raised by the installation of high yield irrigation wells on-site that are screened within the contaminated aquifer about possible significant recontamination of surface soil has been resolved by modeling (**Attachment J**), which indicates that it would take thousands of years to produce a significant effect.

7.8. Issues

No issues related to current site operations, conditions, or activities were identified during this five-year review that prevents the remedy from being protective now or in the future

7.9 Recommendations for Follow-Up Actions

No recommendations or follow-up actions were required since no issues were identified during this five-year review that affects the current and/or future protectiveness of the remedy.

7.10 Protectiveness Statement

The remedy at OU3 is protective of human health and the environment.

8.0 Operable Unit 4

8.1 Introduction

OU4 includes the unsaturated zone of Load Lines 1 through 5 and the Gravel and Clay Pit Area. The selected remedy for OU4 is as follows: Institutional controls to prevent residential use. Deed restrictions and other institutional controls specified in the ROD document for OU4 have been implemented in order to prevent human exposure to contaminated soil.

8.2 Site Chronology

Significant events in the operational and regulatory history of CHAAP are presented in **Table 2-1**. Site specific regulatory and operational events for OU4 are outlined in **Table 8-1**.

Table 8-1: Chronology of Cornhusker Army Ammunition Plant OU4 Events

Event	Date
An incineration project was conducted by the Army to excavate and treat soils beneath unlined leach pits and cesspools of the load lines. Approximately 45,000 tons of contaminated soils were treated by incineration during this time.	August 1987 - July 1988
An IRA was conducted to excavate over 5,000 tons of contaminated soils from 25 sites on the facility.	November - December 1994
The OU4 ROD was signed. The OU4 ROD established a selected remedy of institutional controls to prevent residential use at the OU4 AOCs (i.e. the Unsaturated Zone at Load Lines 1 through 5 and the Gravel and Clay Pit Area).	February 2000
The thermal decomposition and demolition of Load Line 5 buildings was conducted.	July - October 2001
The thermal decomposition and demolition of Load Line 1 buildings was conducted.	August - October 2001 and April 2002 - January 2003
The thermal decomposition and demolition of Load Line 2 buildings was conducted.	March 2003 - March 2005
A geophysical investigation and removal of industrial sewers in Load Line 1 was conducted.	July 2003 - December 2004
The thermal decomposition and demolition of Load Line 3 buildings was conducted.	November 2003 - September 2004
The geophysical survey and anomaly investigation, removal of industrial and sanitary sewers, testing of water supply lines, and	January - August 2005

Event	Date
limited soil screening for explosives in Load Lines 3 and 4 were completed.	
The asbestos abatement and demolition of boiler houses on Load Lines 2 and 3; demolition of boiler house on Load Line 4; creosote wood removal on Load Lines 1, 2, and 3; and fence installation at the Pistol Range and portions of the OB/OD Grounds were completed.	March - June 2005
Asbestos abatement of buildings at Load Line 4 was conducted.	April - June 2005
The disassembly, decontamination, and demolition of buildings and installed equipment containing explosives residues at Load Line 4 was conducted.	July 2005 - December 2006
The removal of asbestos sewer at Load Lines 1, 2, and 3 was completed.	March - May 2006
An explosives-contaminated soil investigation and removal at Load Lines 1, 2, and 3 was completed.	April - November 2006
The removal of asbestos-contaminated material from soil at Load Lines 1 and 2 was conducted,	June - September 2006
An explosives-contaminated soil investigation and removal at Load Line 4 were completed.	July - October 2007

8.3 Site Background

8.3.1 Land and Resource Use

Present activities at CHAAP are limited to maintenance operations, leasing of property for agricultural purposes and livestock grazing, leasing of storage buildings, and wildlife management. A large portion of CHAAP is currently inactive; however, much of the land and buildings have been sold or are leased to various individuals and local concerns. A more detailed discussion of land use at CHAAP can be found in **Section 3.3**.

8.3.2 History of Contamination

A discussion of the history of contamination at CHAAP can be found in **Section 3.4**.

8.3.3 Initial Response

A discussion of the initial response actions at CHAAP can be found in **Section 3.5**.

8.3.4 Basis for Taking Action

OU4 includes the soils associated within the unsaturated zone at Load Lines 1 through 5 and the Gravel and Clay Pit Area. The unsaturated zone at Load Lines 1 through 5 has been defined as 0 to 6 ft bgs in order to allow for groundwater fluctuations (IT, 1999a). Groundwater contamination associated with Load Lines 1 through 5 has been identified and discussed previously as OU1. The operational histories and site characterization activities conducted in the Load Line and Gravel and Clay Pit areas are described in the following sections.

8.3.4.1 Load Lines 1 through 5

Load Lines 1 through 5 are located in the central portion of CHAAP. The load lines were the munitions production areas at CHAAP, which operated intermittently between 1942 and 1973. Load line operations included the production of bombs, shells, boosters, supplementary charges, projectiles, and microgravel mini-mines. The principal explosives used in production activities were TNT and RDX. Lead azide and Freon 113 were also used in the production of microgravel mini-mines at Load Line 5. HMX was used to a lesser extent at all load lines. Other chemical materials used to support munitions production included paints, grease, oil, and solvents (IT, 1999b).

Airborne explosive materials generated during production activities at the load lines were removed from the buildings by ventilation systems equipped with wet scrubbers. The water from the scrubbers was run through settling tanks and recycled back through the scrubbers. Wastewater from this process was disposed of through interior building drains connected to concrete pits containing canvas-like filter bags, called sack sumps. The sack sumps were designed to filter out solid explosives particles. The filtered wastewater was discharged through open concrete channels into earthen impoundments referred to as explosive wastewater cesspools. These impoundments had brick or masonry-lined sidewalls that were open at the bottom, allowing wastewater to infiltrate directly into the Grand Island Formation. Water that did not infiltrate through the bottom of the impoundment was routed through an overflow pipe into a leaching pit (IT, 1999b).

The limited filtering effectiveness of the sack pumps allowed some solid particles containing explosives to flow into the earthen impoundments. The residue was periodically scraped from the bottom of the earthen impoundments and leaching pits and ignited at the Burning Grounds. Wastewater was also generated from periodic washing of machinery, interior-building surfaces, and carts used for transporting the munitions through LAP process areas. This wastewater was also discharged to the sack sumps, explosive wastewater cesspools, and leaching pits (IT, 1999b).

The quantity and composition of wastewater generated at the load lines has been estimated from production records. Limited data were available from the World War II era. The average

volume of wastewater generated at CHAAP from all operations is estimated to have been 7,000 gallons per day (gpd) per load line. Other estimates as high as 9,000 to 28,000 gpd per load line have been documented (IT, 1999b). Summarizing from the Production Records Review, the largest amounts of wastewater discharged to the ground originated from Load Lines 1 and 2. Load Line 3 was the least used production facility (IT, 1999b).

Environmental investigation activities associated with the load lines consisted of subsurface soil sampling during the 1993 SCD (USAEC, 1993); soil incineration during the 1989 IRIP (Mason & Hangar, 1989); and soil delineation and IRA actions during the 1994 IRA (ICF KE, 1996). Several areas were identified within OU4 which were potentially associated with explosives contamination in groundwater (OU1). These areas include previously excavated wastewater impoundments; areas where explosives were produced, handled, or stored; interior floor drain outlets; surface depressions and drainage ditches associated with munitions production areas; and non-explosive wastewater impoundments (USAEC, 1994). With the exception of the previously excavated wastewater impoundments, these potential sources were investigated and evaluated during the 1993 SCD, the 1989 IRIP, and the 1994 IRA activities. Details of the SI activities are presented in the OU4 ROD (IT, 1999b).

No explosives contamination was found to exist in the surface depressions or drainage ditches emanating from the munitions production areas. Explosives contaminants were found in roughly 30 percent of the soil samples collected at interior floor drain outlets and in explosives production, handling, and storage areas. Gridded sampling in these areas indicated that the surface contamination was very limited in lateral extent. Subsurface soil sampling in an area heavily stained with explosives east of Load Line 4, near the Gravel and Clay Pit Area, indicated that contaminant levels decrease rapidly with depth. Contaminant levels were minimal near the water table. Samples for analysis of TNT were collected from the base of all remaining non-explosive wastewater impoundments in the load line areas. No detections of TNT exceeded cleanup levels (5 mg/kg) at CHAAP during the IRIP in Load Lines 1, 4, and 5 (Mason & Hangar, 1989). Detections only slightly above the cleanup level were observed at two locations in Load Lines 2 and 3. Based on these results, it was determined that non-explosive wastewater impoundments do not represent a significant source of explosives contamination in groundwater at CHAAP (USAEC, 1994).

Based on historical operations at the site, the majority of explosives were discharged directly to the saturated zone (OU1) through explosive wastewater cesspools. Areas that contained soil contamination in the unsaturated zone (OU4) were incinerated during the 1989 IRIP (Mason & Hangar, 1989) or excavated during the 1994 IRA (USAEC, 1994). With the exception of one detection of TNT at IRA Site 4, COPCs detected at the load lines were all below the calculated risk-based cleanup levels based on non-residential use (i.e., industrial and agricultural), and in most cases, below USEPA Region III residential soil RBCs (IT, 1999b).

8.3.4.2 The Gravel and Clay Pit Area

The Gravel and Clay Pit Area is located in the western part of CHAAP, between the perimeter fence of Load Line 4 and Ninth Avenue. The 1980 Installation Assessment indicated that this area had historically been used for clay and borrow activities as well as for the disposal of construction debris and other trash (USATHAMA, 1980). The Gravel and Clay Pit Area measures approximately 600 ft by 1,800 ft (approximately 25 acres), and is covered by natural grassland vegetation and some wooded areas (IT, 1999b).

Eight areas within the Gravel and Clay Pit Area were identified as AOCs: the Clay Pit Area, the Low-Lying Area, the Excavation South of the Low-Lying Area, the Northeast Depression, IRA Site 25, the Tree-Surrounded Impoundment, the Lumber-Filled Excavation, and the Debris Pile. Operations associated with each of the eight AOCs are presented in the following paragraphs.

The Clay Pit Area: The Clay Pit Area, also referred to as The Clay Pit Borrow Area, is located at the southern edge of the Gravel and Clay Pit Area. The site consists of a shallow, vegetated depression, which measures approximately 100 ft by 250 ft and may have been an old borrow trench from which clay was excavated. A 1978 aerial photograph identified ground features consistent with open dumping and/or landfill activities. The 1980 EA reported that the clay pit had been used for the disposal of construction material along with crankcase oil, battery cables, and trash (USATHAMA, 1980).

The Excavation South of the Low-Lying Area: This excavated area was located south of the Low-Lying Area. This trench was partially filled at the southern end by what appeared to be construction material, including concrete and asphalt debris (IT, 1999b).

The Low-Lying Area: A large low-lying area occupied a large part of the northern half of the Gravel and Clay Pit Area. This area appeared to receive excess surface water runoff from the Tree-Surrounded Impoundment by an overflow ditch. A 1951 aerial photograph indicated an excavation in this area at the time (EPIC, 1982). Fill material was present at the surface in the eastern half of the area and consisted mostly of inert construction debris including asphalt, corrugated pipe, and concrete fence pilings (IT, 1999b).

The Northeast Depression: A small 20 ft by 40 ft depression, possibly related to excavation, was noted in the northeastern part of the Gravel and Clay Pit Area. No other information was reported for this area (IT, 1999b).

IRA Site 25: This site is located in the west-central part of the Gravel and Clay Pit Area. Soils from previous SIs showed concentrations of TNT at 4.7 mg/kg at a depth of 10.5 ft bgs at IRA Site 25. Contaminated soils were excavated to a depth of 11 ft bgs and disposed of off-site during the 1994 IRA (USAEC, 1994). The excavation was backfilled with clean fill (IT, 1999b).

The Tree-Surrounded Impoundment: The Tree-Surrounded Impoundment extends south from the Lumber-Filled Excavation to a drainage ditch at Load Line 4. This impoundment was used for surface water runoff from the eastern side of Load Line 4, which is channeled via a road culvert from Load Line 4 into the west side of this impoundment. An overflow ditch flows east from the Tree-Surrounded Impoundment and transports runoff into the Low-Lying Area. Aerial photographs indicate a denuded area with possible dumping activity in 1969 (USEPA, 1991). From 1978 to 1999, photographs showed progressive tree growth over the area around the impoundment (IT, 1999b).

The Lumber-Filled Excavation: This area is located in the northwest corner of the Gravel and Clay Pit Area. Used construction material was disposed of in the excavation. Construction materials included randomly piled 2-inch by 4-inch lumber, which appeared to have been originally painted yellow. A mound of dirt immediately north of the excavation appeared to have been derived from the excavation (IT, 1999b).

The Debris Pile: The Debris Pile is located in the southwest portion of the Gravel and Clay Pit Area. Aerial photographs from 1978, 1988, and 1991 show a dirt access road from Ninth Avenue terminating at this location where some ground scarring was noted (USEPA, 1991). In the 1993 SCD investigation, asphalt and concrete rubble were observed, with some of the rubble having an oily residue. In the summer of 1995, the Debris Pile consisted of a 10 ft high mound of brush and tree debris. In 1999 the pile was noted to cover the same area measuring approximately 30 ft by 50 ft and varying in height from 1 to 6 ft. The pile consisted of brush and tree debris with a small quantity of concrete rubble and a small number of roofing shingles (IT, 1999b).

Extensive soil sampling was conducted in the Gravel and Clay Pit Area during environmental investigations conducted at CHAAP. Details and results of these investigations are presented in the Final ROD for OU4 (IT, 1999b). Soil sample results revealed one detection of TNT (4.7 mg/kg at 10.5 ft bgs) at IRA Site 25. Removal of this TNT was completed during the 1994 IRA (USAEC, 1994) where the location was excavated to a depth of 11 ft bgs and the site was backfilled with clean soil.

Confirmation soil sampling was conducted at the Gravel and Clay Pit area during the 1996 RI (ICF KE, 1996). No COPCs were detected above industrial risk-based cleanup levels. Soil samples, however, revealed concentrations of PAHs in site soils above residential RBCs. All concentrations of PAHs were below the NDEQ guidance cleanup concentration of 33 mg/kg, which was established as the cleanup level for PAHs in the OU4 ROD.

8.4 Remedial Actions

8.4.1 Remedy Selection and Implementation

Concentrations of COCs in soils following IRA actions at Load Lines 1 through 5 and the Gravel and Clay Pit Area were all below the calculated RBCs for industrial/agricultural use, and in most cases were also below USEPA Region III Residential RBCs. Further remedial actions for soil and groundwater at OU4 were not required. Concentrations of PAHs in soil samples collected at the Gravel and Clay Pit Area; however, exceeded residential RBCs. As a result, institutional controls were required. The selected remedy in the Final ROD for OU4 was Alternative Two, which specified institutional controls (deed restrictions) to prevent residential use (IT, 1999b).

The OU4 ROD addressed only the soils associated with activities conducted at the load lines. The evaluation of the load lines in the RI considered it likely that use of the land and buildings at the load lines would not change significantly. However, when activities were initiated to excess the load lines, it was determined that additional actions were required for the buildings, piping, and other equipment at Load Lines 1 through 4. In order to facilitate transfer of the load lines to the public, the USEPA informally agreed to expedite explosive safety actions. These explosive safety actions are not deemed to be environmental actions subject to CERCLA. Instead, remedial activities associated with the actual load line buildings are subject to the National Defense Authorization Act (Public Law 103-337), which was enacted on October 5, 1994, prior to the signing of the OU4 ROD in February 2000.

Initially, the Army Operations Safety Command agreed to perform the explosives safety actions at the load lines by removing all process piping, equipment, and mechanical systems, and then pressure washing the interior of each load line structure. However, the USACE Real Estate Division, in an effort to seek a better resale value, suggested demolition of the entire building structures. Building demolition activities at the load lines included removal of roofing and siding made of transite (a non-friable asbestos-containing cement building material), flashing and burning, demolition, and restoration of the site, leaving only the foundations in place. A succession of actions at the load lines included removal of asbestos-containing materials, thermal decomposition and demolition of load line buildings, removal of sewer lines, and remediation of explosives contaminated soil.

All explosive safety actions to certify the load line tracts as safe for public transfer were conducted in accordance with Department of Defense Explosives Safety Board regulations. In addition, all explosive safety actions were performed in compliance with Federal, State, and local regulations. At the conclusion of these actions, the load line properties were certified as safe for sale to the general public with regard to explosive hazards. In addition, explosives-contaminated soil that had been present beneath the load line buildings was remediated down to the industrial cleanup levels specified in the OU4 ROD.

The majority of CHAAP property has been transferred out of United States ownership, with much of the property associated with OU4 sold within recent years. The Load Line 1 and surrounding area property was sold to Southern Power District for heavy industrial development in September 2007. The Load Lines 2, 3, and 4 properties were sold to the Grand Island Area EDC (October 2008 and August 2009), which then sold the majority of the land to private individuals for agricultural use. Load Line 5 was sold to Heritage Disposal and Storage, LLC in September 2004. With the completion of the sale of the Load Line 4 property, all CHAAP land that overlies the OU1 groundwater plume has been sold. The institutional controls required for the Army were put into place. The deeds for all of the former load line properties restrict land use to commercial, industrial, and agricultural. The deeds do not permit residential use of the land. In addition, use of the groundwater that is part of the explosives-contaminated groundwater plume for drinking water is prohibited.

8.4.2 System Operation/Operations and Maintenance

There are no active systems to operate. However, the ROD did require the following:

- Five-year reviews to evaluate the implementation and performance of the selected remedy to determine if it is still protective of human health and the environment.

8.5 Progress Since Last Five-Year Review

8.5.1 Protectiveness Statement in Previous Five-Year Review

The following protectiveness statement was included in the second five-year review:

“This second five-year review provides an assessment of these remedial actions to determine if they remain protective of human health and the environment. Based on the findings of this five-year review, the remedial actions at CHAAP as set forth in the various decision documents, have been completed as planned, or will meet the intent of the decision documents when completed. These remedies are achieving the remedial goals as intended, and are expected to remain protective of human health and the environment when groundwater cleanup goals are reached through treatment and MNA.”

8.5.2 Recommendations In Previous Five-Year Review and Actions Taken

See the summary contained in **Table 8-2**.

Table 8-2
Actions Taken Since the Last Five-Year Review

Issue	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
Compare the levels of remaining soil contamination to residential values to determine if any soil OUs may be returned to unrestricted use and removed from the CERCLA/Five-Year Review process. OUs with soil contamination exceeding residential levels will remain with deed restrictions and/or land use controls.	USACE	EPA	September 2011	No additional soil sampling has been done so there is no data to make this determination.	none

8.6 Five-Year Review Process

8.6.1 Data Review

8.6.1.1 Soil

The soil has not been sampled during this five year review period; however, groundwater data would indicate that there are still source areas remaining in the unsaturated zone. These areas include one source area in the former Load Line 2 area and two source areas in the former Load Line 1 area (see Section 8.7 for additional details).

8.6.1.2 Groundwater

Because no groundwater monitoring was required by the ROD, no additional data has been generated since the ROD.

8.6.2 Site Inspection

Site inspection findings are presented in Section 5.6.2. A site inspection checklist is included as **Attachment G**. Site photographs are included as **Attachment H**.

8.6.3 Site Inspection

Interviews were conducted for all the OUs at one time. A summary of the interviews can be found in Section 5.6.3. No additional information was provided during the interviews specific to OU4.

8.7 Technical Assessment

This section presents a technical assessment and is formulated based on the answers to Questions A, B and C, presented below. As answers were formulated, consideration was given to the status of the remedial action. For consistency with Five Year Review guidance, each question is summarily answered yes or no. Supporting information is provided in the previous sections and referenced documents with additional analysis provided, as needed.

Question A: Is the remedy functioning as intended by the decision documents?

Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

8.7.1 Question A: Is the remedy functioning as intended by the decision documents?

Yes. At OU4, the selected remedy as specified in the ROD is institutional controls in the form of institutional controls to prevent residential use. The selected remedy for OU4 is functioning and achieving the desired results as intended in the associated ROD document. The majority of CHAAP property has been transferred out of United States ownership. The deeds for all of the former load line properties restrict land use to commercial, industrial, and agricultural. The deeds do not permit residential use of the land

8.7.1.1 Early Indicators of Potential Issues

An incineration project was conducted by the Army in 1987 and 1988 to excavate and thermally treat soils beneath unlined leach pits and cesspools of the load lines. Most of these were only excavated 2 feet. A follow-up IRM to excavate an additional 2 feet of soil was conducted in 1994. The ROD was signed in 2000 establishing institutional controls for the Load Lines. No additional sampling or remedial actions were conducted since. However, annual groundwater sampling confirms that there are still 3 “hotspots” for groundwater contamination, two associated with Load Line 1, and one associated with Load Line 2. This is likely due to a continual influx of contamination from these unsaturated source areas. This can also be seen when the groundwater rises during wet years (as happened in 2009) and the groundwater contamination has a corresponding increase. The remedy of institutional controls does nothing to reduce this contamination.

8.7.1.2 Implementation of Institutional Controls and Other Measures

The institutional controls that are in place include deed restrictions to prevent residential use. Observations made during the site visit indicate that institutional controls are being enforced in

regard to use of the land. No private residences were observed and the land was found to be used for either industrial or agricultural purposes.

8.7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. Since the same exposure assumptions, toxicity data, and cleanup levels are used across the site refer to Section 5.7.2 for the discussion of Question B.

8.7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No. Refer to Section 5.7.3 for the discussion of Question C.

8.7.4 Technical Assessment Summary

Overall, the remedy was implemented and is functioning as intended. The review of documents, ARARs, risk assumptions, and the results of the site inspections indicate that the selected remedies for OU4 are functioning and achieving the desired results as intended in the associated ROD documents. There have been no changes in the ARARs that would affect the protectiveness of the remedy and there have been no changes in standards that would affect existing cleanup levels. Changes in the toxicity factors that were used in calculation of cleanup levels did not result in the need for additional or changed remedies. There has been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy. New ecological guidance has been issued since the preparation of the 1996 ERA, and a number of potential ecological screening levels have been developed, changed, or published in new sources; however, the ecological risk evaluation presented in **Attachment K** concluded that ecological risk issues do not affect the protectiveness of the remedy. A question raised by the installation of high yield irrigation wells on-site that are screened within the contaminated aquifer about possible significant recontamination of surface soil has been resolved by modeling (**Attachment J**), which indicates that it would take thousands of years to produce a significant effect.

8.8 Issues

No issues related to current site operations, conditions, or activities were identified during this five-year review that prevents the remedy from being protective now or in the future.

8.9 Recommendations and Follow-up Actions

No recommendations or follow-up actions were required since no issues were identified during this five-year review that affects the current and/or future protectiveness of the remedy.

8.10 Protectiveness Statement

The remedy at OU4 is protective of human health and the environment.

9.0 Next Review

The next Five Year Review for CHAAP is required by September 2020, five years from the date of this review.

10.0 References

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Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment A
Site Location Figures

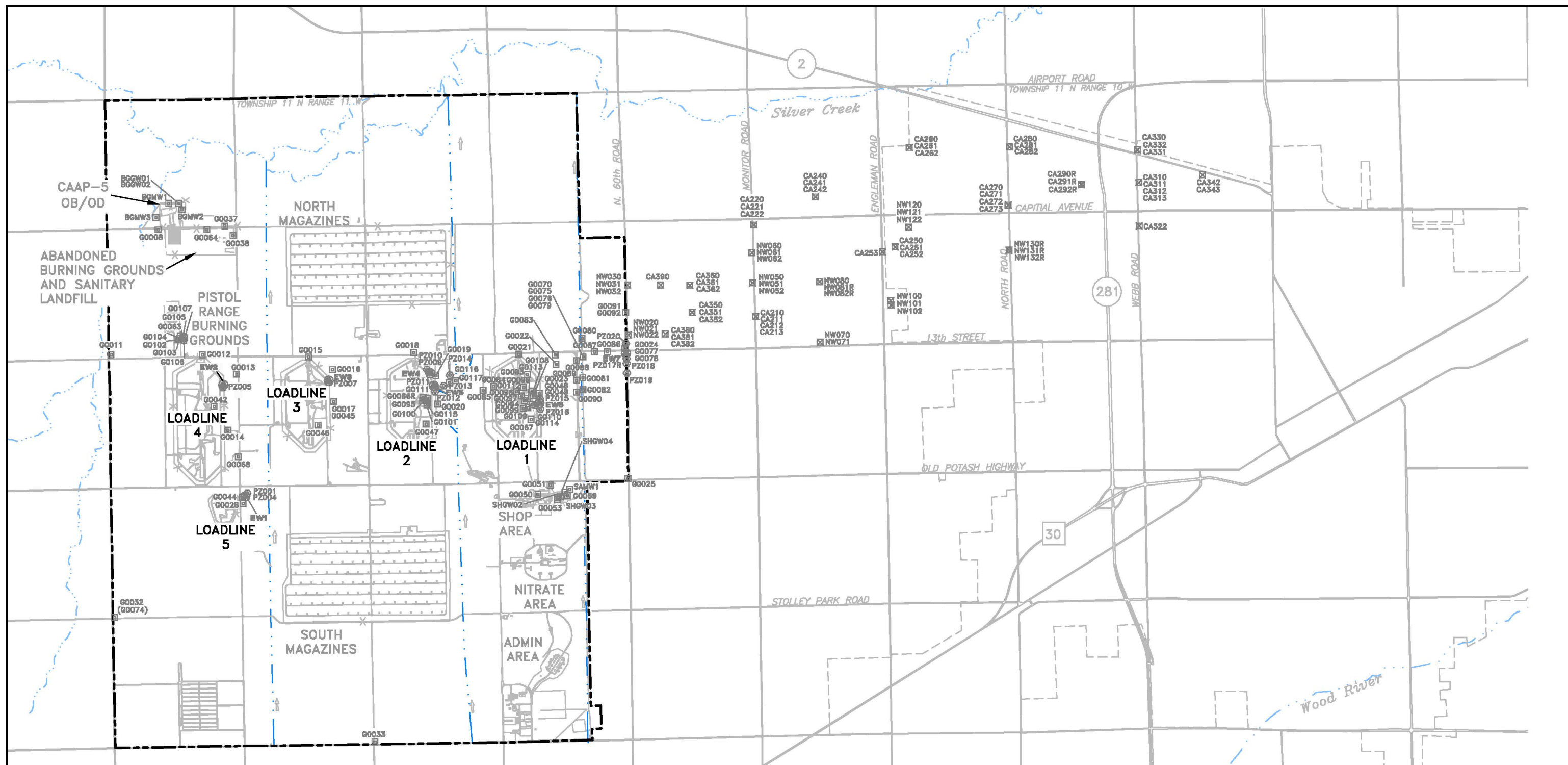
Attachment A – Site Map



Vicinity Map – Cornhusker Army Ammunition Plant



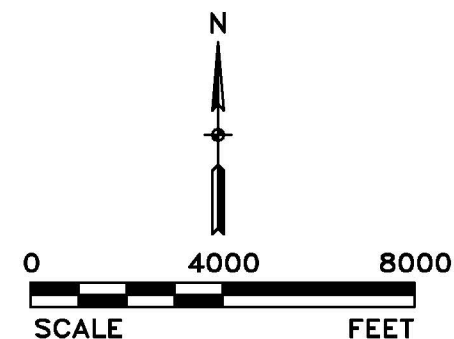
Site Map – Cornhusker Army Ammunition Plant



LEGEND:

- G0029 □ ON-POST GROUNDWATER MONITORING WELL
- CA390 ☒ OFF-POST GROUNDWATER MONITORING WELL
- PZ020 ⊙ ON-POST PIEZOMETER
- EW1 ● GROUNDWATER EXTRACTION WELL

- ROADS
- - - FACILITY BOUNDARY
- - - GRAND ISLAND CITY LIMITS
- SURFACE DRAINAGE
- (281) STATE ROUTE
- 30 U.S. ROUTE



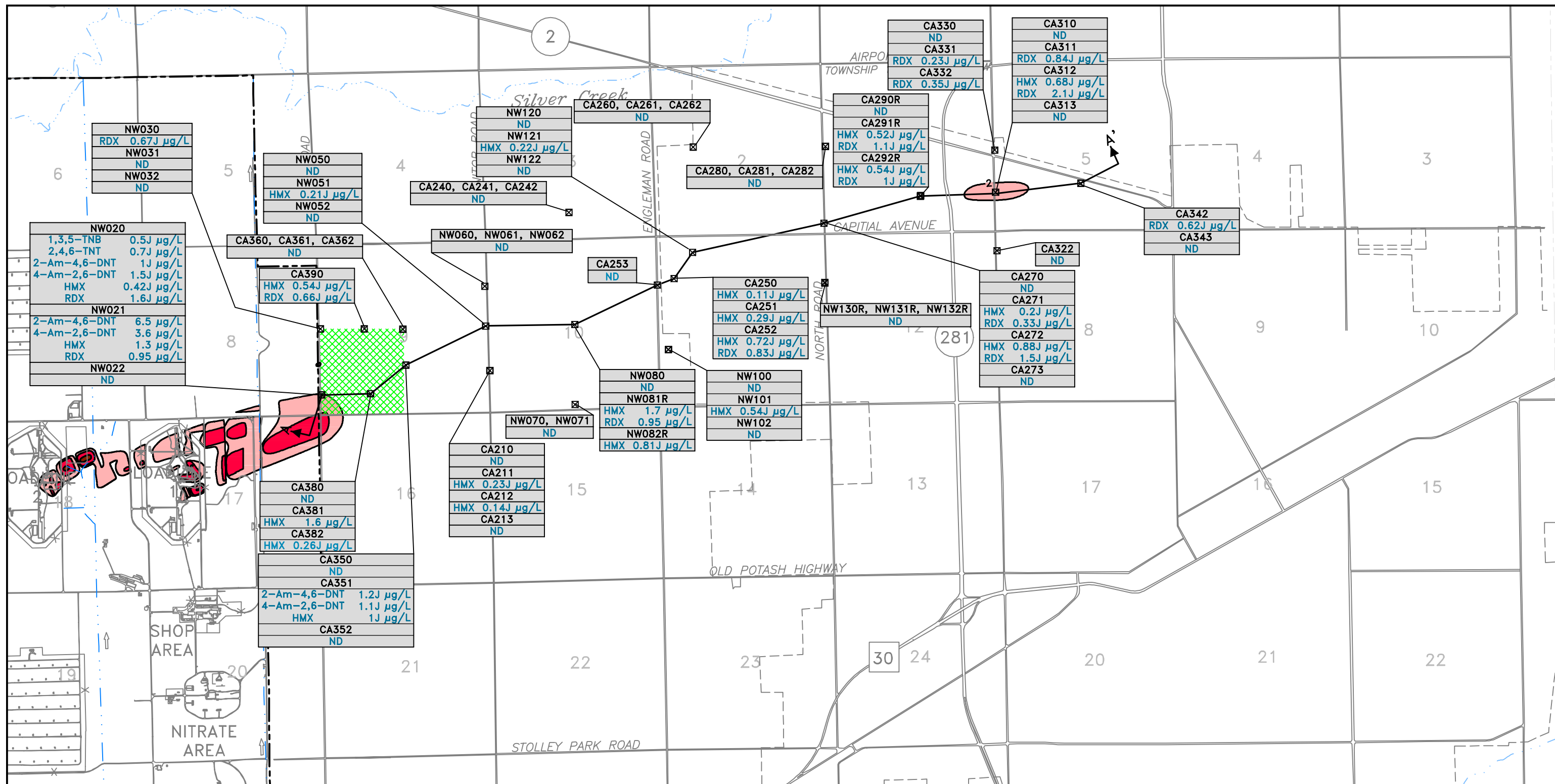
SITE LOCATION MAP CORNHUSKER ARMY AMMUNITION PLANT

DRN. BY: DPG	DATE: 11/25/13	PROJECT NO. 16170748	FIG. NO. 1-2
CHK'D. BY: RPC	REVISION: 0		

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment B

Figures



LEGEND:

- FACILITY BOUNDARY
- GRAND ISLAND CITY LIMITS
- DRAINAGE DITCH FLOW DIRECTION
- SURFACE DRAINAGE
- SECTION NUMBER
- OFF-POST GROUNDWATER MONITORING WELL
- EXPLOSIVES GROUNDWATER SAMPLING RESULTS - MARCH 2013



- HORIZONTAL EXTENT OF TARGET CLEANUP EXPLOSIVES (2,4,6-TNT AND RDX CONCENTRATIONS >2µg/L) - MARCH 2013
- HORIZONTAL EXTENT OF TARGET EXPLOSIVES (2,4,6-TNT AND RDX CONCENTRATIONS >20µg/L) - MARCH 2013
- HORIZONTAL EXTENT OF TARGET EXPLOSIVES (2,4,6-TNT AND RDX CONCENTRATIONS >200µg/L) - MARCH 2013
- FEEDLOT AREA
- GEOLOGIC CROSS-SECTION

1,3,5-TNB = 1,3,5-TRINITROBENZENE
2-AM-4,6-DNT = 2-AMINO-4,6-DINITROTOLUENE
2,4,6-TNT = 2,4,6-TRINITROTOLUENE
4-AM-4,6-DNT = 4-AMINO-2,6-DINITROTOLUENE
HMX = OCTAHYDRO-1,3,5,7-TETRAZOCINE
J = ESTIMATED QUALIFIER
LTM = LONG-TERM MONITORING
ND = NONDETECT
OU = OPERABLE UNIT
RDX = HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE
µg/L = MICROGRAMS PER LITER



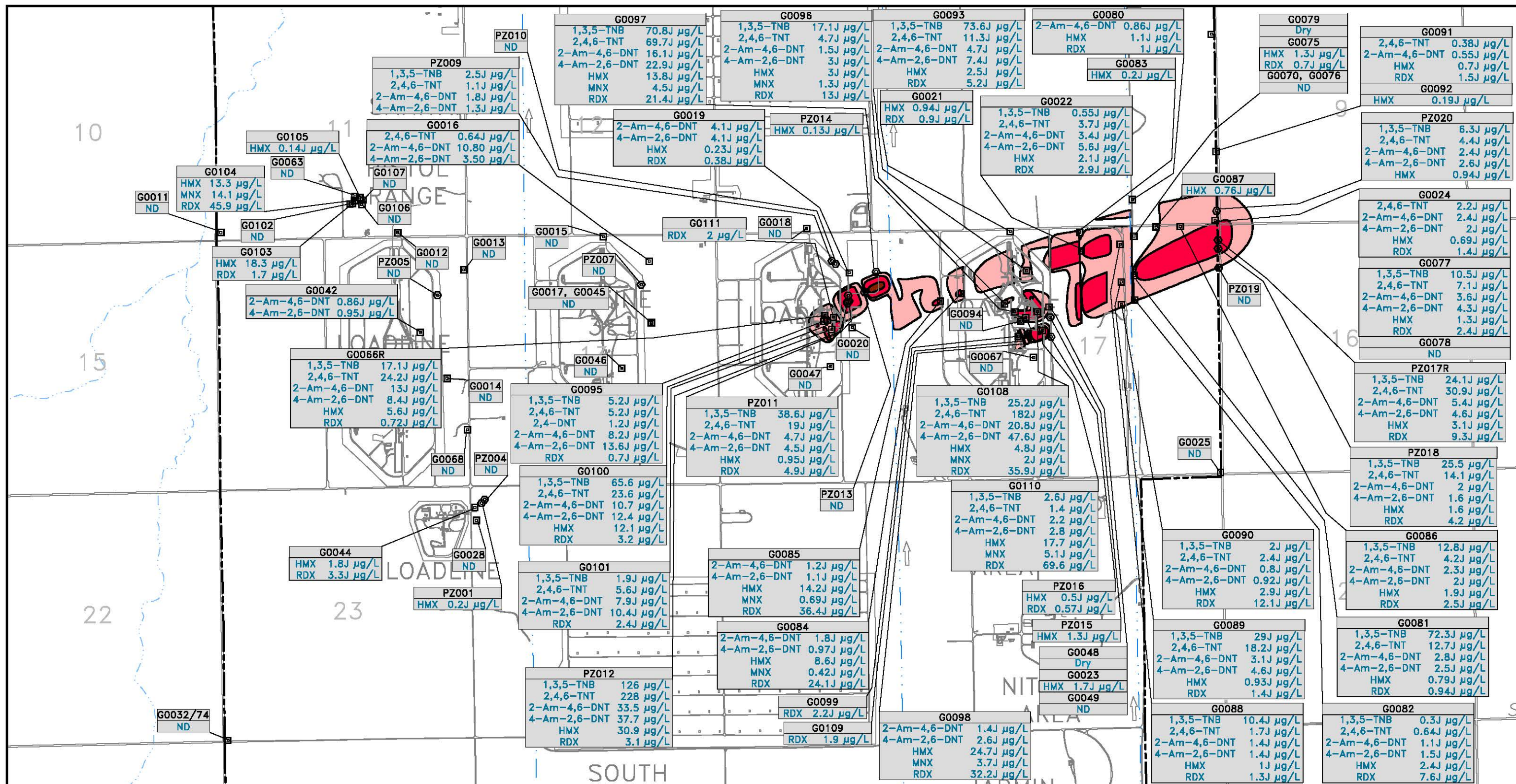
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October 28, 2013 3:46:29 p.m.
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OFF-POST EXPLOSIVES PLUME
(OU1) MARCH 2013
CORNHUSKER ARMY AMMUNITION PLANT

DRN. BY: DPG	DATE: 05/20/13	PROJECT NO. 16170747	FIG. NO. 5-1
CHK'D. BY: RPC	DATE: 05/20/13		



LEGEND:

- FACILITY BOUNDARY
- GRAND ISLAND CITY LIMITS
- DRAINAGE DITCH FLOW DIRECTION
- SURFACE DRAINAGE
- SECTION NUMBER
- ON-POST GROUNDWATER MONITORING WELL
- ON-POST PIEZOMETER
- EXPLOSIVES GROUNDWATER SAMPLING RESULTS - MARCH 2013

- 2** HORIZONTAL EXTENT OF TARGET CLEANUP EXPLOSIVES (2,4,6-TNT AND RDX CONCENTRATIONS $>2\mu\text{g/L}$) - MARCH 2013
- 20** HORIZONTAL EXTENT OF TARGET EXPLOSIVES (2,4,6-TNT AND RDX CONCENTRATIONS $>20\mu\text{g/L}$) - MARCH 2013
- 200** HORIZONTAL EXTENT OF TARGET EXPLOSIVES (2,4,6-TNT AND RDX CONCENTRATIONS $>200\mu\text{g/L}$) - MARCH 2013

NOTE:
1. ON-POST EXPLOSIVES PLUME BASED ON 2013 LTM RESULTS AND 2013 OU1 RAO GROUNDWATER INVESTIGATION RESULTS.
2. G0033 IS NOT ANNOTATED ON THIS FIGURE. NO EXPLOSIVES WERE DETECTED.

1,3,5-TNB = 1,3,5-TRINITROBENZENE
2-AM-4,6-DNT = 2-AMINO-4,6-DINITROTOLUENE
2,4,6-TNT = 2,4,6-TRINITROTOLUENE
2,6-DNT = 2,6-DINITROTOLUENE
4-AM-4,6-DNT = 4-AMINO-2,6-DINITROTOLUENE
HMX = OCTAHYDRO-1,3,5,7-TETRAZOCINE
J = ESTIMATED QUALIFIER
LTM = LONG-TERM MONITORING
MNX = MONO-NITROSO-RDX
ND = NONDETECT
OU = OPERABLE UNIT
RAO = REMEDIAL ACTION OPERATION
RDX = HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE
 $\mu\text{g/L}$ = MICROGRAMS PER LITER

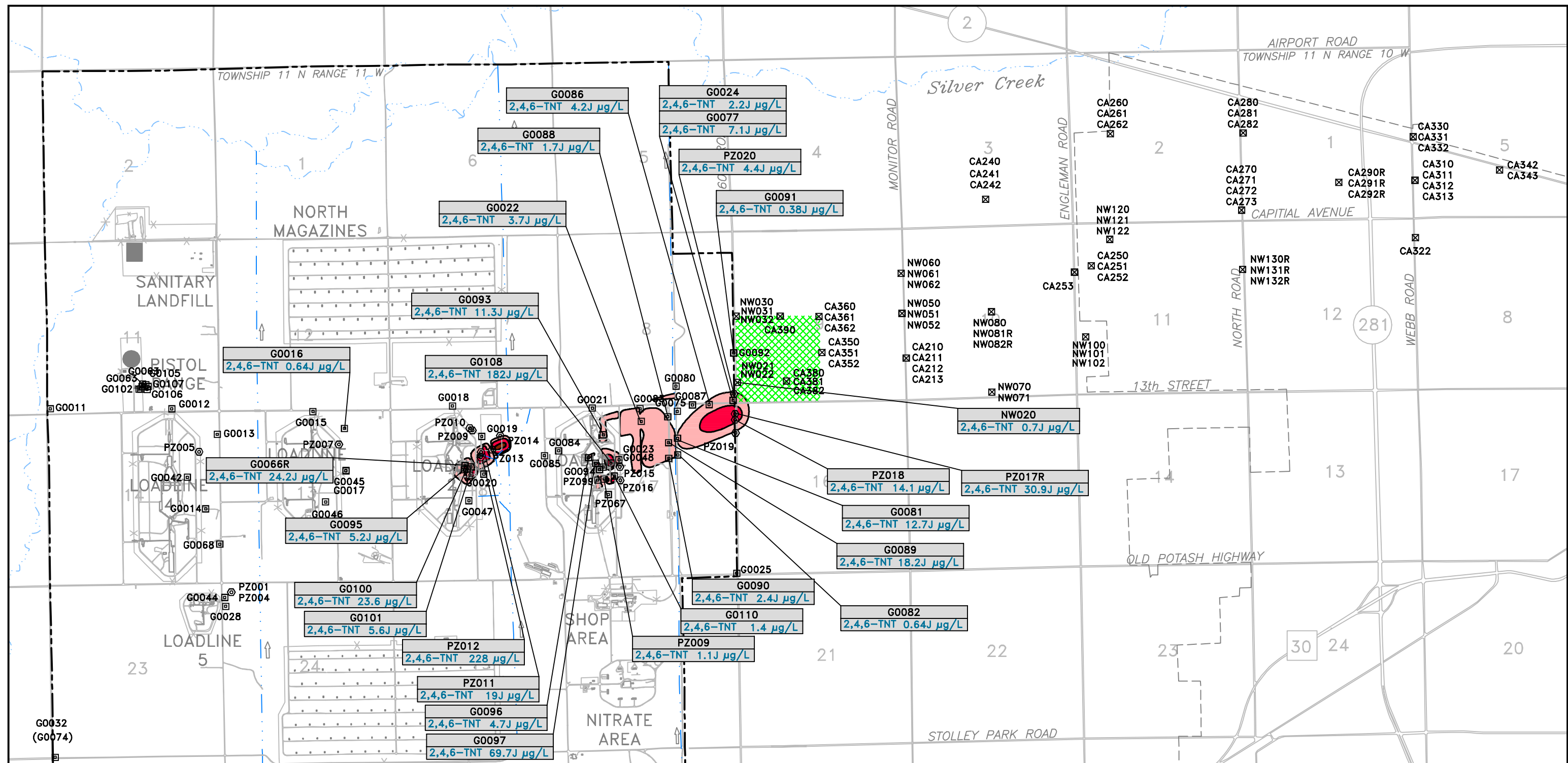


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SCALE FEET



ON-POST EXPLOSIVES PLUME
(OU1) MARCH 2013
CORNHUSKER ARMY AMMUNITION PLANT

DRN. BY: DPG	DATE: 5/20/13	PROJECT NO.	FIG. NO.
CHK'D. BY: RPC	DATE: 5/20/13	16170747	5-2



LEGEND:

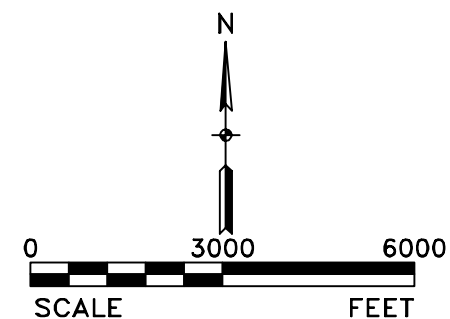
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	GRAND ISLAND CITY LIMITS
	DRAINAGE DITCH FLOW DIRECTION
	SURFACE DRAINAGE
1	SECTION NUMBER
	ON-POST GROUNDWATER MONITORING WELL
	OFF-POST GROUNDWATER MONITORING WELL
	ON-POST PIEZOMETER
	DETECTED 2,4,6-TNT CONCENTRATIONS - MARCH 2013



	2	HORIZONTAL EXTENT OF TNT (CONCENTRATIONS >2µg/L) - MARCH 2013
	20	HORIZONTAL EXTENT OF TNT (CONCENTRATIONS >20µg/L) - MARCH 2013
	200	HORIZONTAL EXTENT OF TNT (CONCENTRATIONS >200µg/L) - MARCH 2013
		FEEDLOT AREA

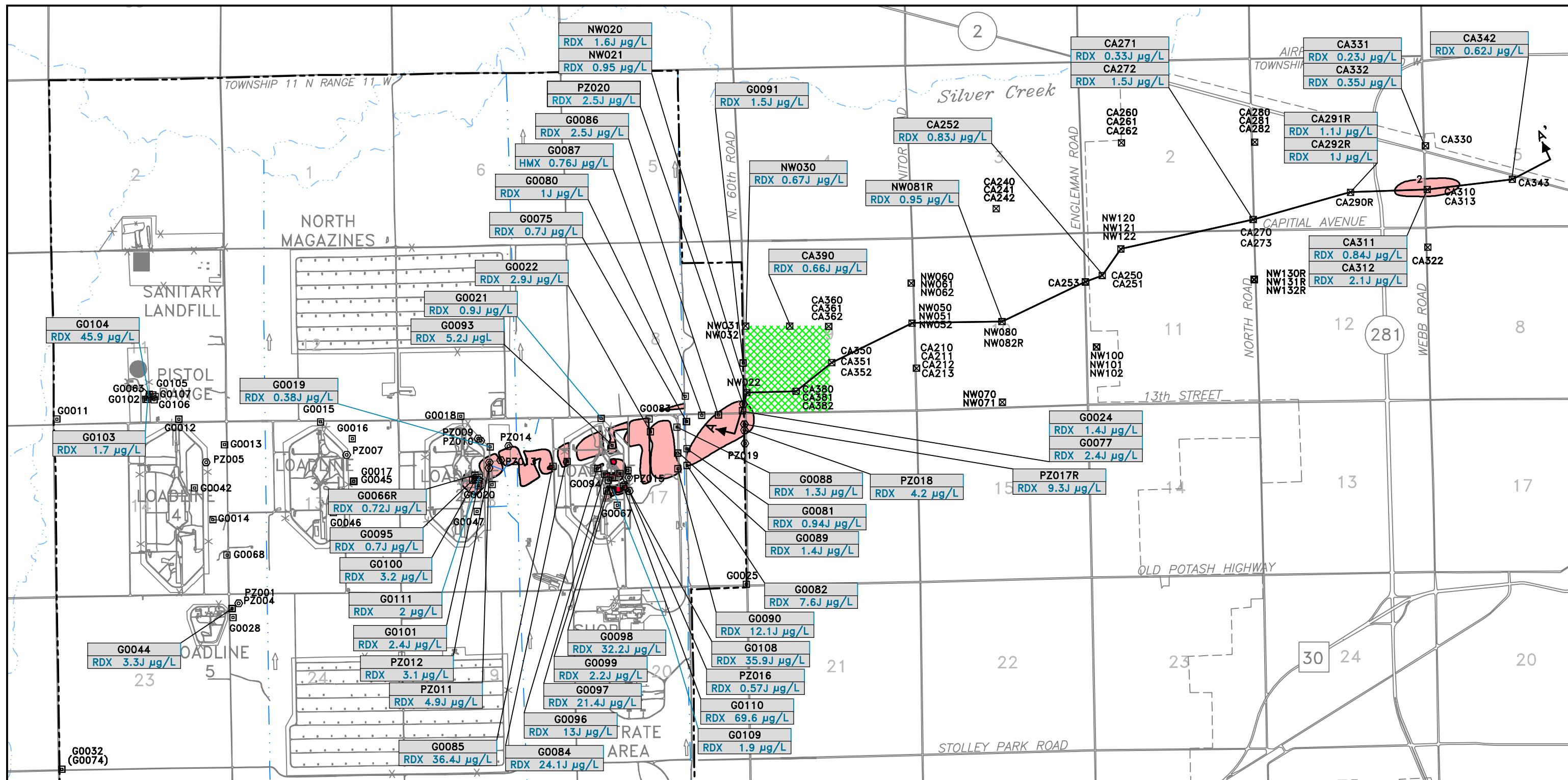
2,4,6-TNT = 2,4,6-TRINITROTOLUENE
J = ESTIMATED QUALIFIER
LTM = LONG-TERM MONITORING
OU = OPERABLE UNIT
RAO = REMEDIAL ACTION OPERATION
µg/L = MICROGRAMS PER LITER

NOTE:

1. TNT PLUME BASED ON 2013 LTM RESULTS AND 2013 OU1 RAO GROUNDWATER INVESTIGATION RESULTS.
2. G0033 IS NOT ANNOTATED ON THIS FIGURE. NO EXPLOSIVES WERE DETECTED.
3. ALL MONITORING WELLS SHOWN WERE SAMPLED AND ANALYZED FOR TNT. DETECTED TNT CONCENTRATIONS ARE SHOWN. ALL OTHER WELLS WERE "NON-DETECT" FOR TNT OR THE WELL WAS DRY.



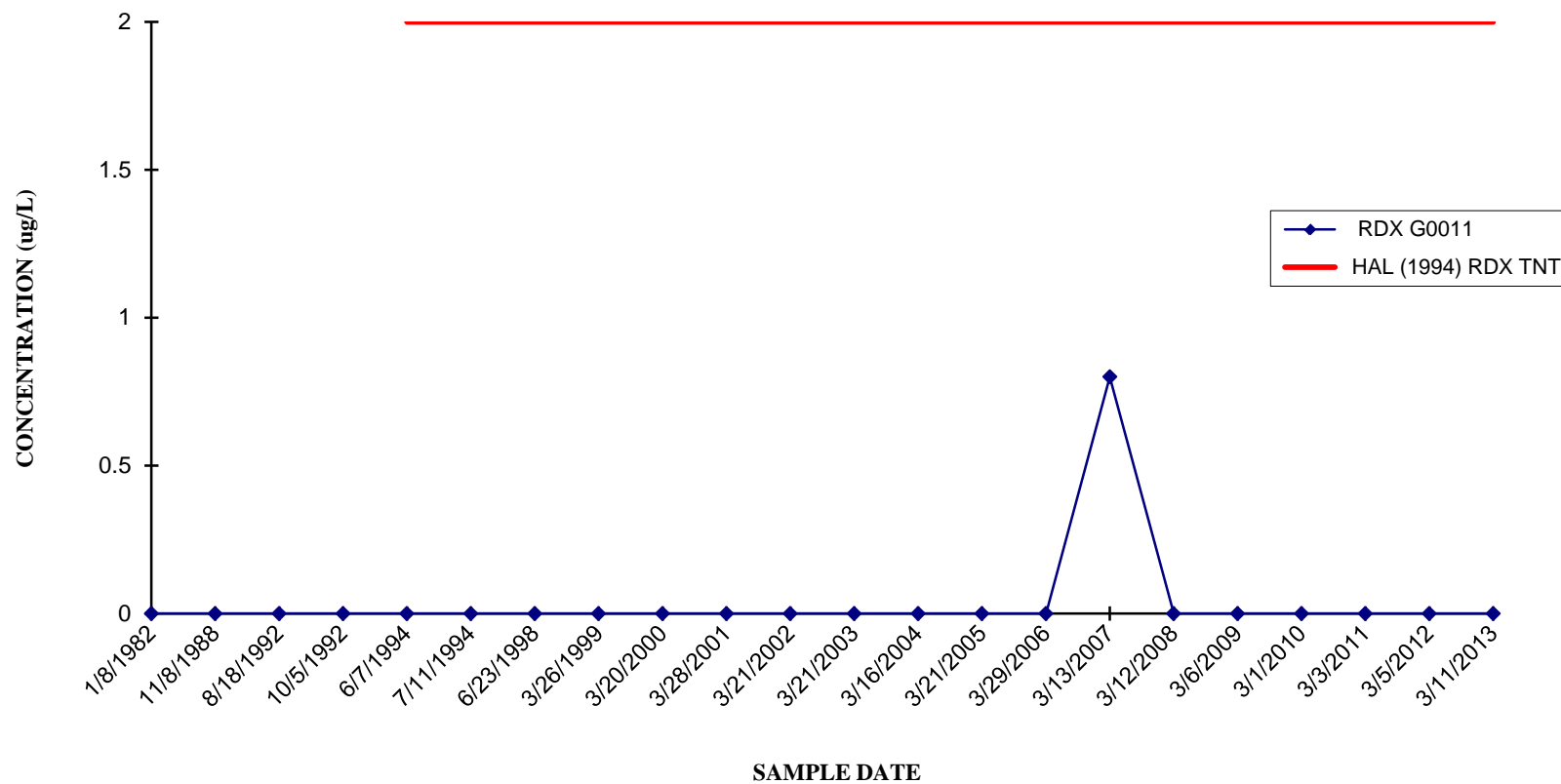
 Bay West		 URS	
TNT PLUME (OU1) MARCH 2013 CORNHUSKER ARMY AMMUNITION PLANT			
DRN. BY: DPG	DATE: 06/27/13	PROJECT NO. 16170747	FIG. NO. 5-15
CHK'D. BY: RPC	DATE: 06/27/13		



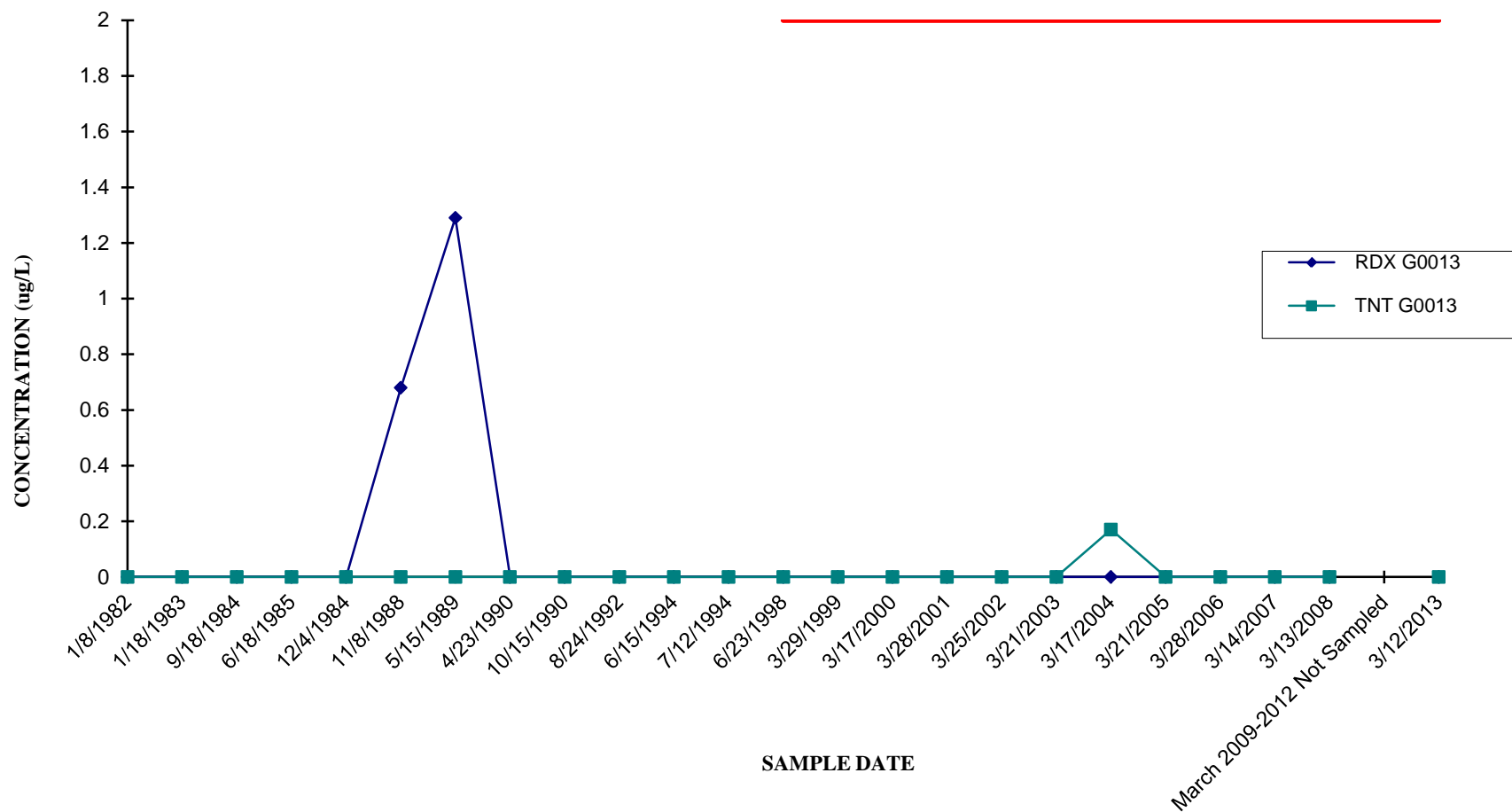
C.3 OU1 Explosives — Graphical

CORNHUSKER ARMY AMMUNITION PLANT

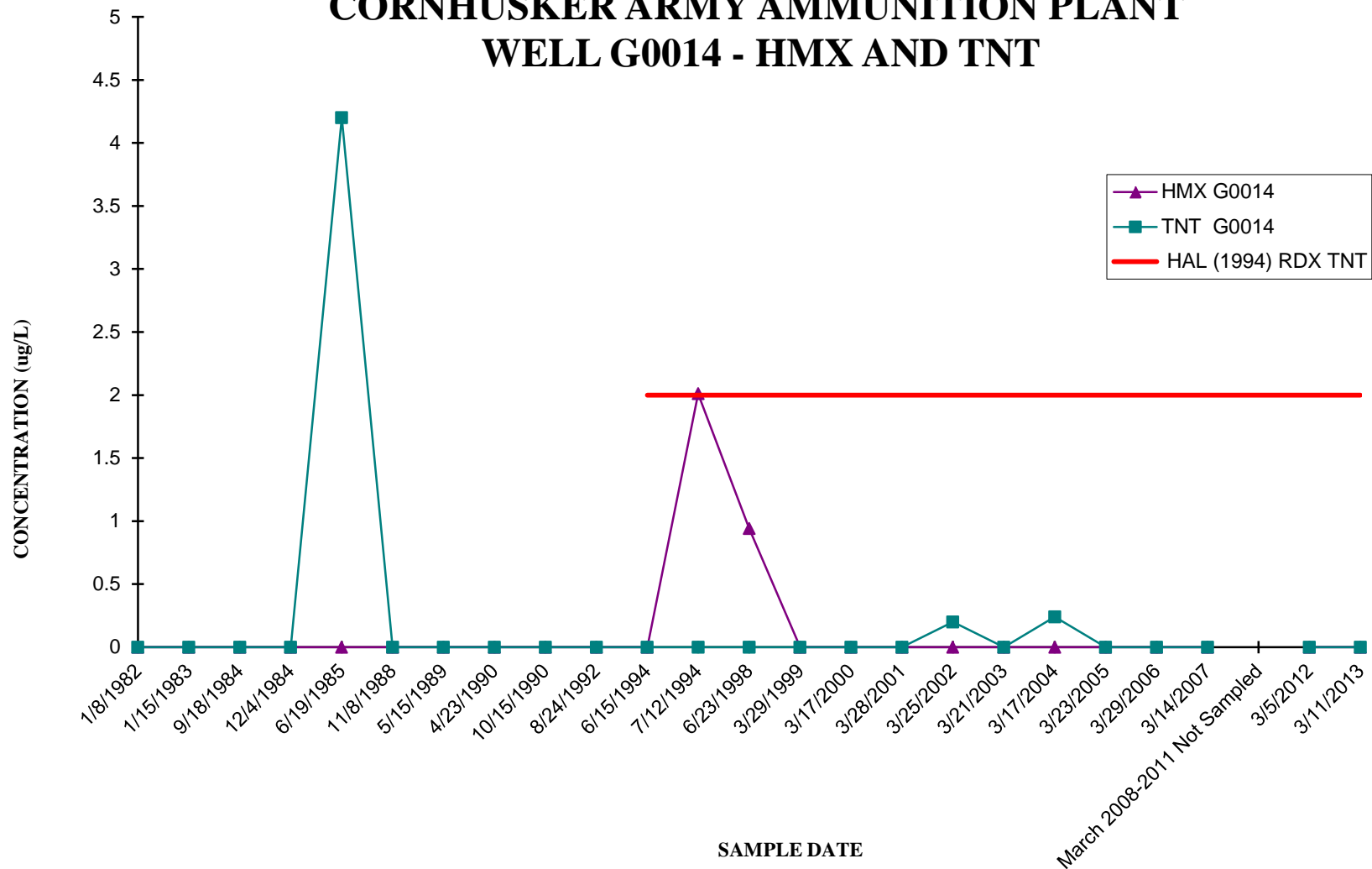
WELL G0011 - RDX



CORNHUSKER ARMY AMMUNITION PLANT WELL G0013 - RDX AND TNT

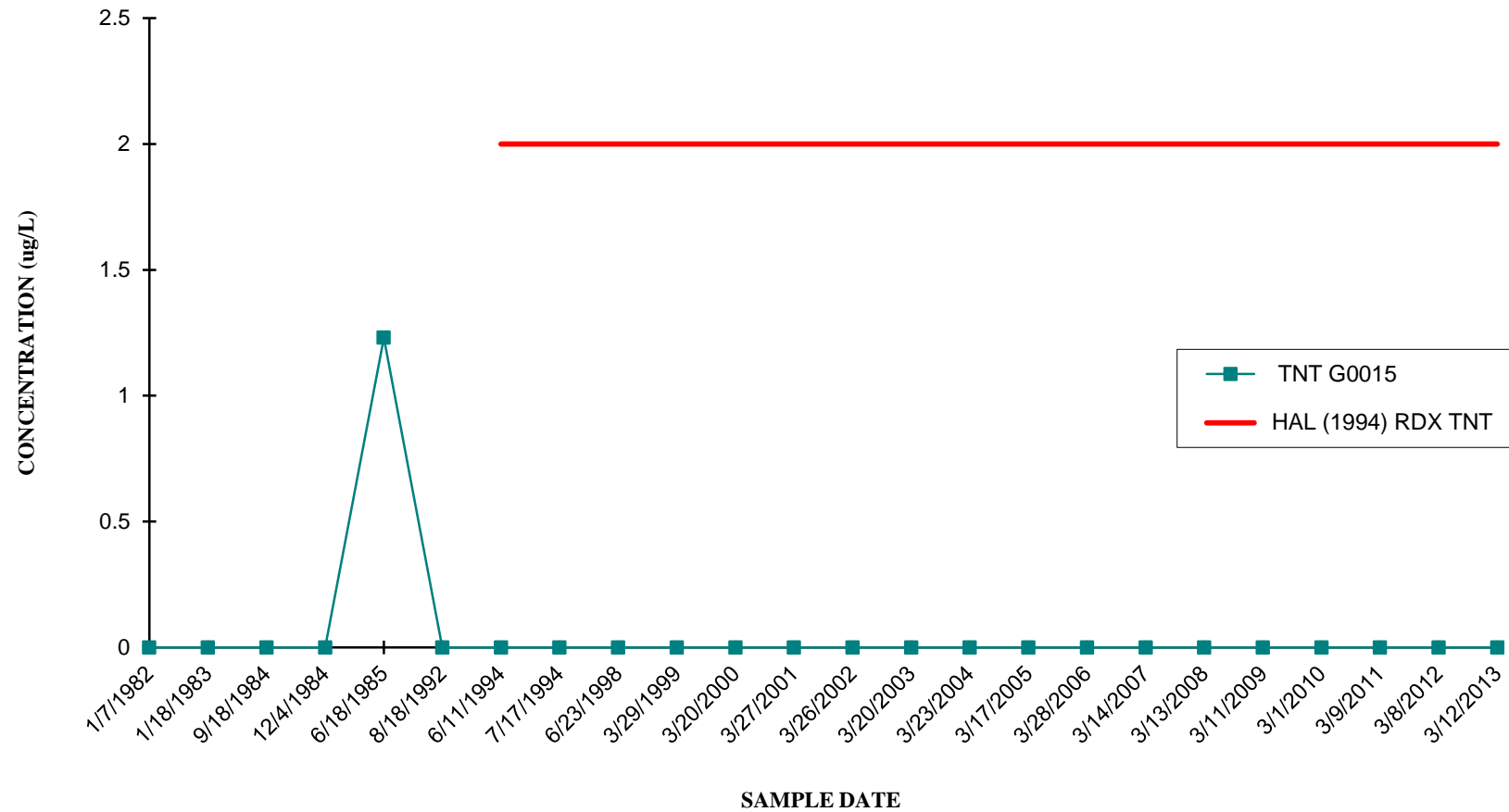


CORNHUSKER ARMY AMMUNITION PLANT WELL G0014 - HMX AND TNT

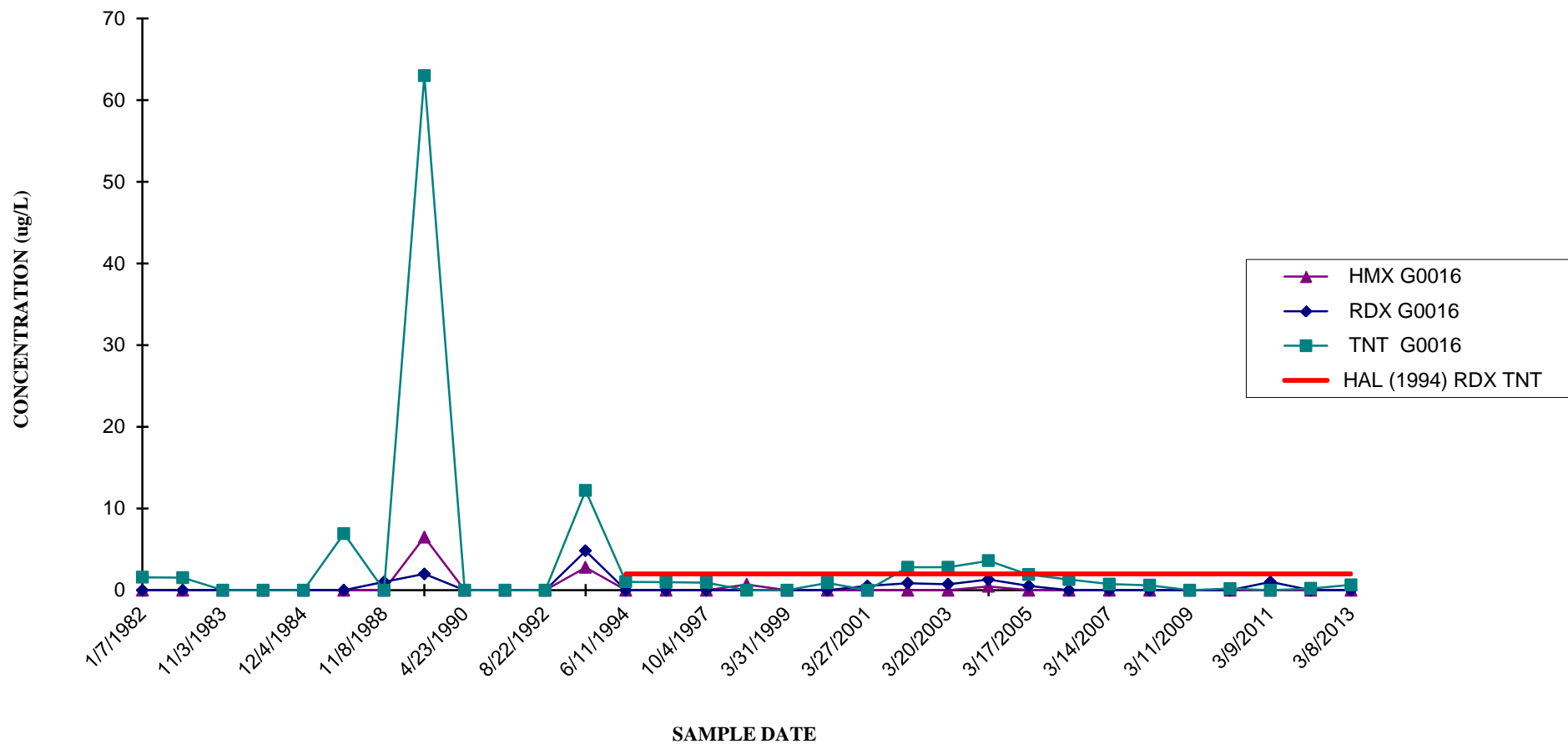


CORNHUSKER ARMY AMMUNITION PLANT

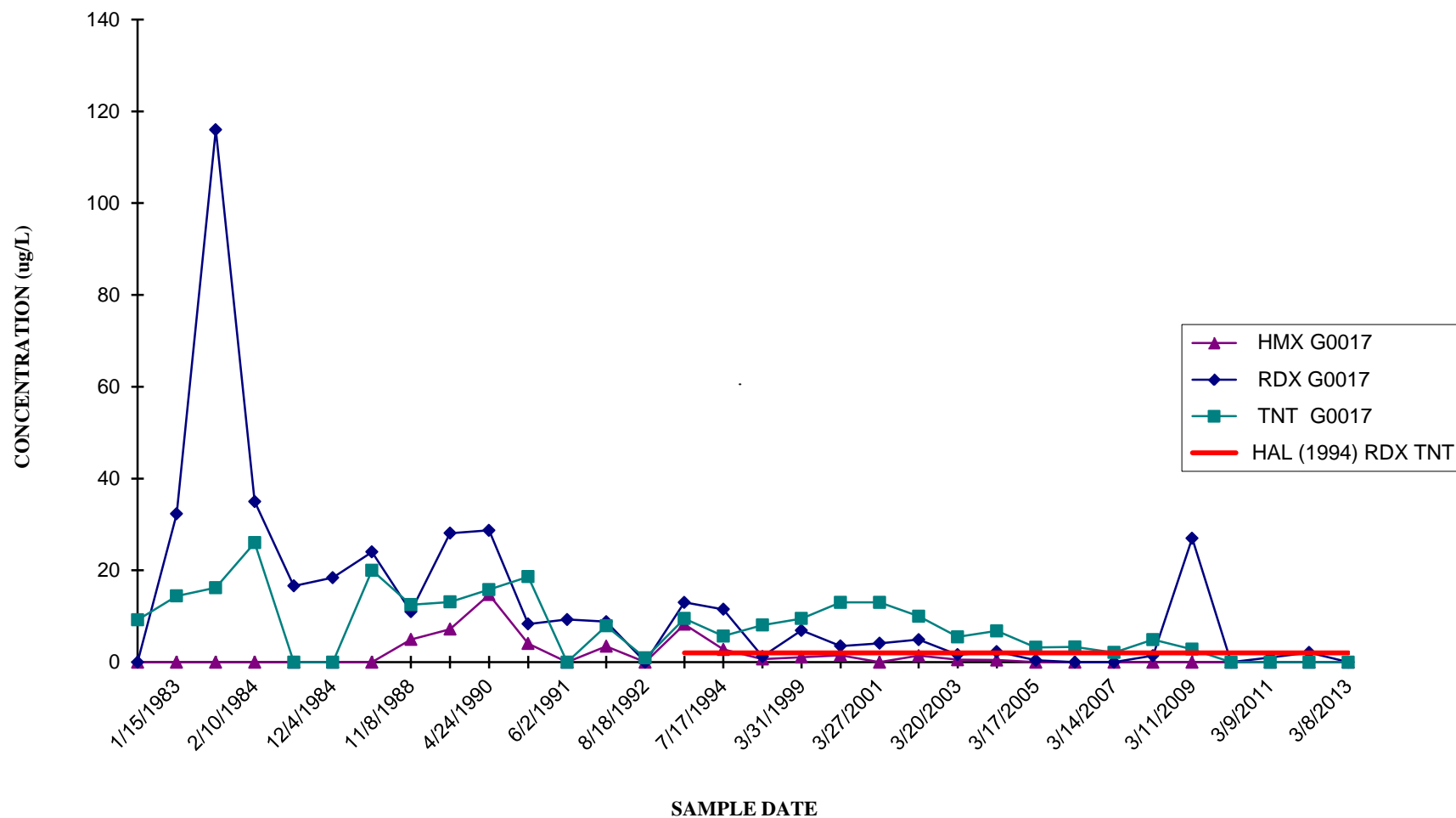
WELL G0015 - TNT



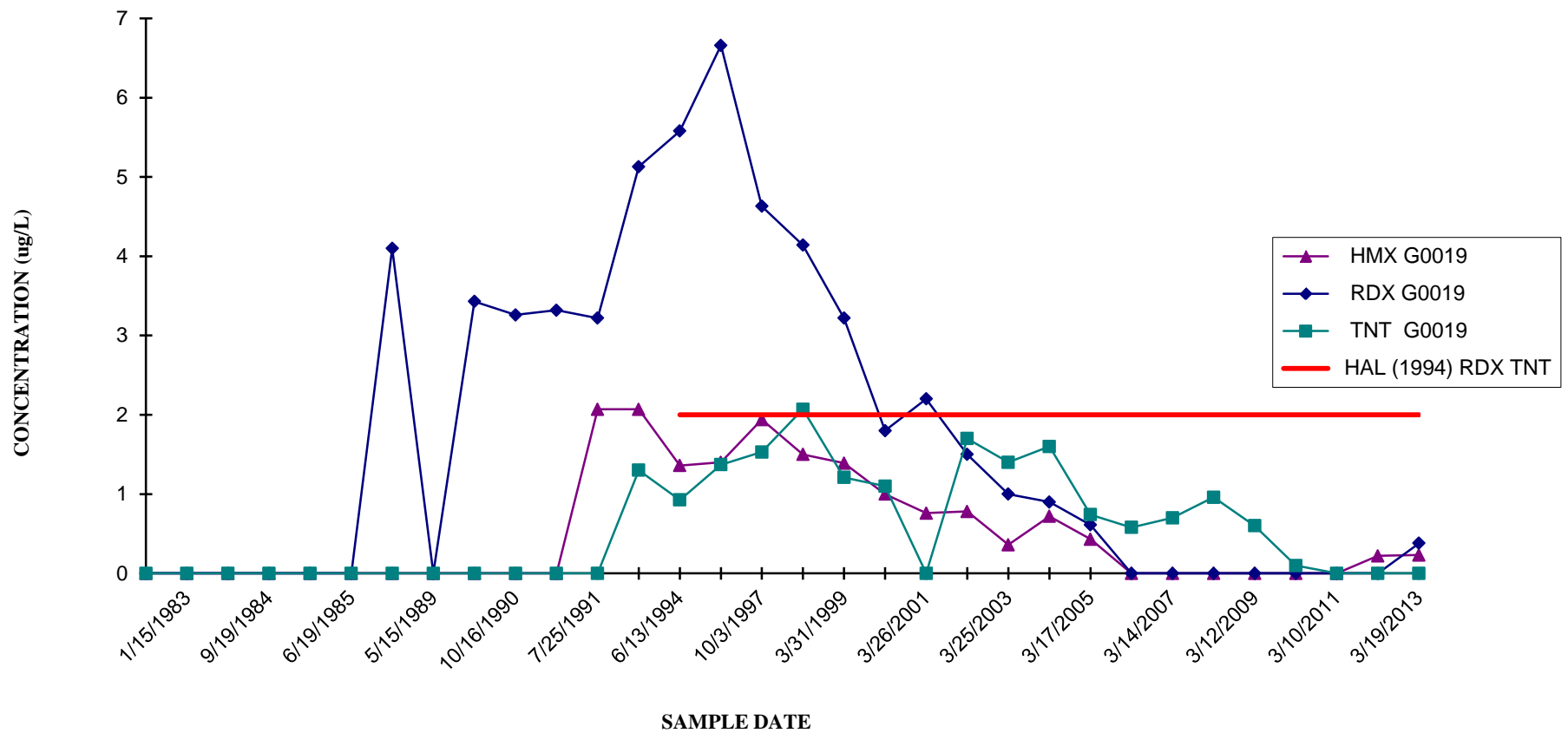
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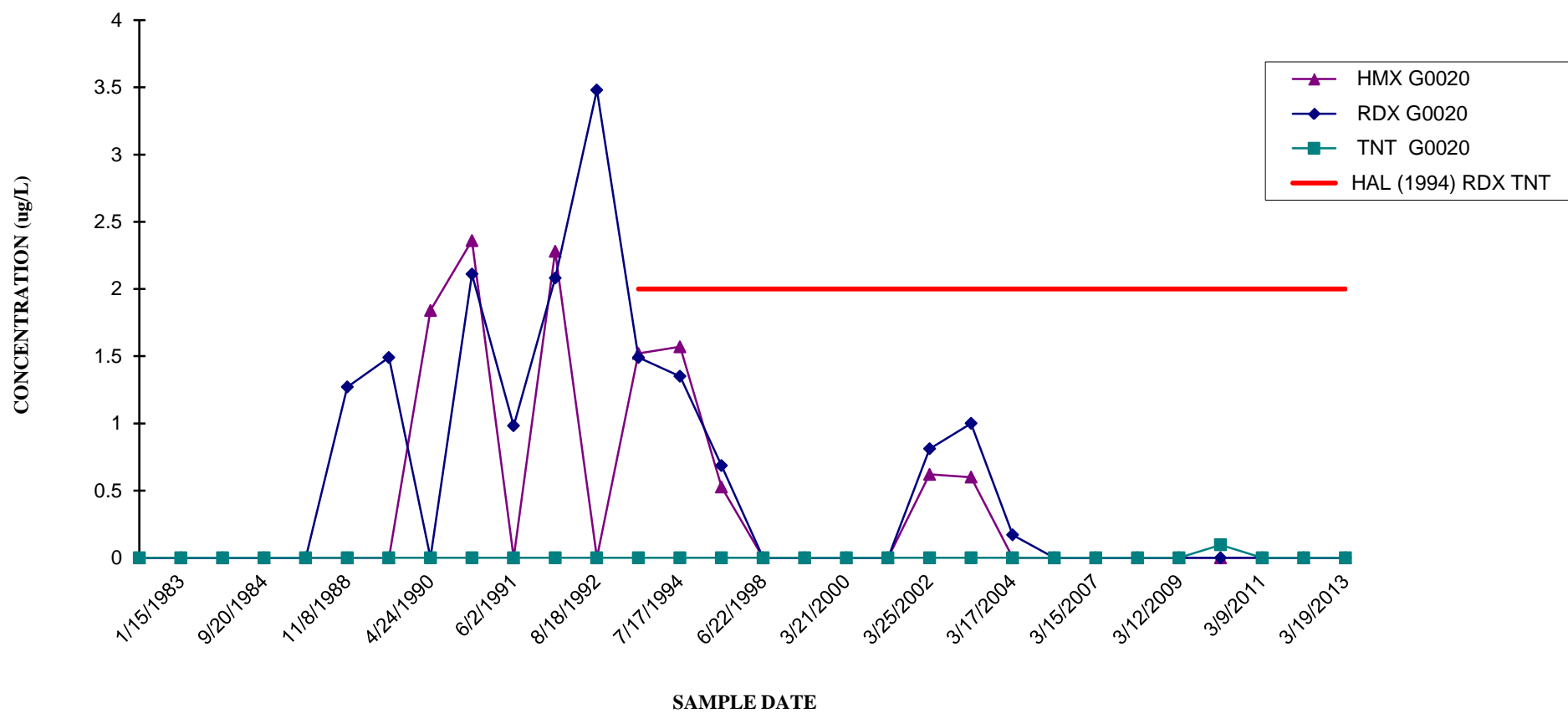
CORNHUSKER ARMY AMMUNITION PLANT WELL G0017 - HMX, RDX, AND TNT



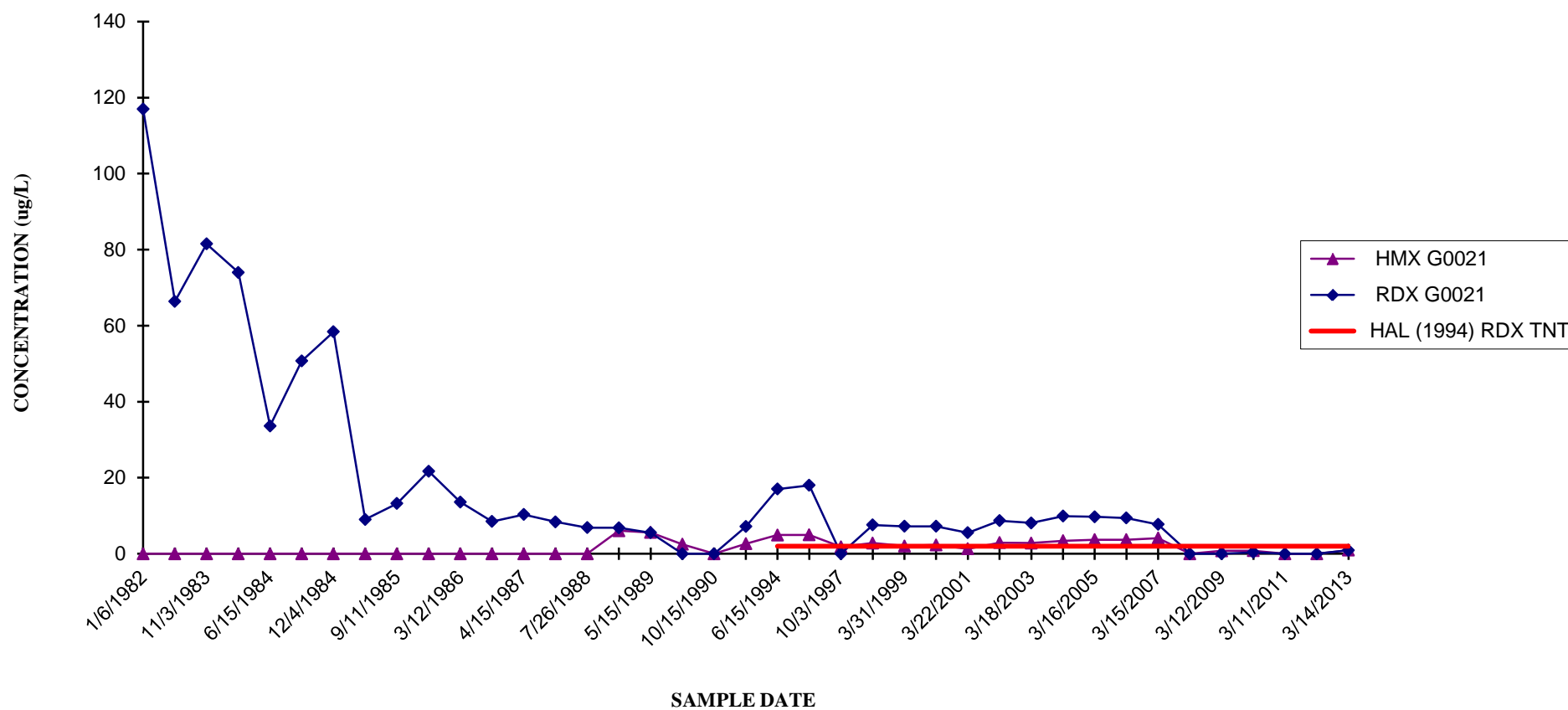
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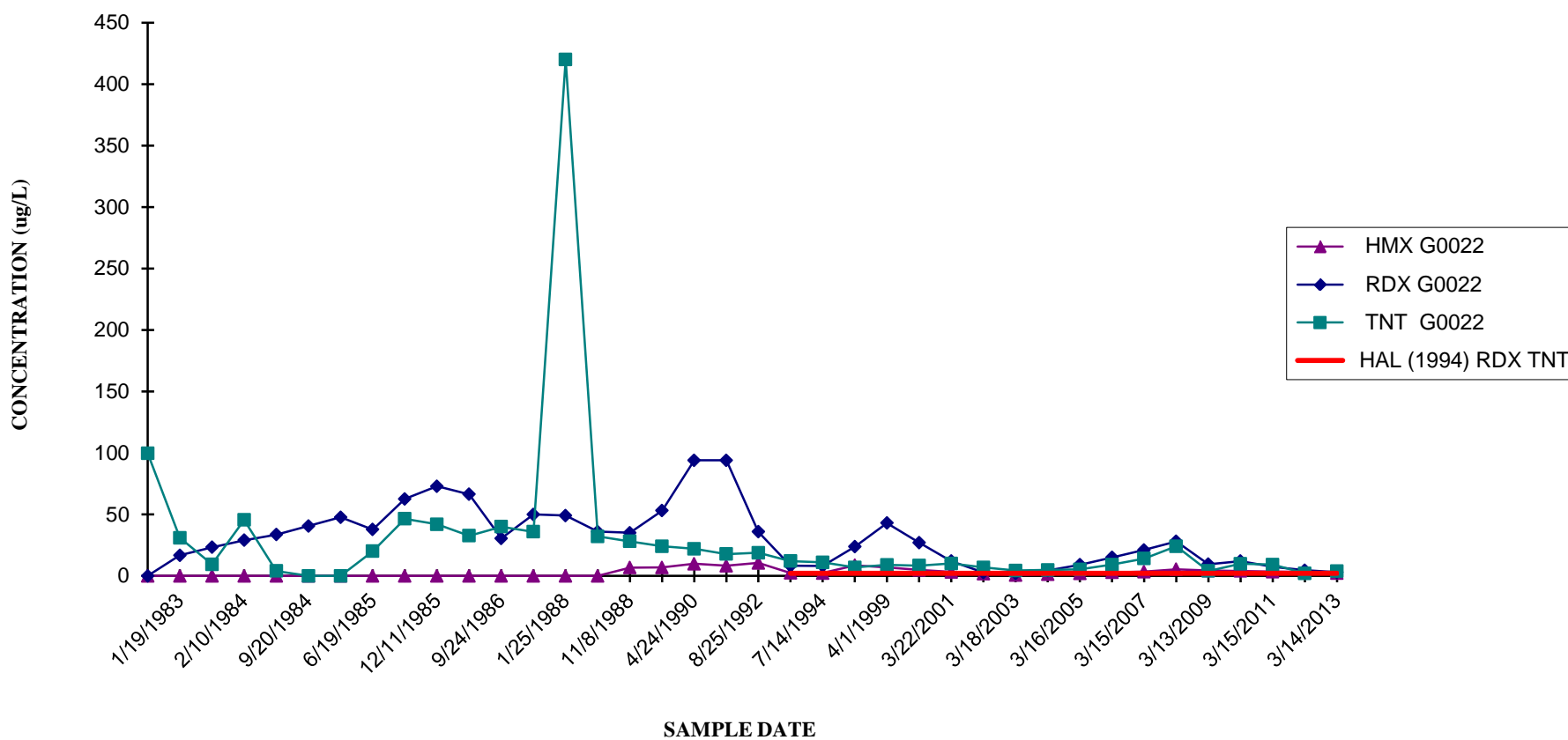
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CORNHUSKER ARMY AMMUNITION PLANT WELL G0021 - HMX AND RDX

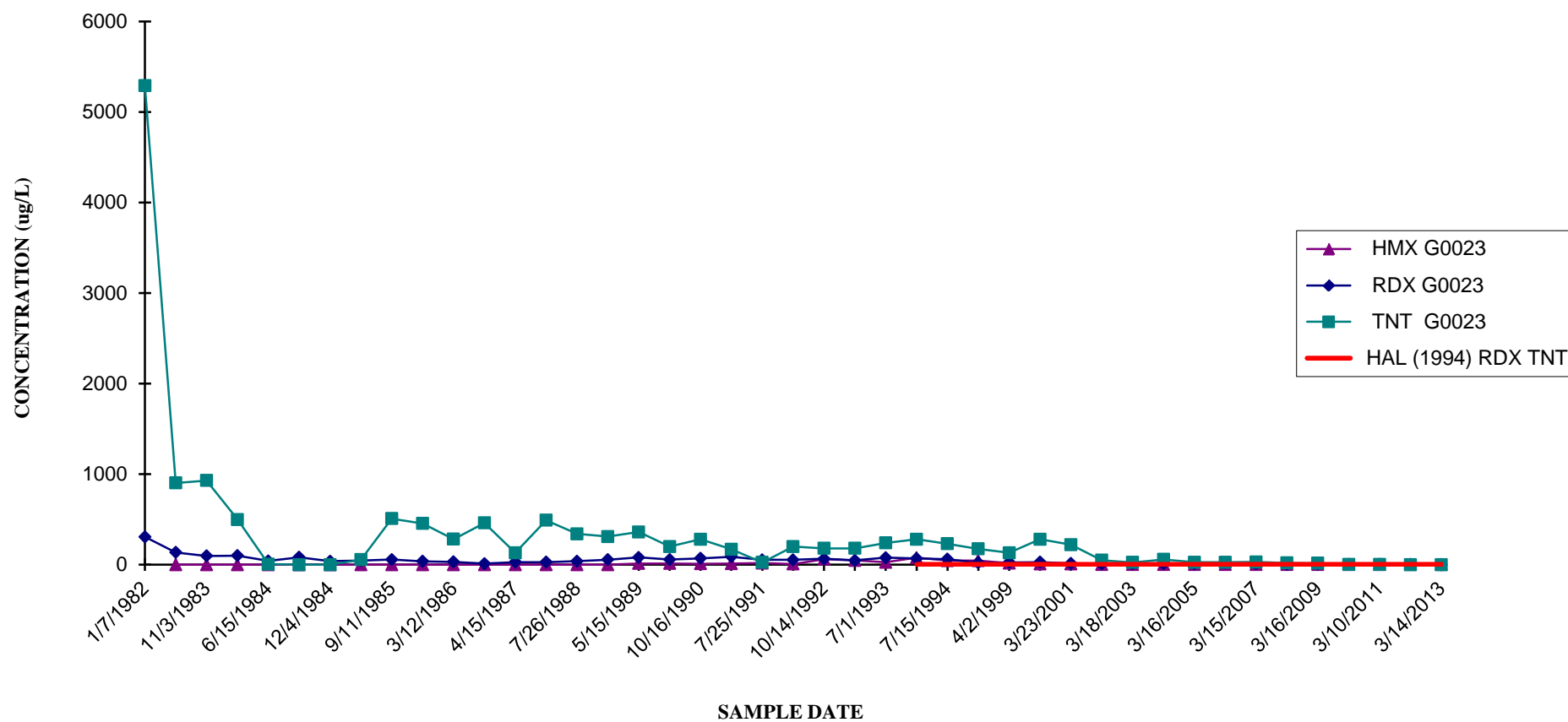


CORNHUSKER ARMY AMMUNITION PLANT WELL G0022 - HMX, RDX, AND TNT

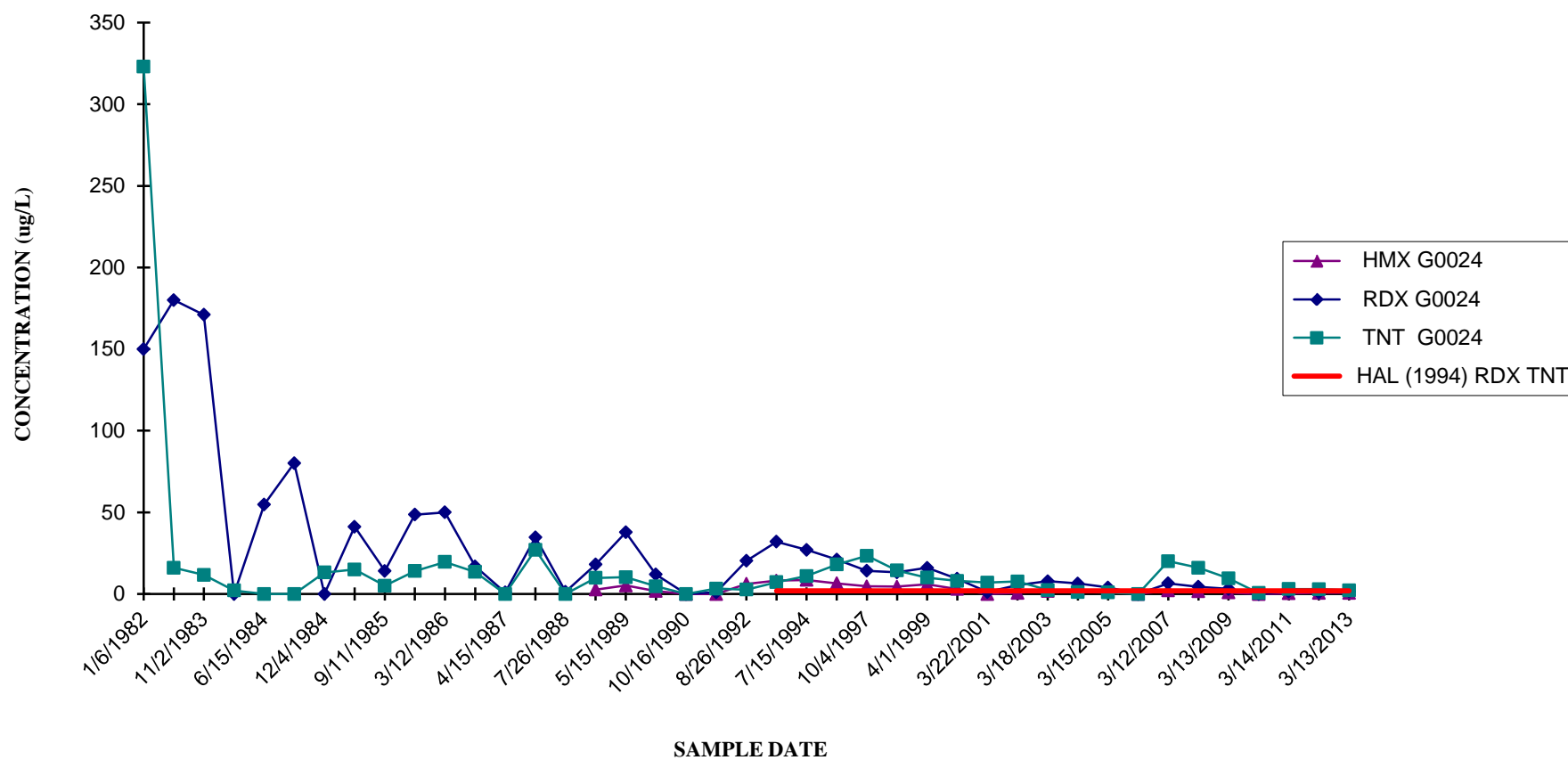


CORNHUSKER ARMY AMMUNITION PLANT

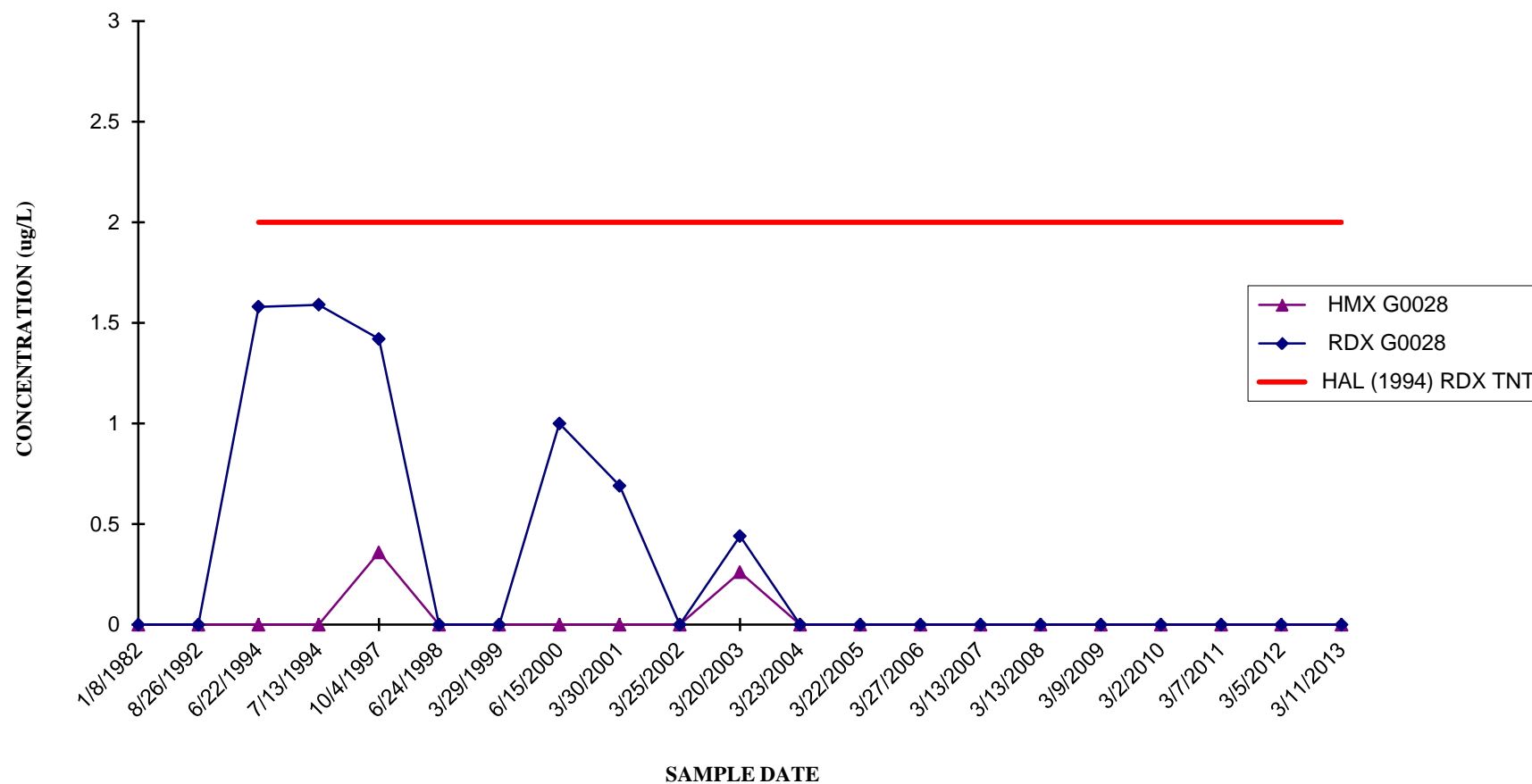
WELL G0023 - HMX, RDX, AND TNT



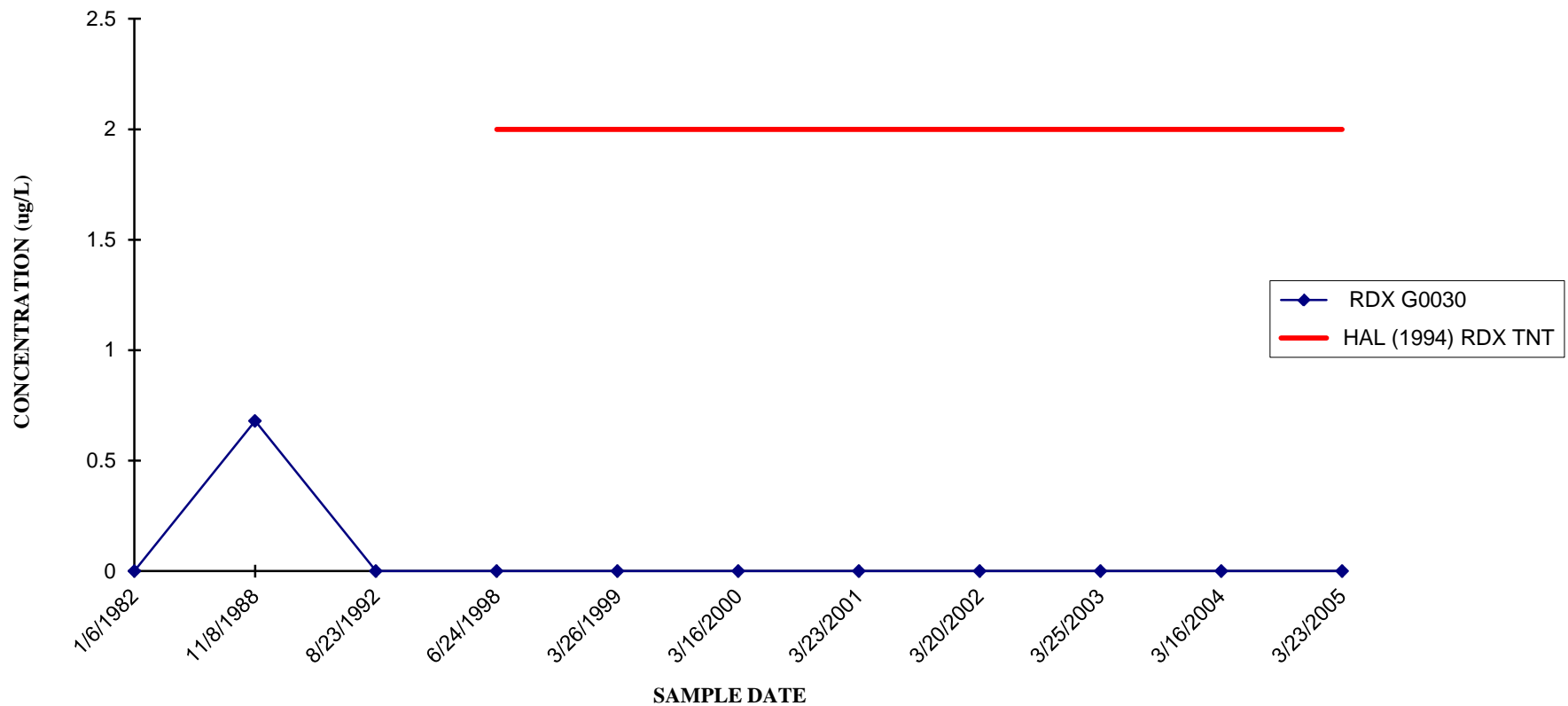
CORNHUSKER ARMY AMMUNITION PLANT WELL G0024 - HMX, RDX AND TNT



CORNHUSKER ARMY AMMUNITION PLANT WELL G0028 - HMX AND RDX

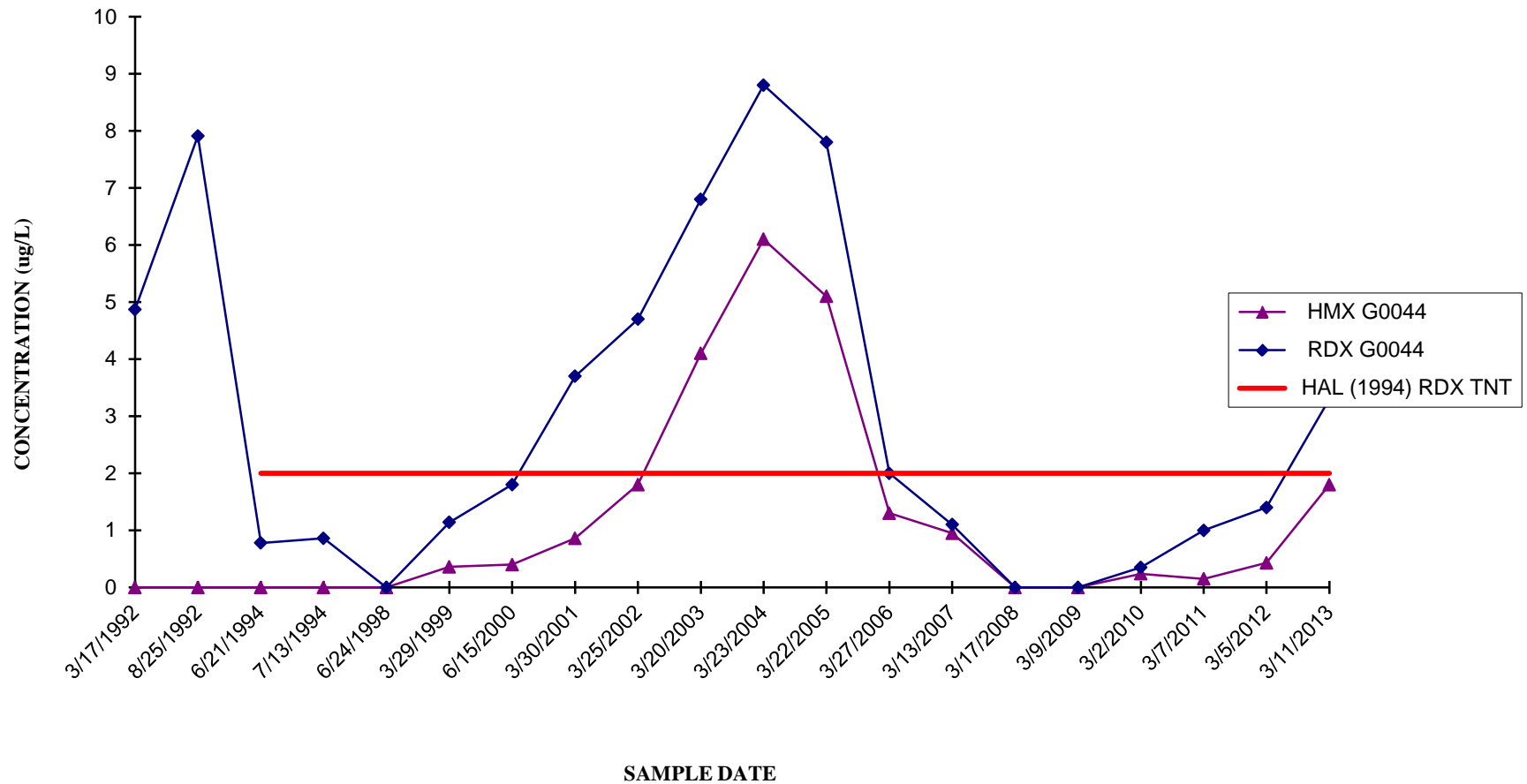


CORNHUSKER ARMY AMMUNITION PLANT WELL G0030 - RDX

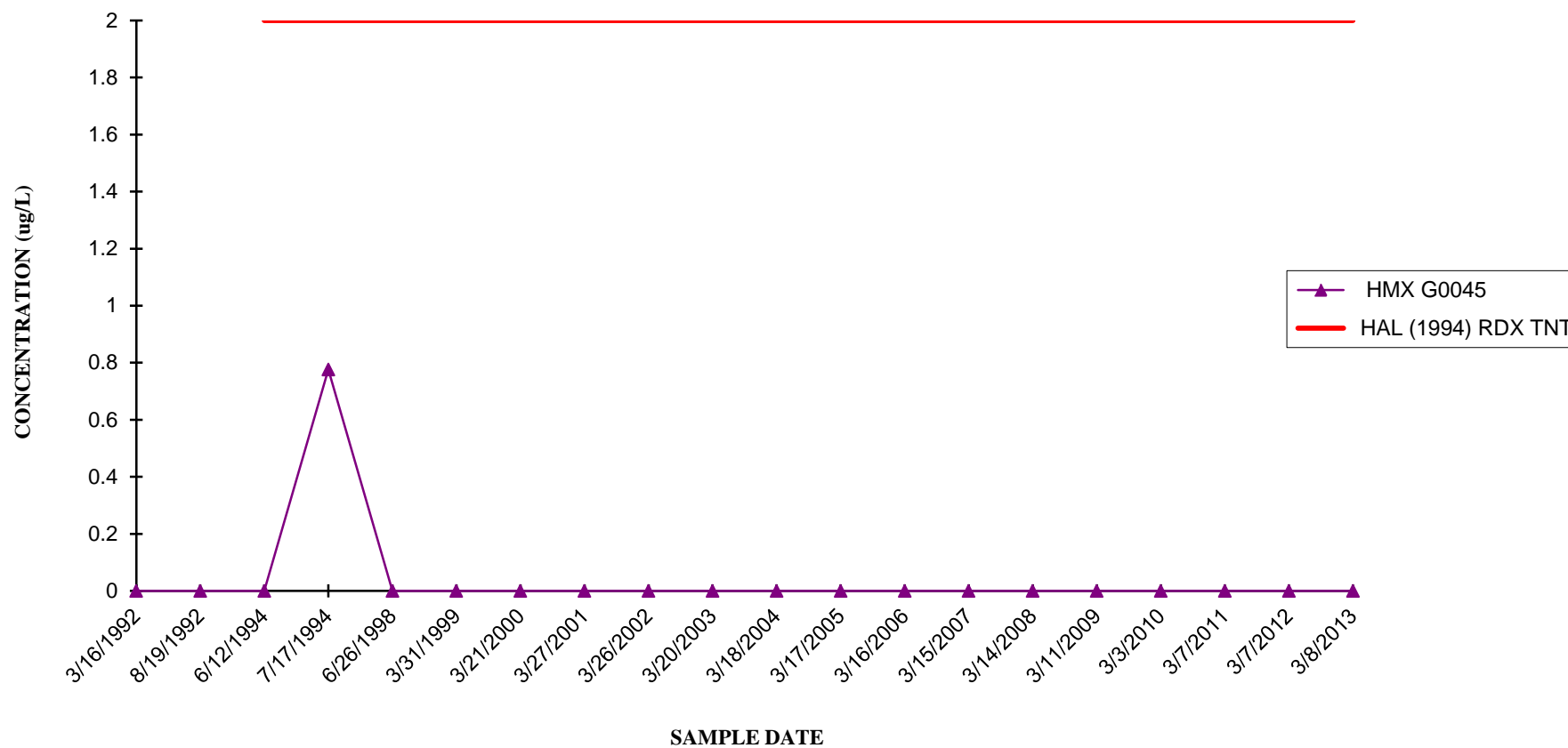


NOTE: Well G0030 was abandoned in 2005.

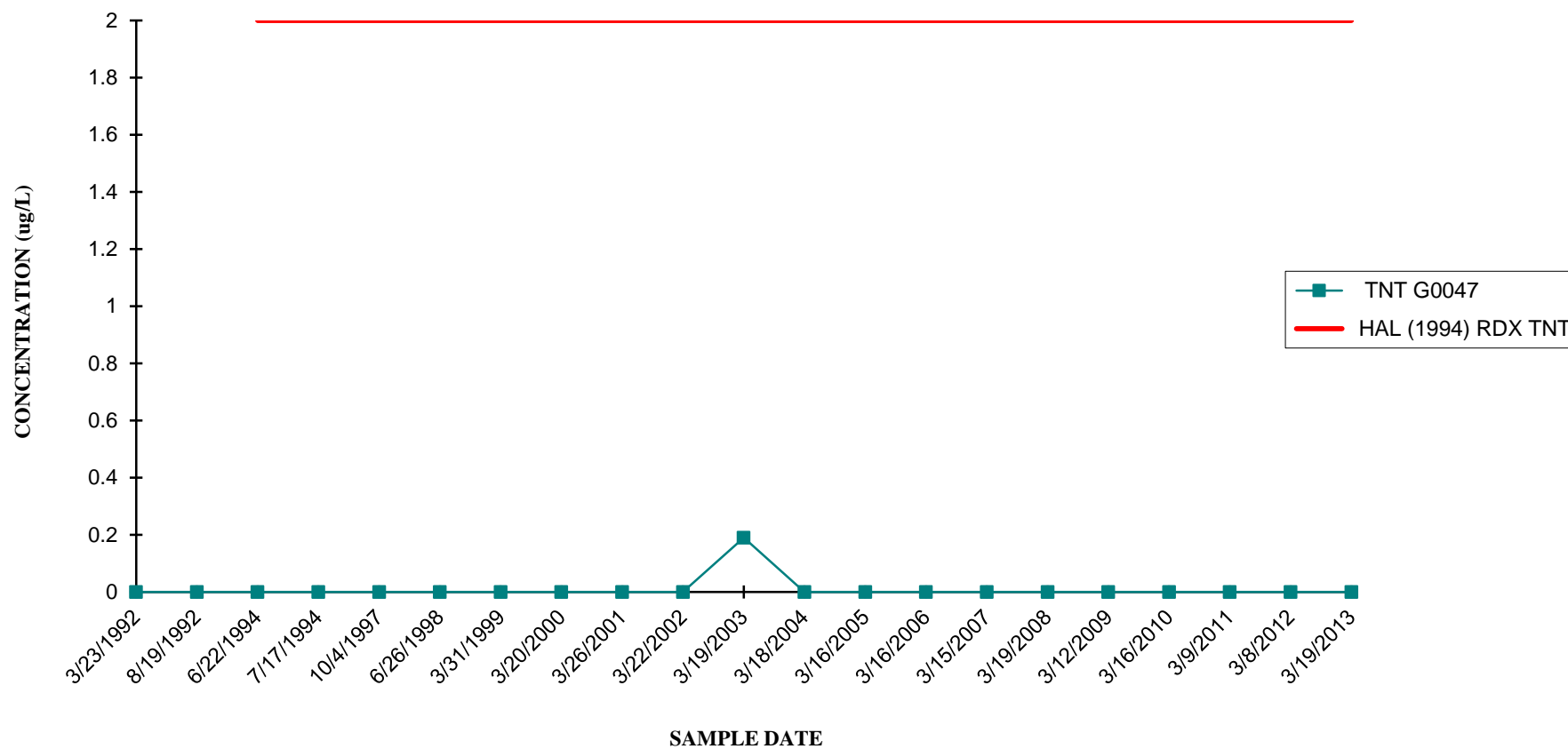
CORNHUSKER ARMY AMMUNITION PLANT WELL G0044 - HMX AND RDX



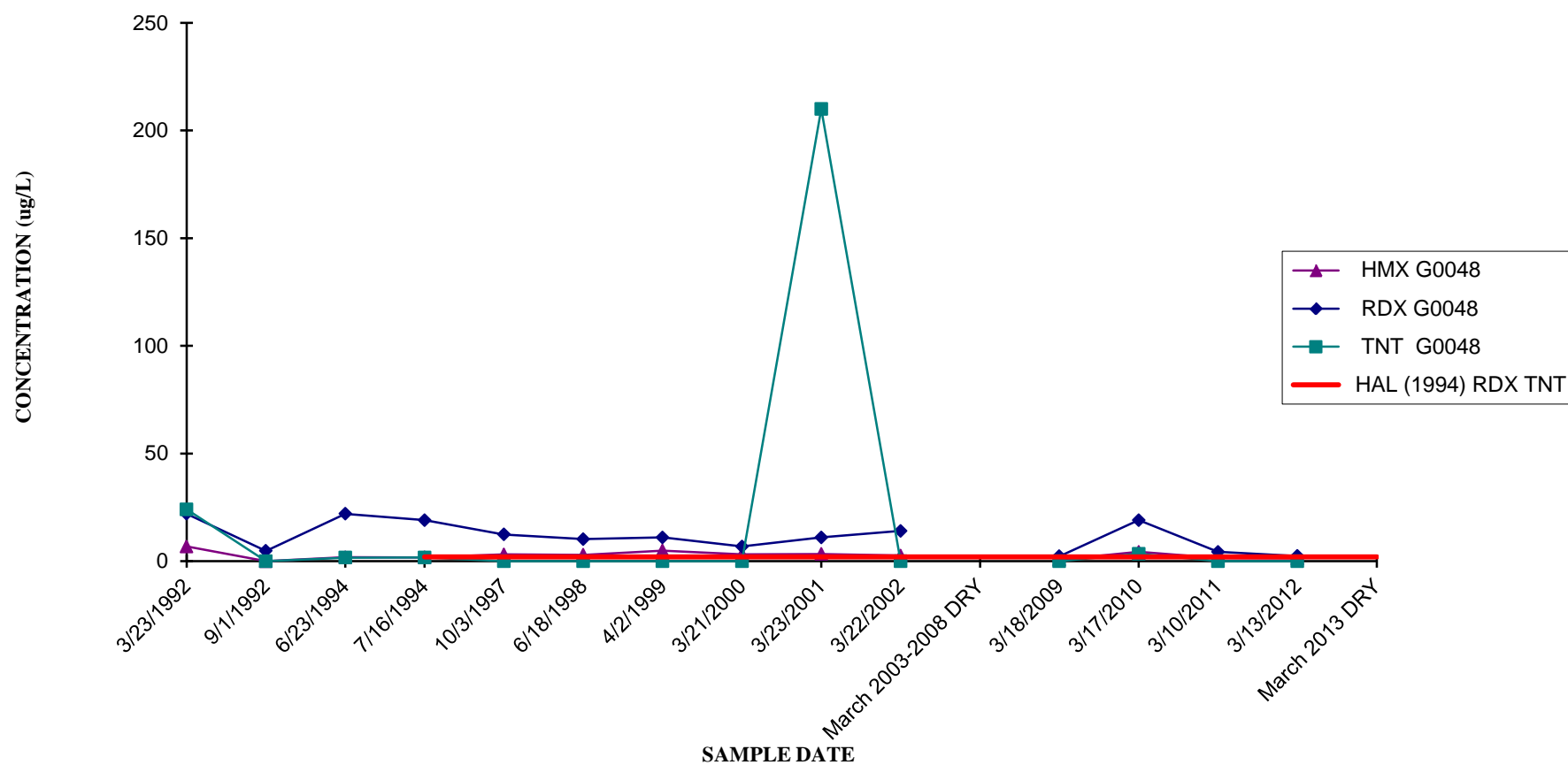
CORNHUSKER ARMY AMMUNITION PLANT WELL G0045 - HMX



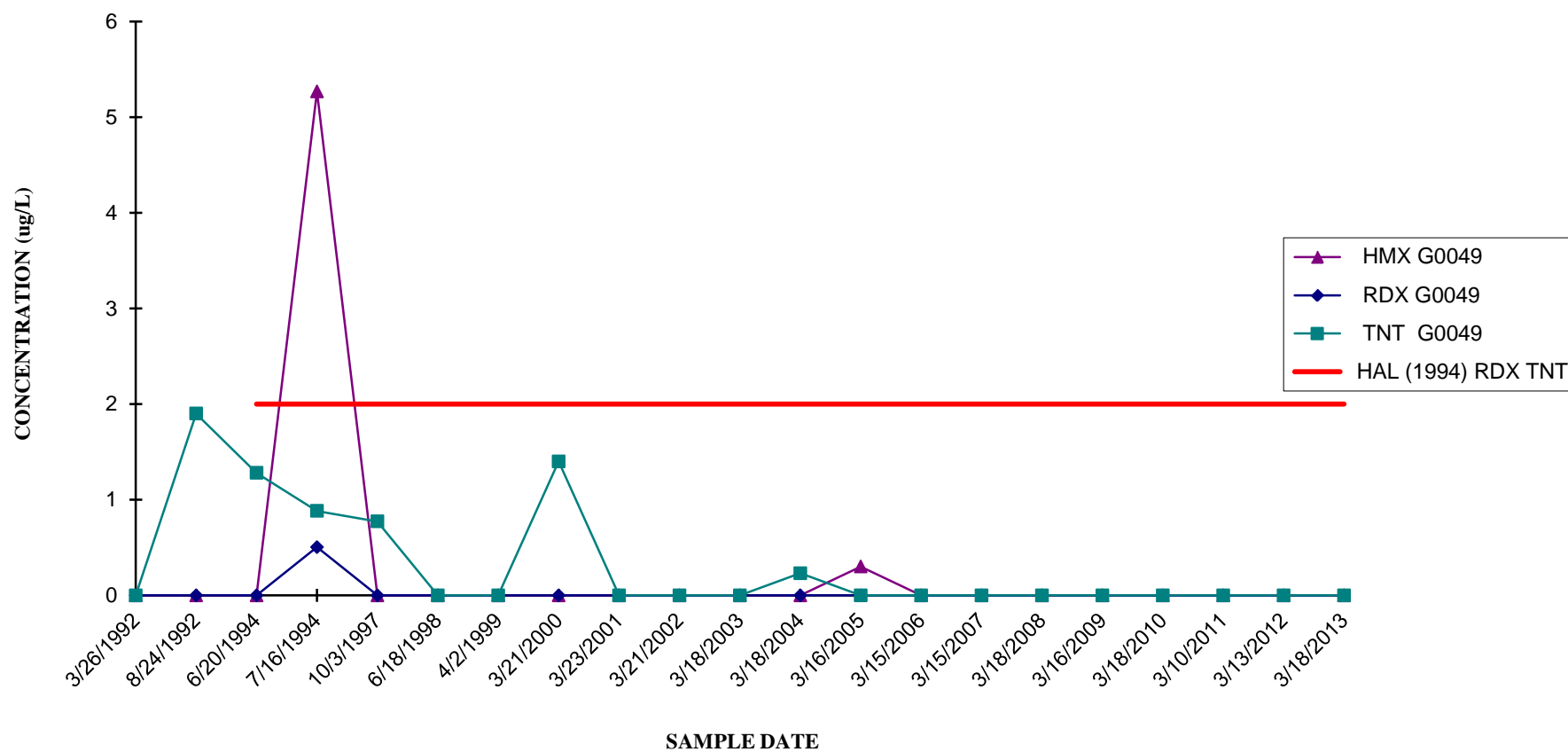
CORNHUSKER ARMY AMMUNITION PLANT WELL G0047 - TNT



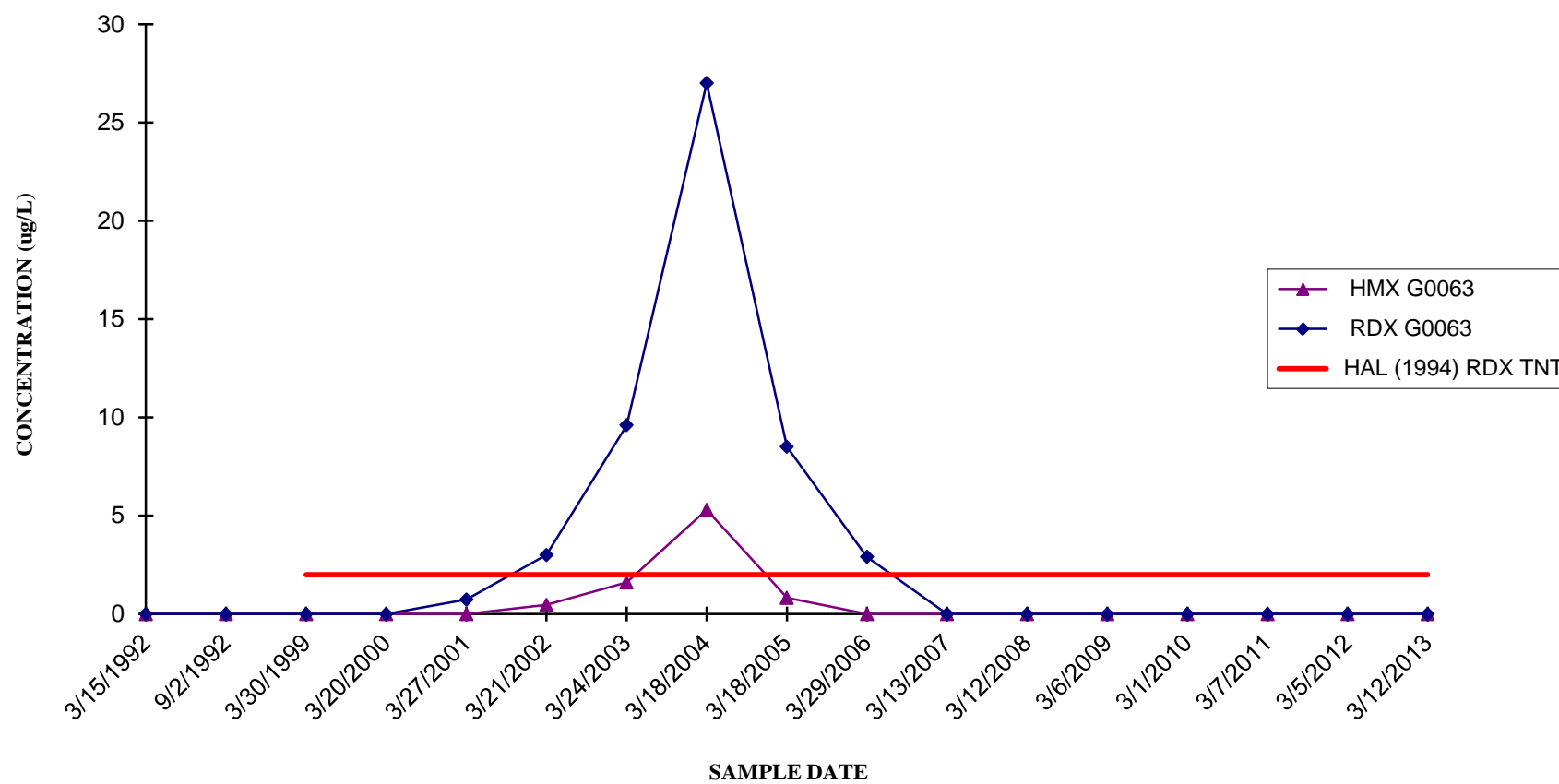
CORNHUSKER ARMY AMMUNITION PLANT WELL G0048 - HMX, RDX, AND TNT



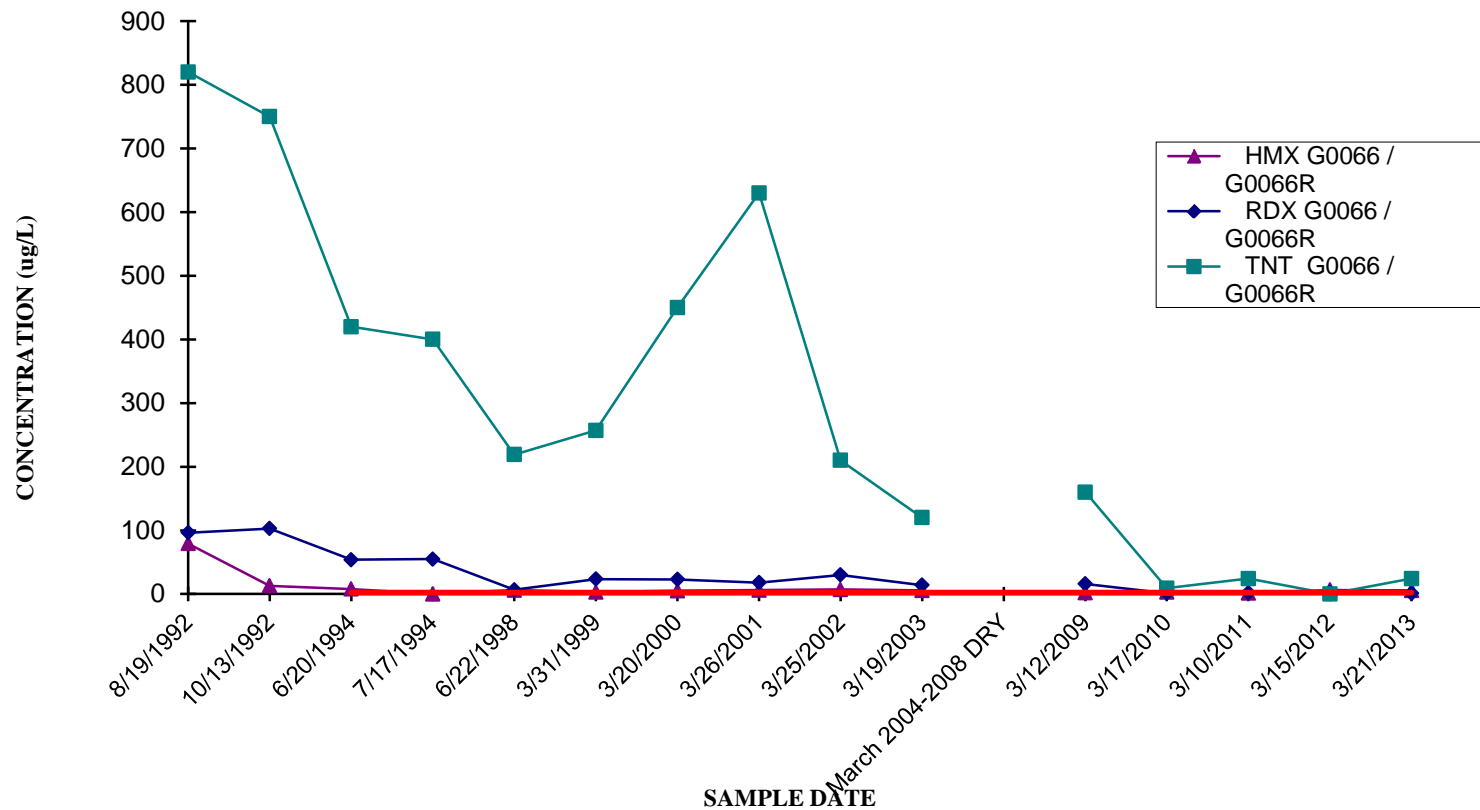
CORNHUSKER ARMY AMMUNITION PLANT WELL G0049 - HMX, RDX, AND TNT



CORNHUSKER ARMY AMMUNITION PLANT WELL G0063 - HMX AND RDX

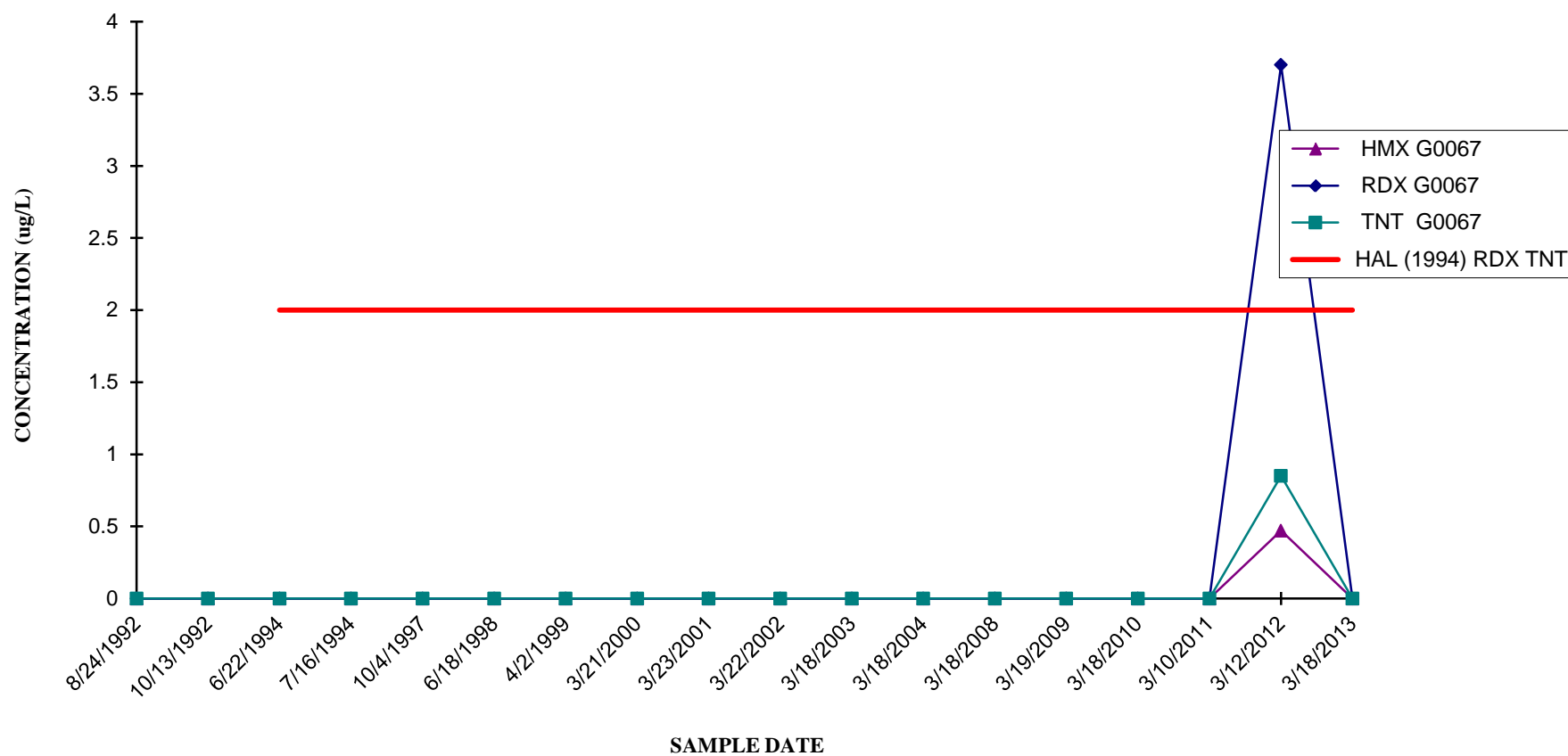


CORNHUSKER ARMY AMMUNITION PLANT WELL G0066/G0066R* - HMX, RDX, AND TNT

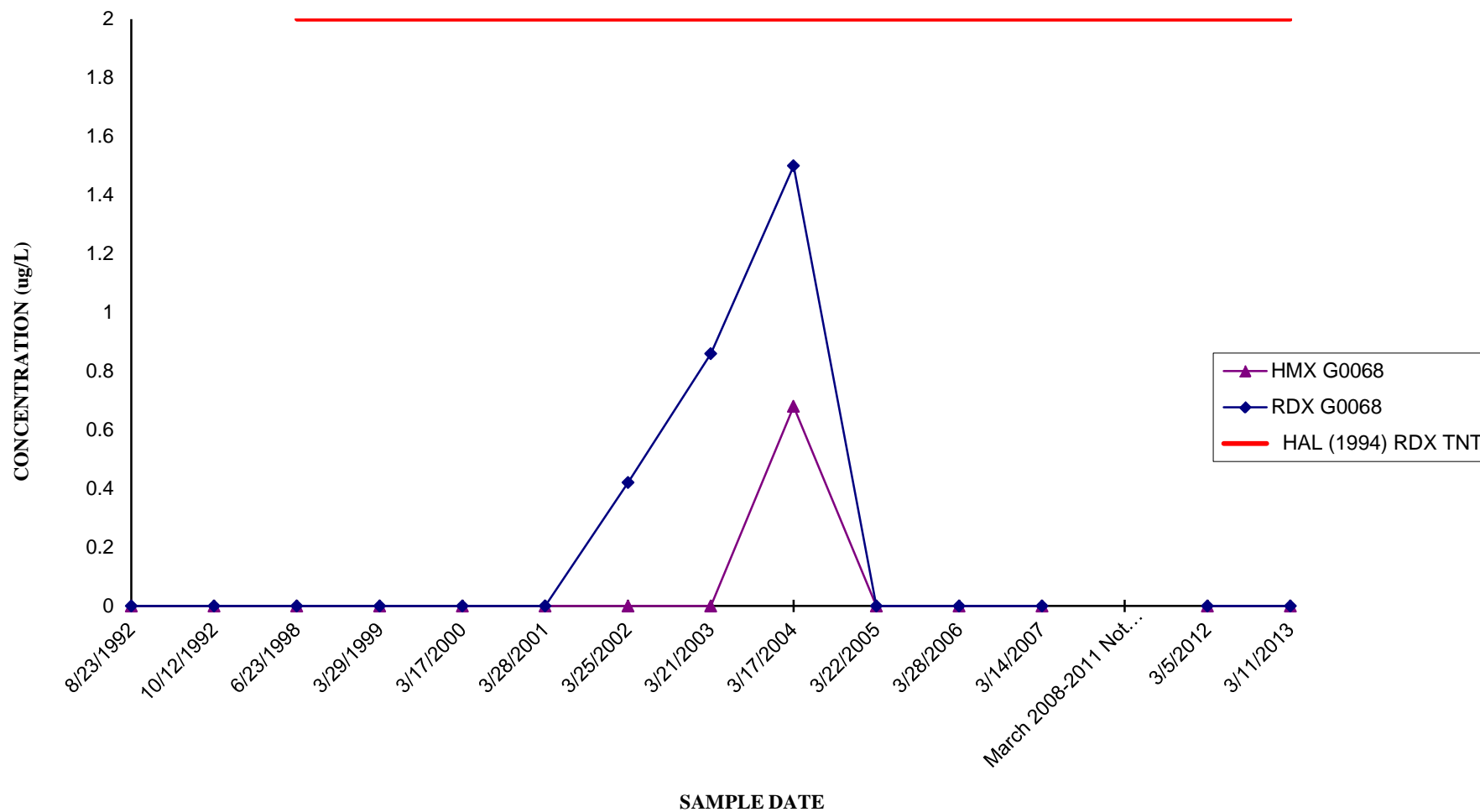


Well G0066 was abandoned and replaced by G0066R in November 2010.

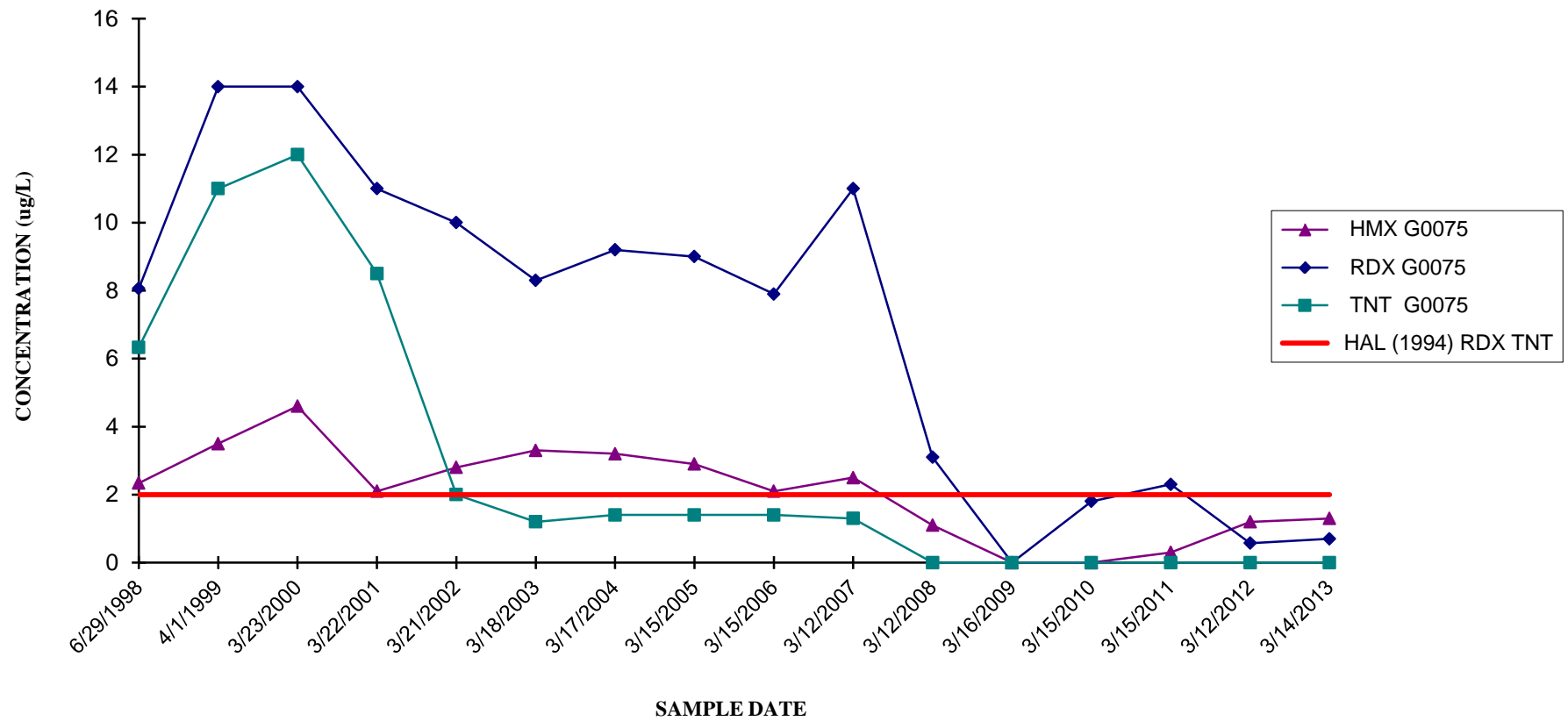
CORNHUSKER ARMY AMMUNITION PLANT WELL G0067 - HMX, RDX, AND TNT



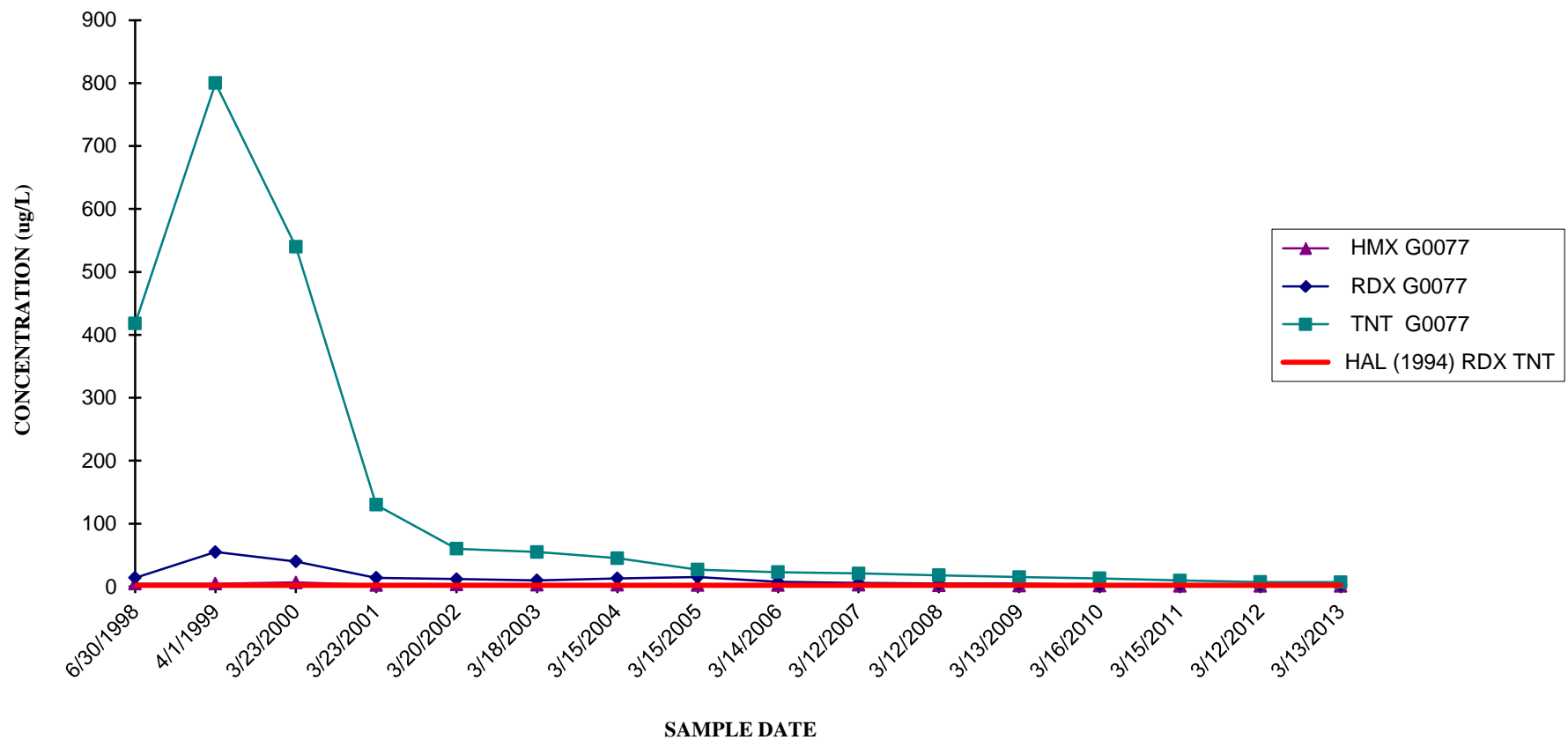
CORNHUSKER ARMY AMMUNITION PLANT WELL G0068 - HMX AND RDX



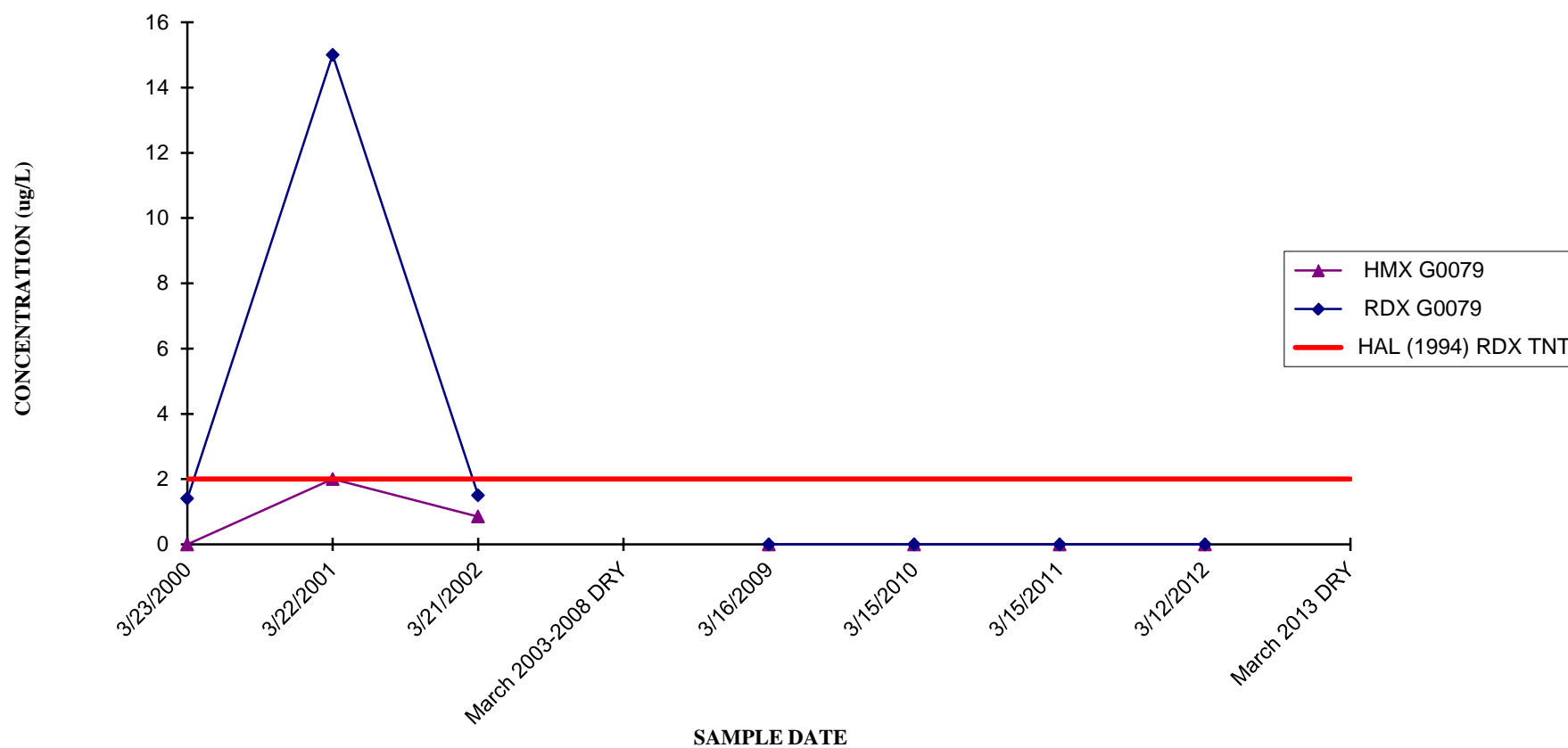
CORNHUSKER ARMY AMMUNITION PLANT WELL G0075 - HMX, RDX, AND TNT



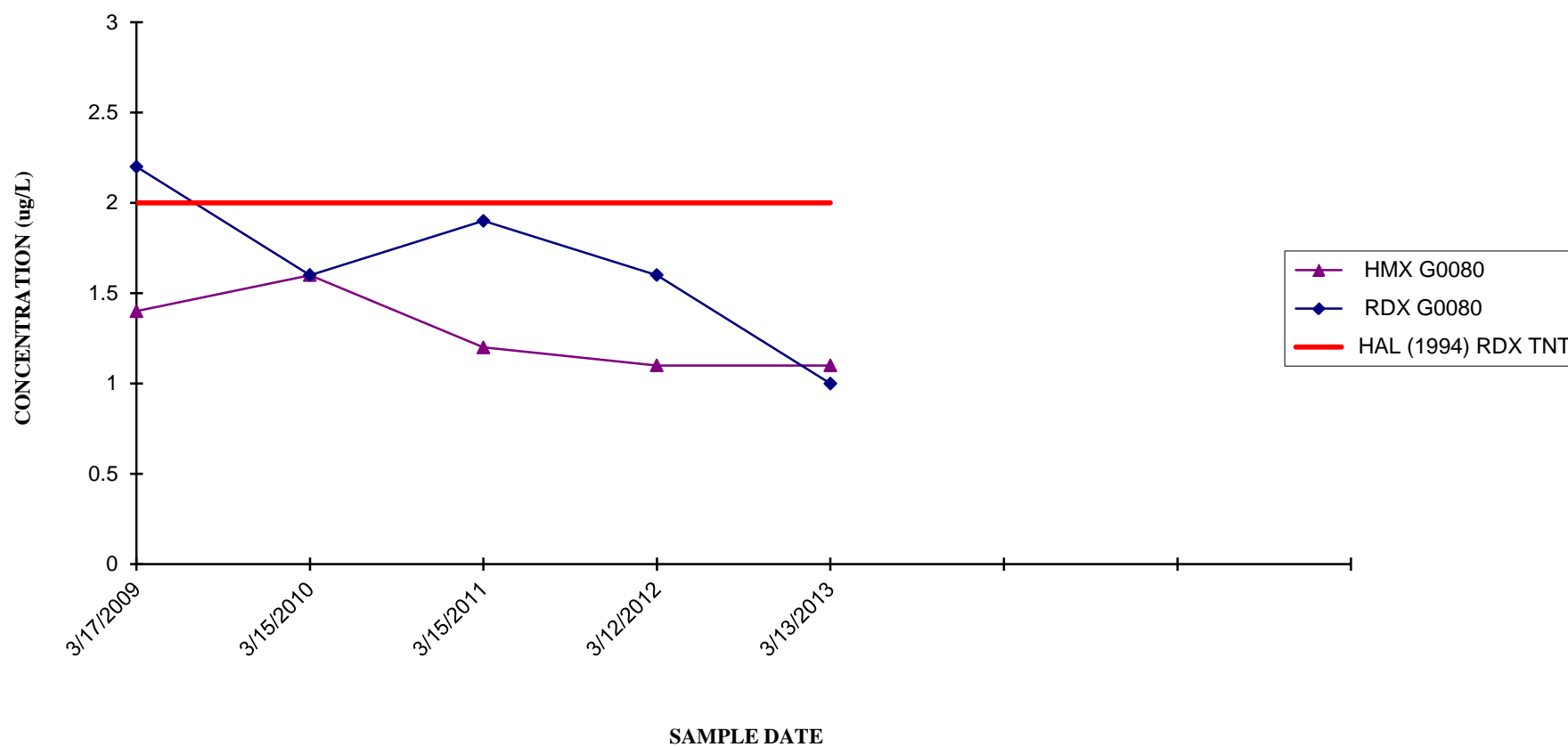
CORNHUSKER ARMY AMMUNITION PLANT WELL G0077 - HMX, RDX, AND TNT



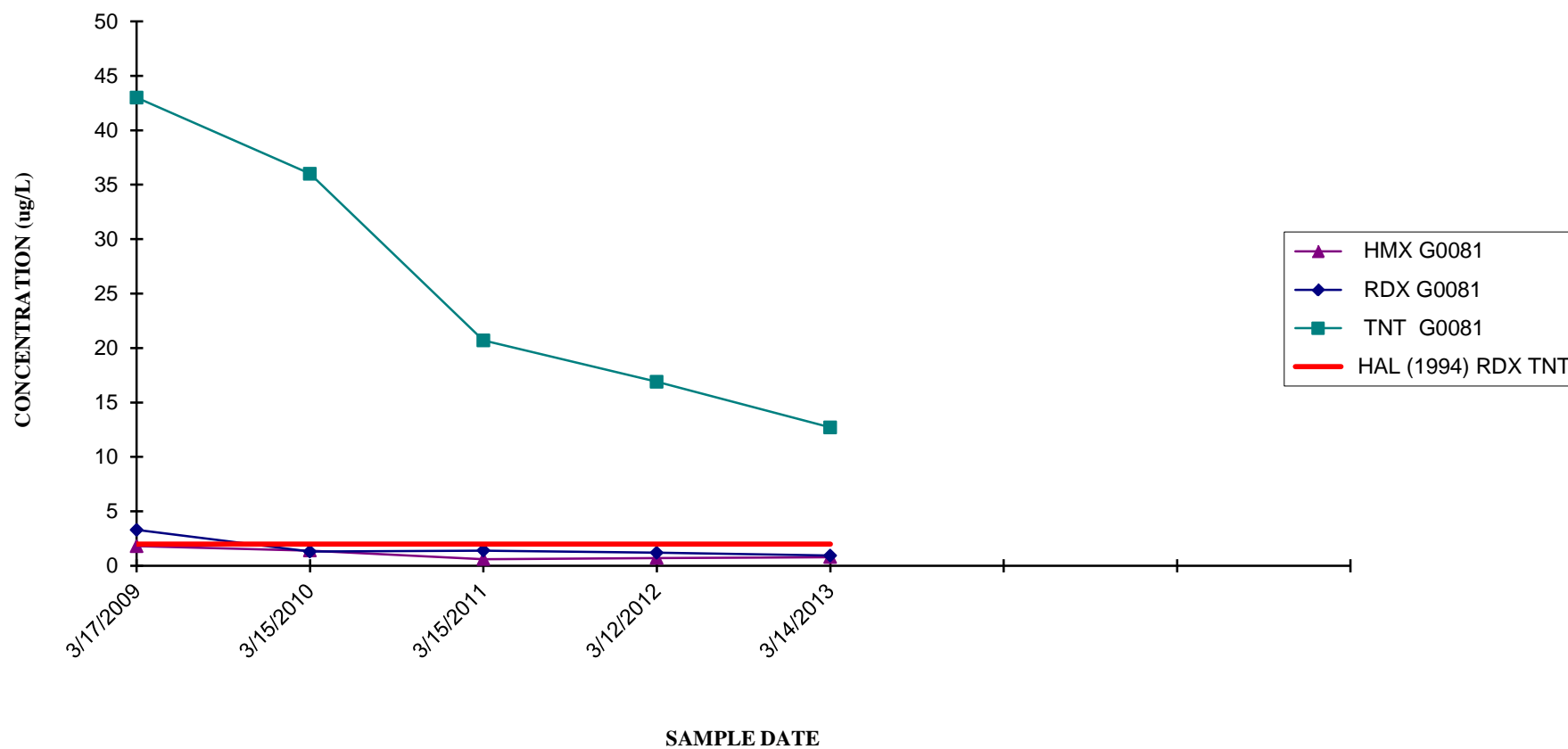
CORNHUSKER ARMY AMMUNITION PLANT WELL G0079 - HMX AND RDX



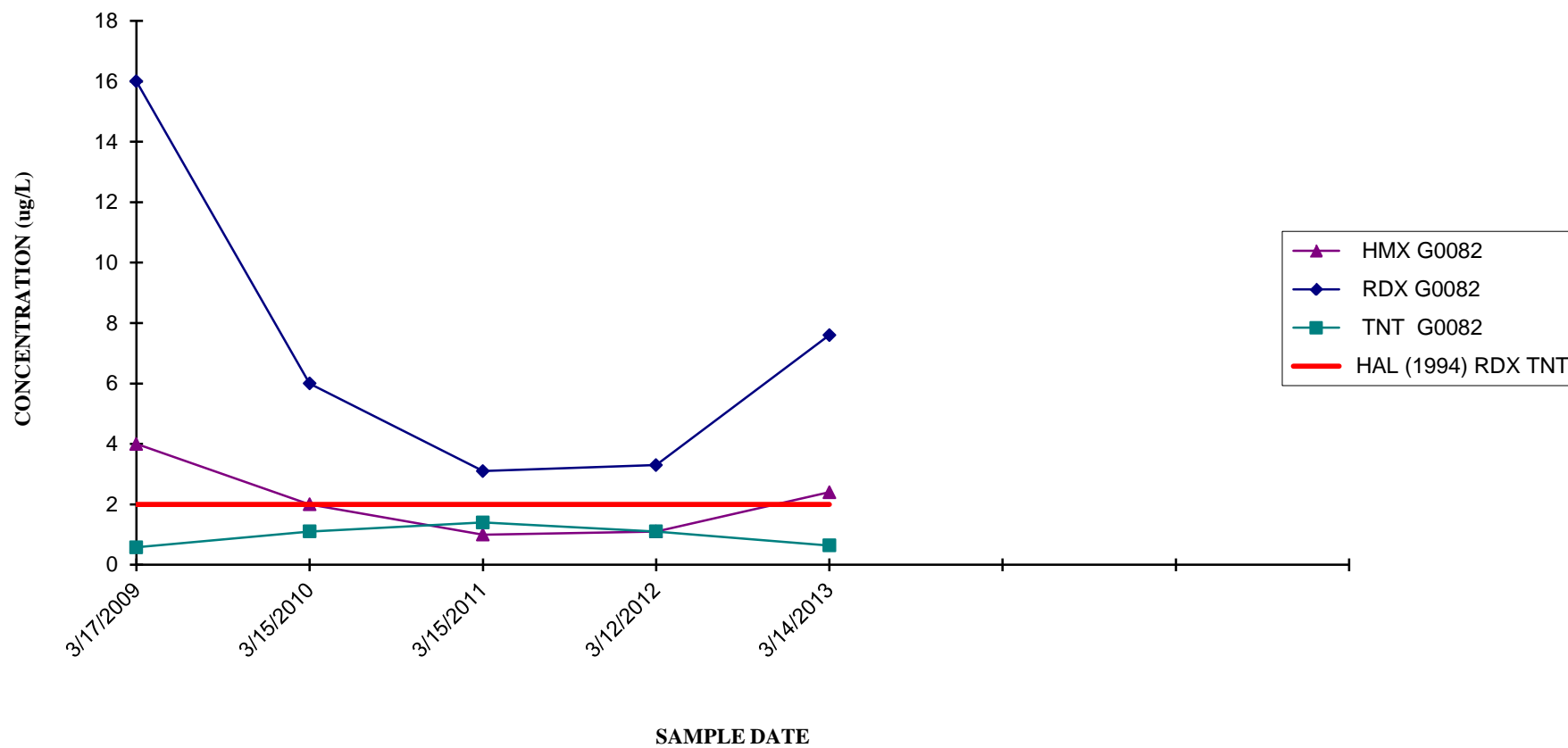
CORNHUSKER ARMY AMMUNITION PLANT WELL G0080 - HMX AND RDX



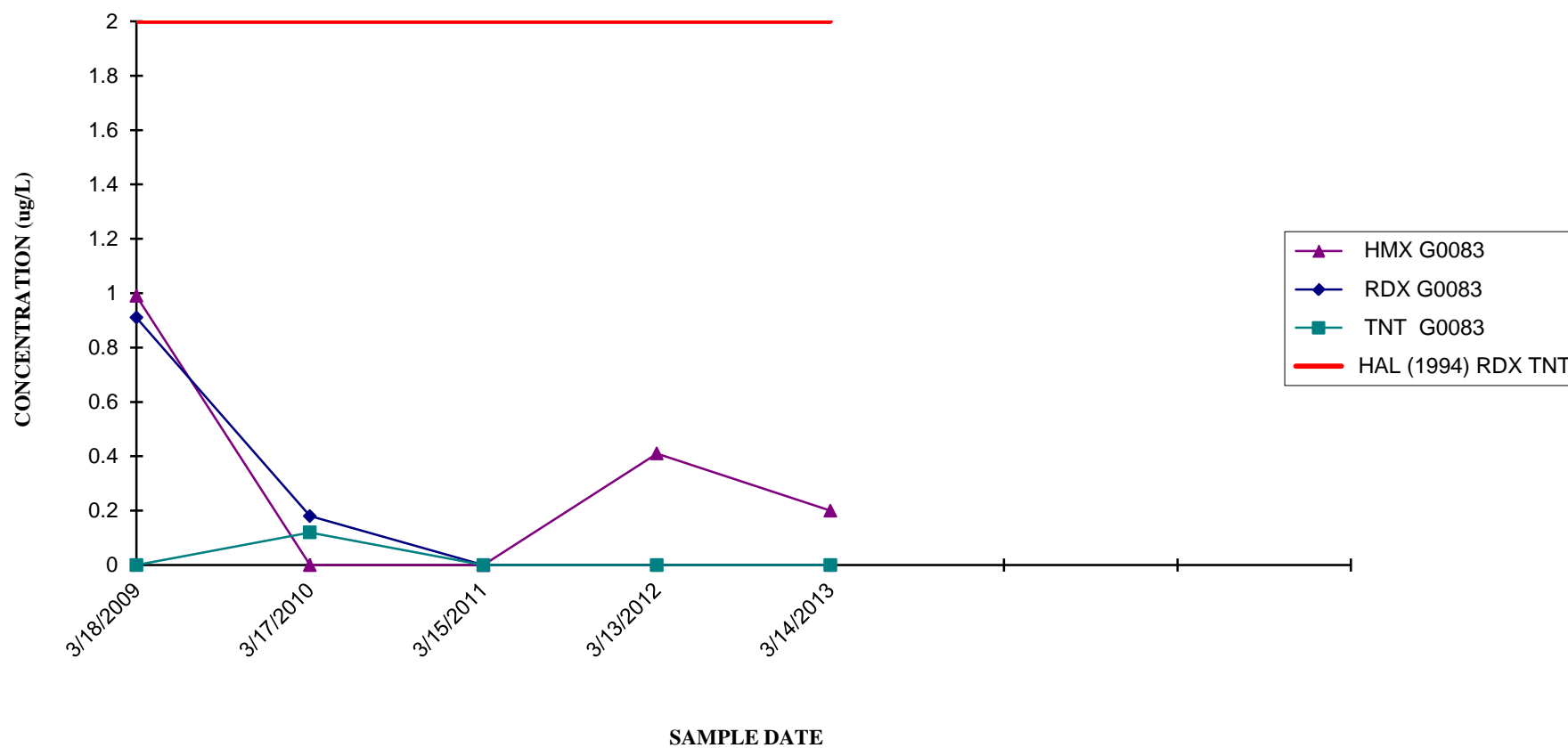
CORNHUSKER ARMY AMMUNITION PLANT WELL G0081 - HMX, RDX, AND TNT



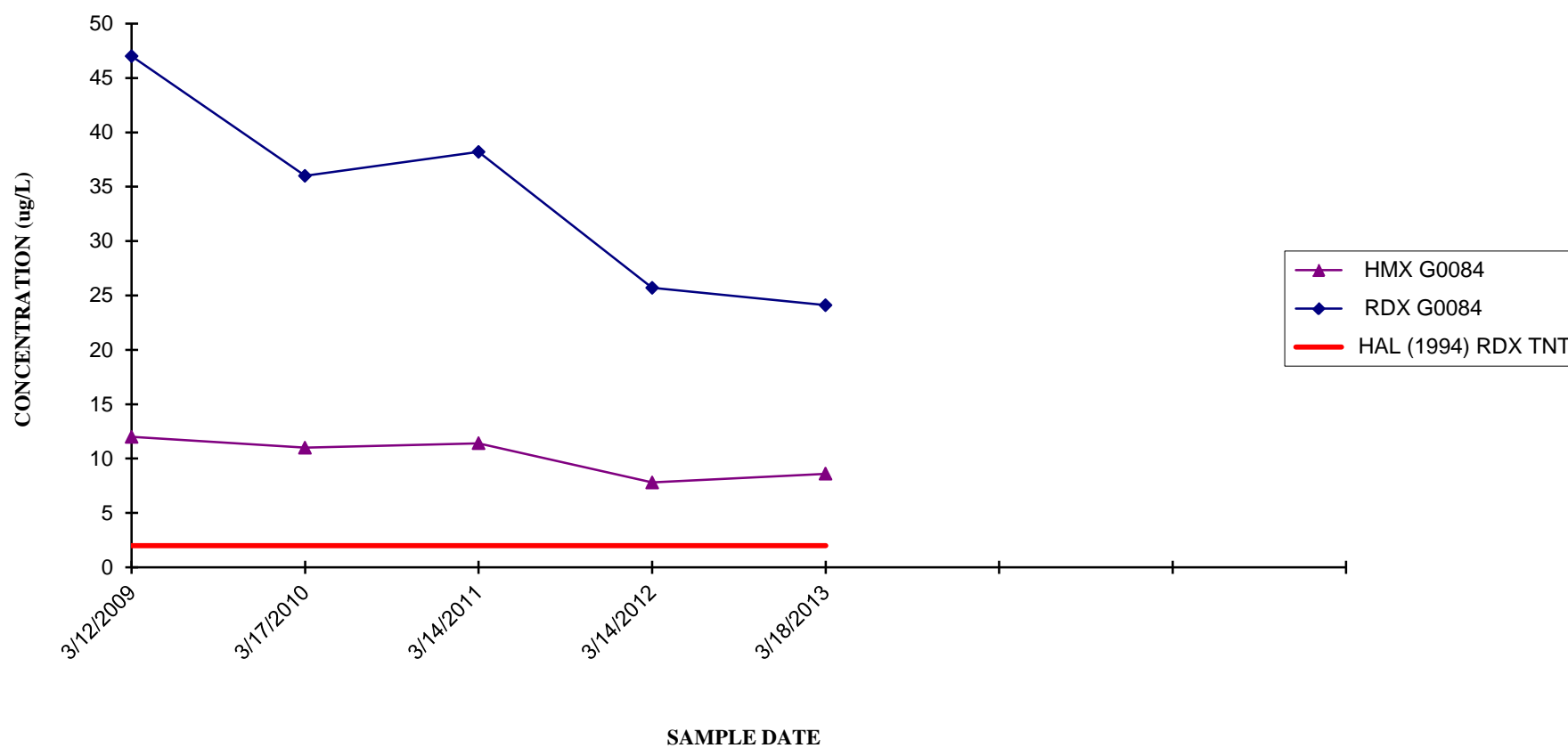
CORNHUSKER ARMY AMMUNITION PLANT WELL G0082 - HMX, RDX, AND TNT



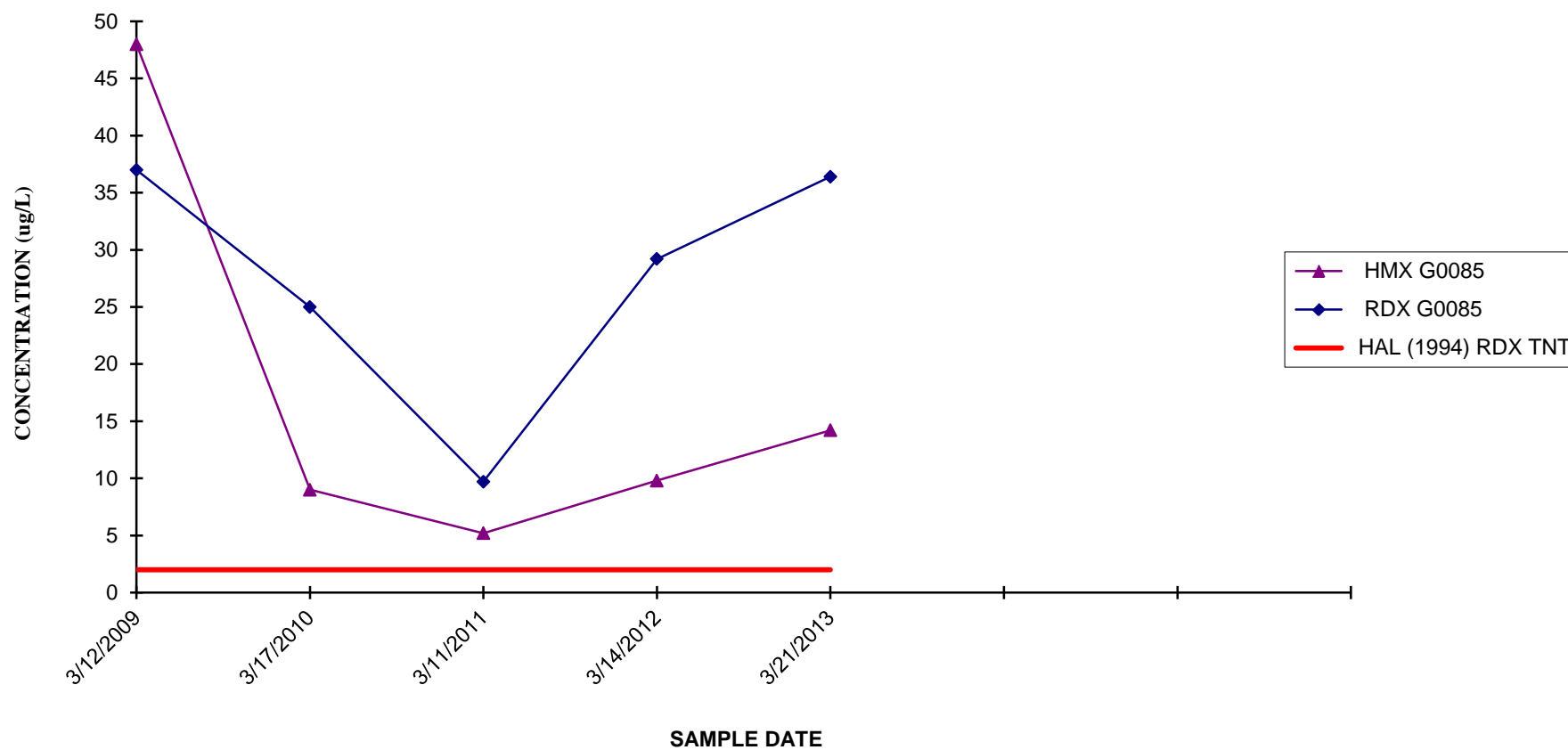
CORNHUSKER ARMY AMMUNITION PLANT WELL G0083 - HMX, RDX, AND TNT



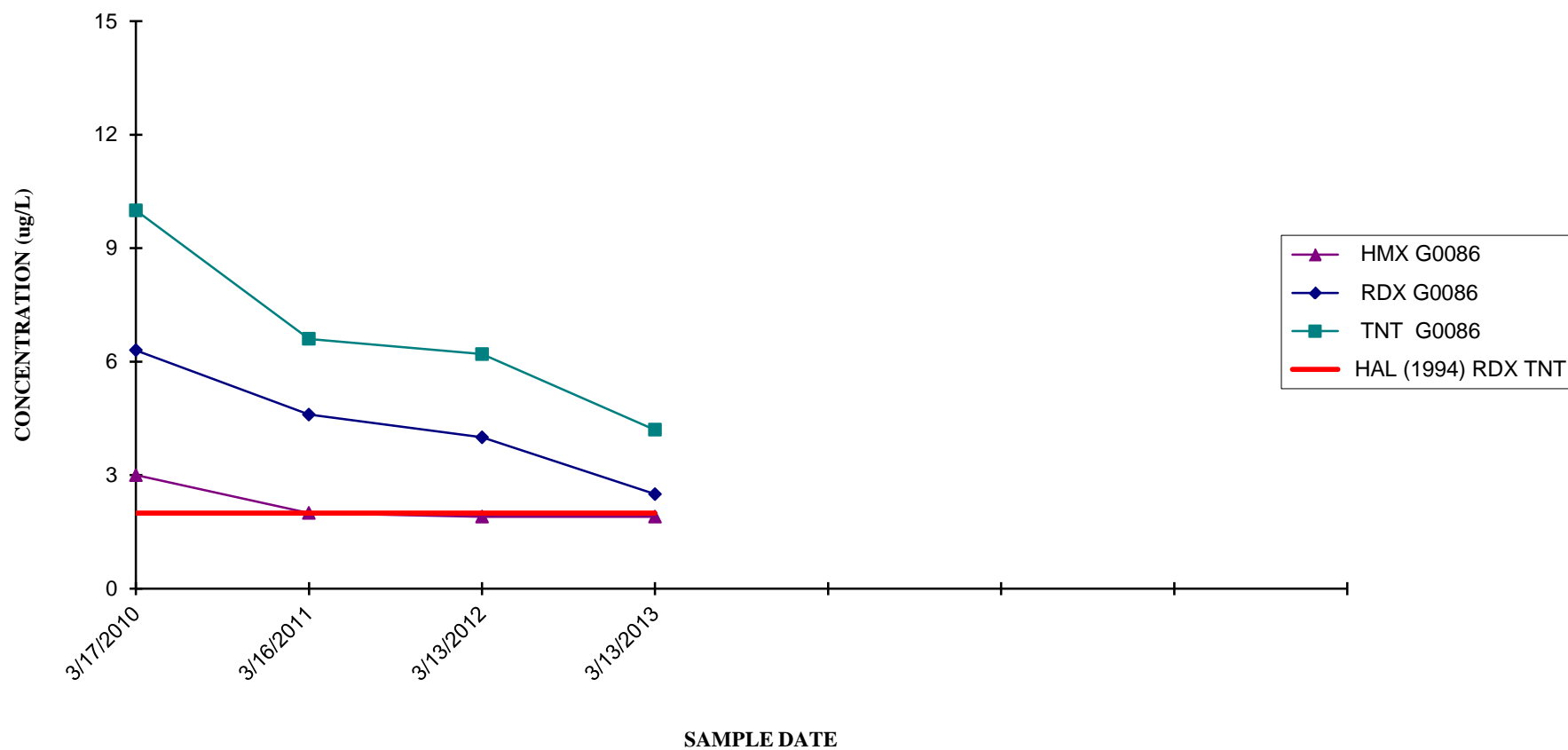
CORNHUSKER ARMY AMMUNITION PLANT WELL G0084 - HMX AND RDX



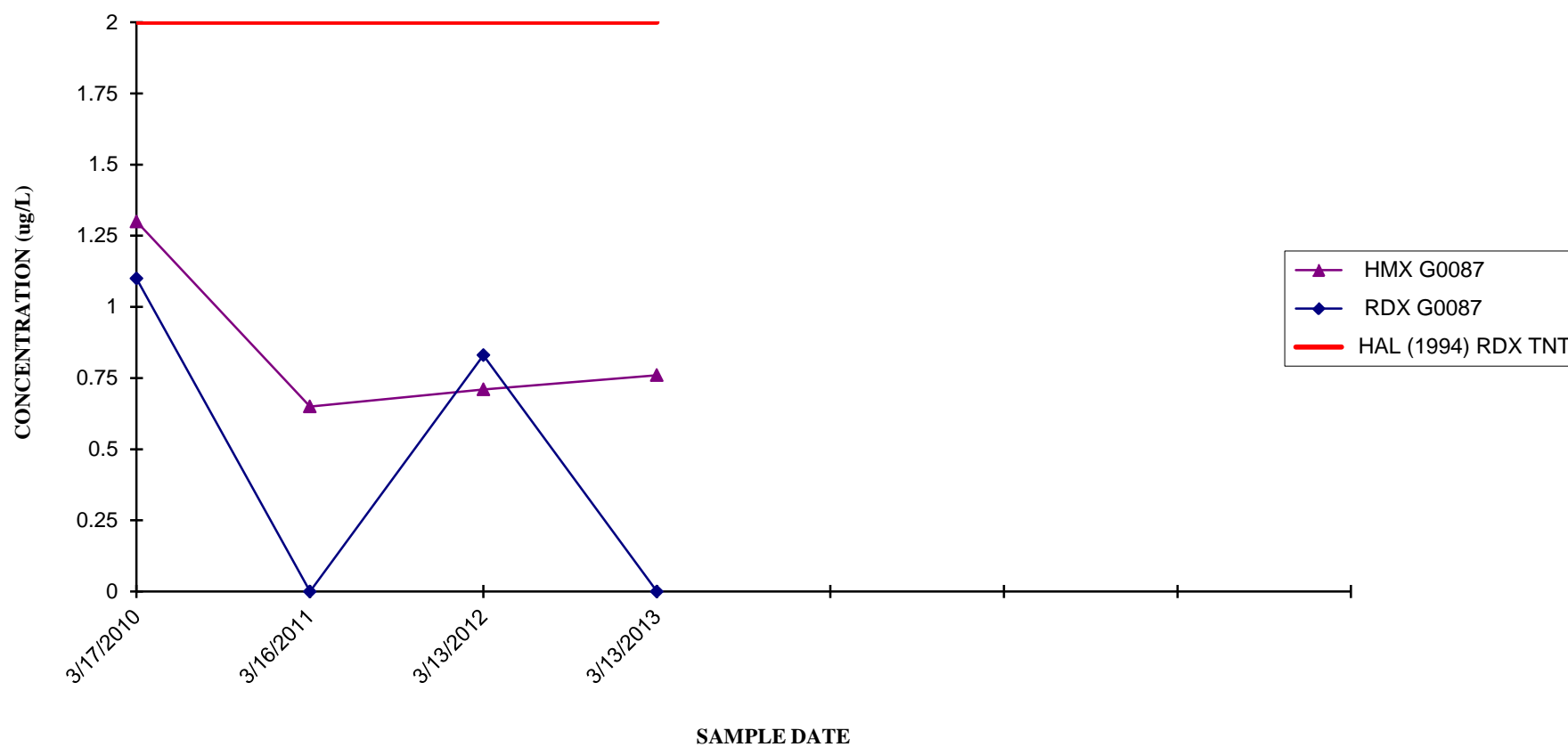
CORNHUSKER ARMY AMMUNITION PLANT WELL G0085 - HMX AND RDX



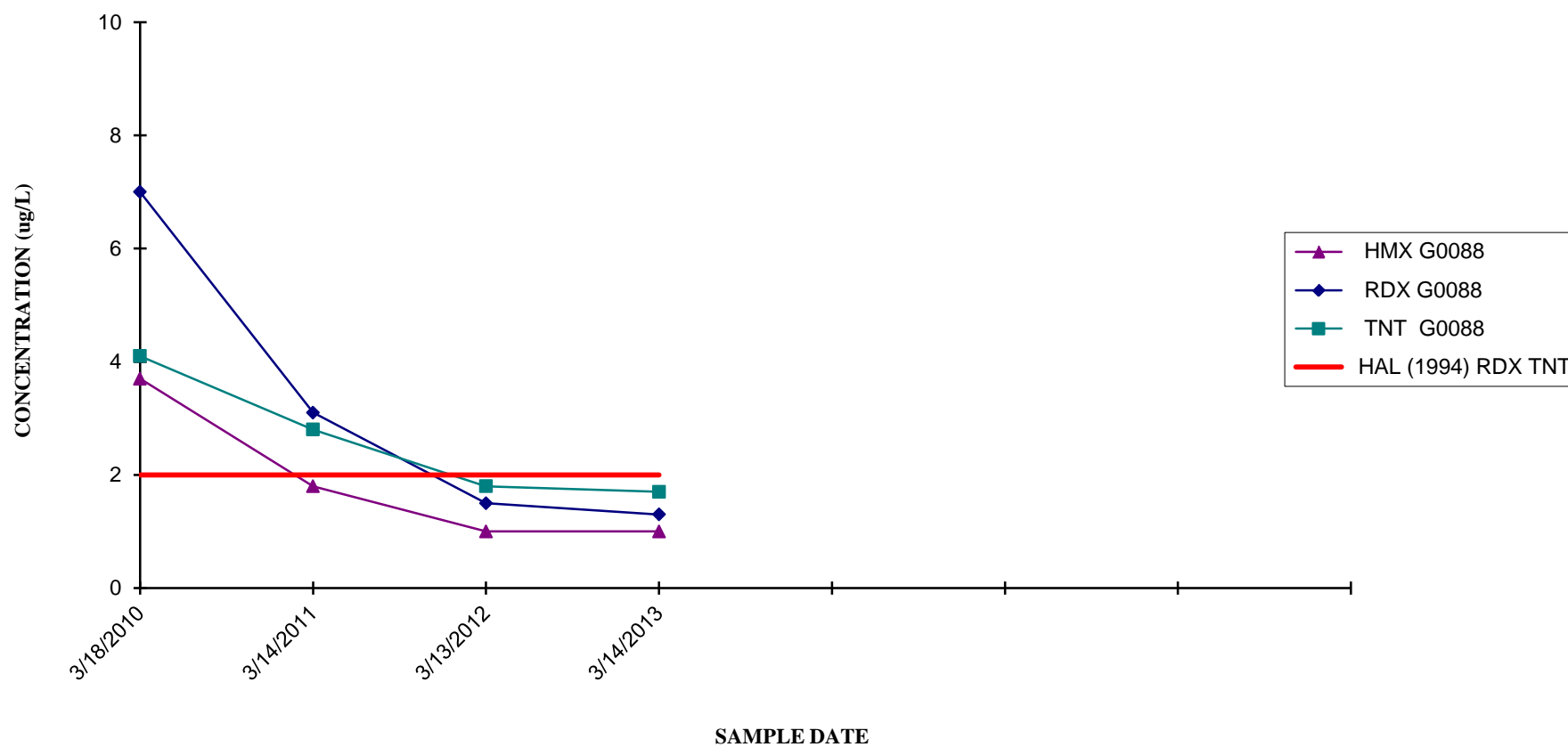
CORNHUSKER ARMY AMMUNITION PLANT WELL G0086 - HMX, RDX, AND TNT



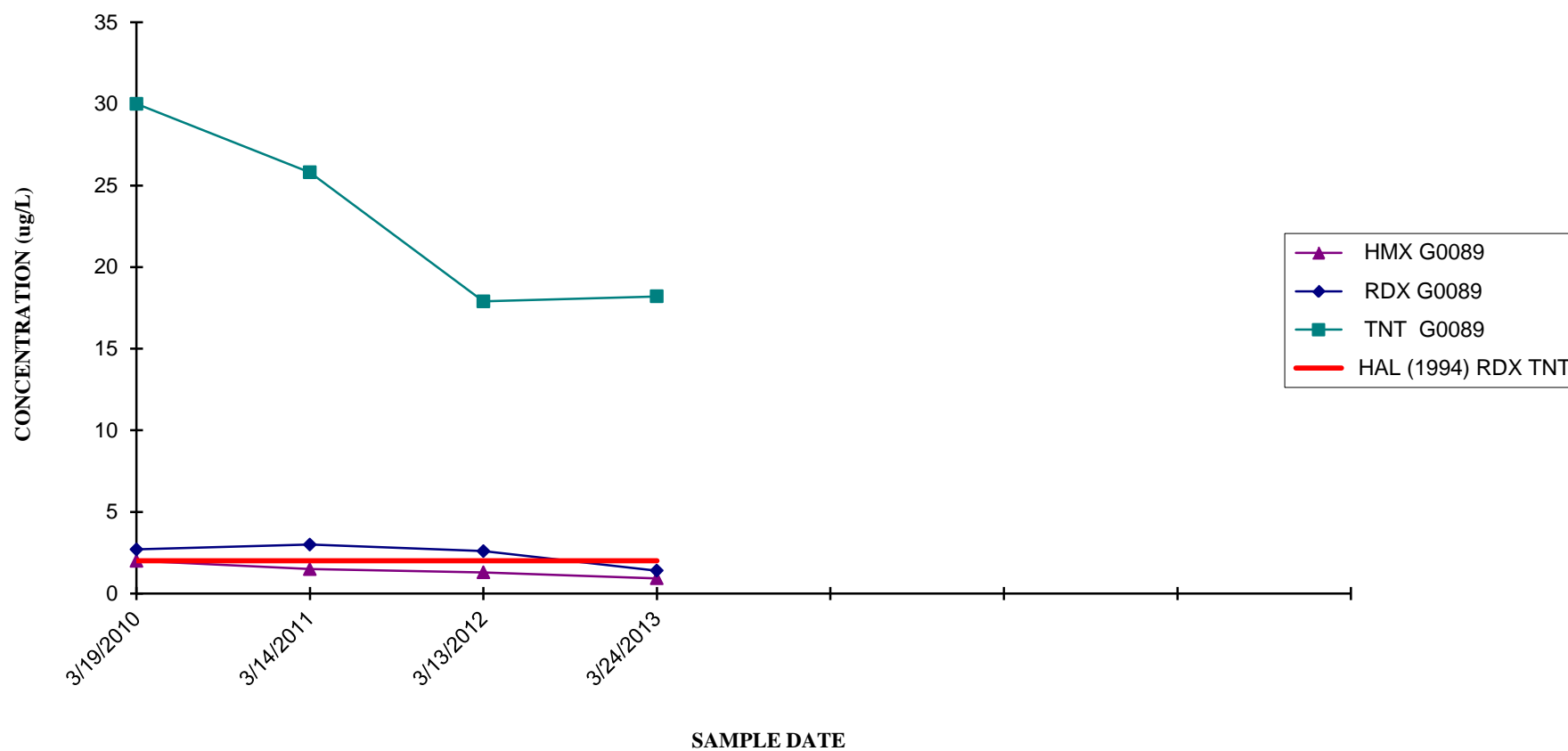
CORNHUSKER ARMY AMMUNITION PLANT WELL G0087 - HMX AND RDX



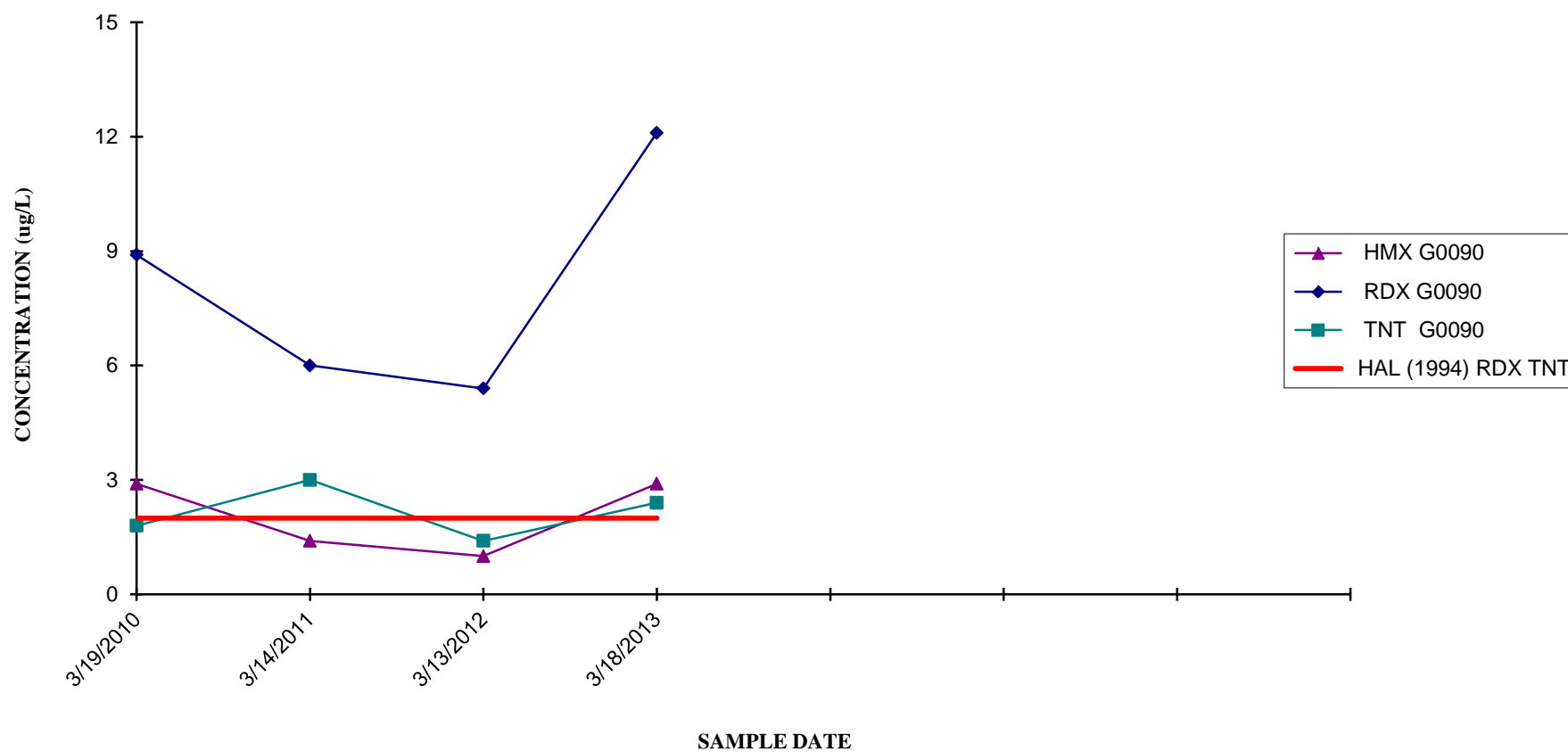
CORNHUSKER ARMY AMMUNITION PLANT WELL G0088 - HMX, RDX, AND TNT



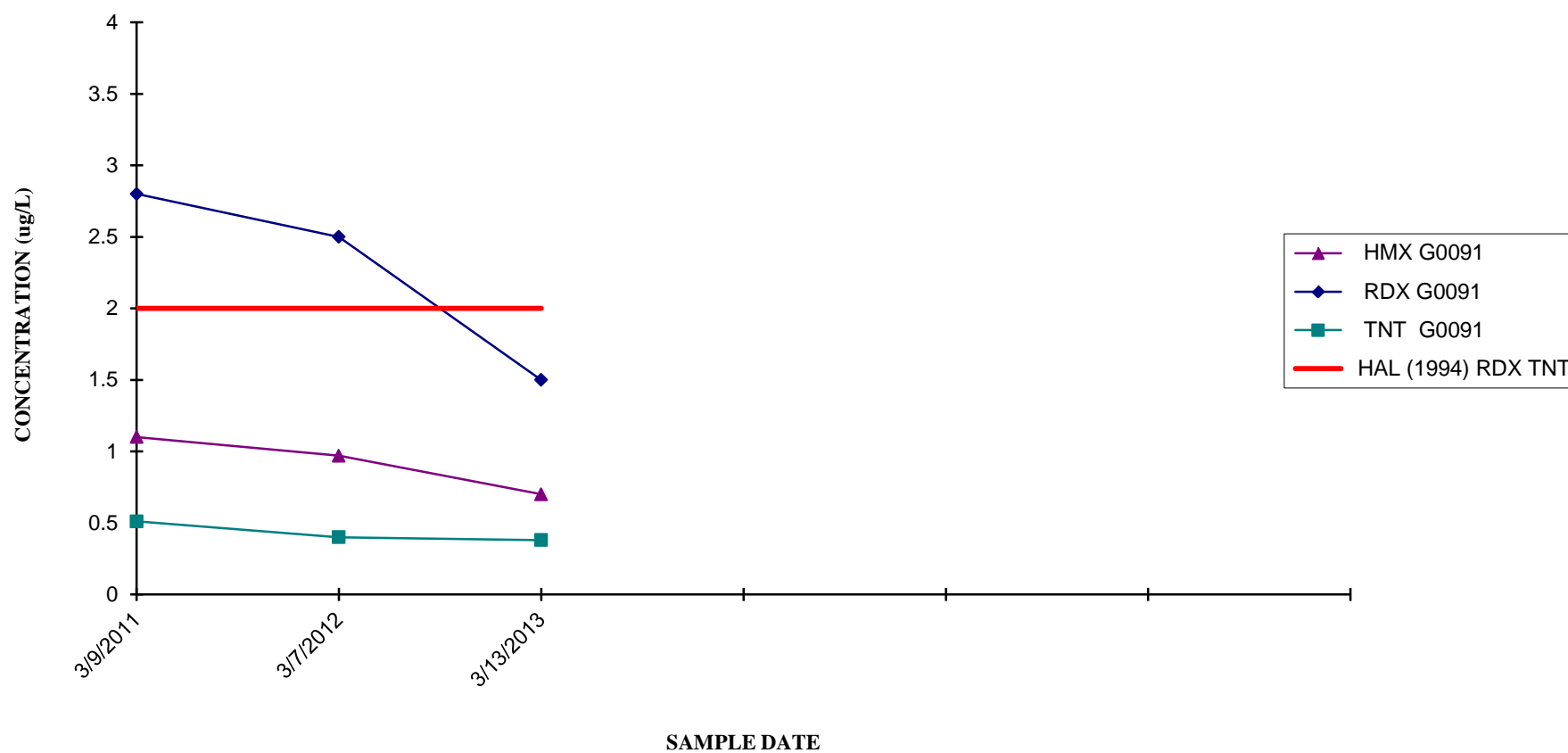
CORNHUSKER ARMY AMMUNITION PLANT WELL G0089 - HMX, RDX, AND TNT



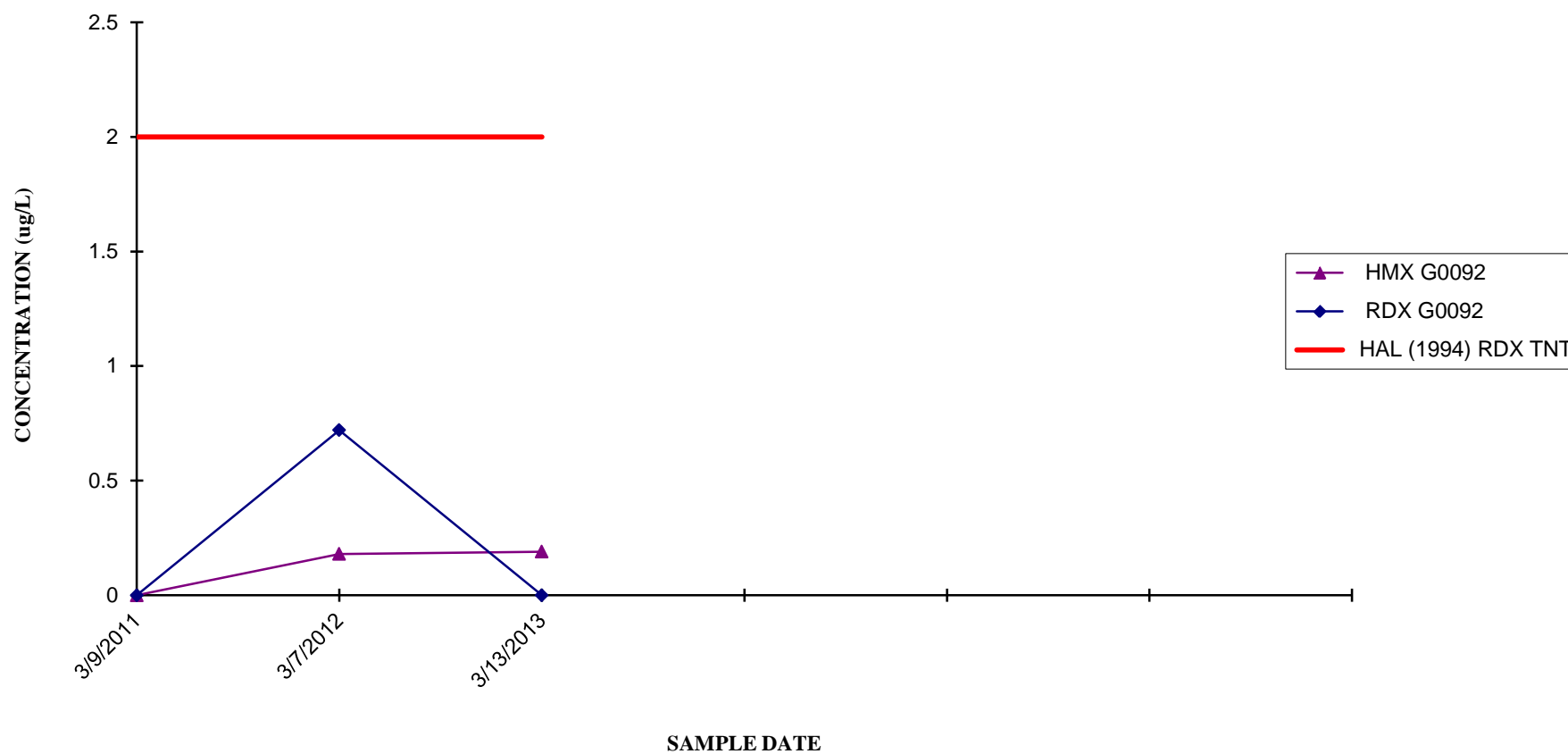
CORNHUSKER ARMY AMMUNITION PLANT WELL G0090 - HMX, RDX, AND TNT



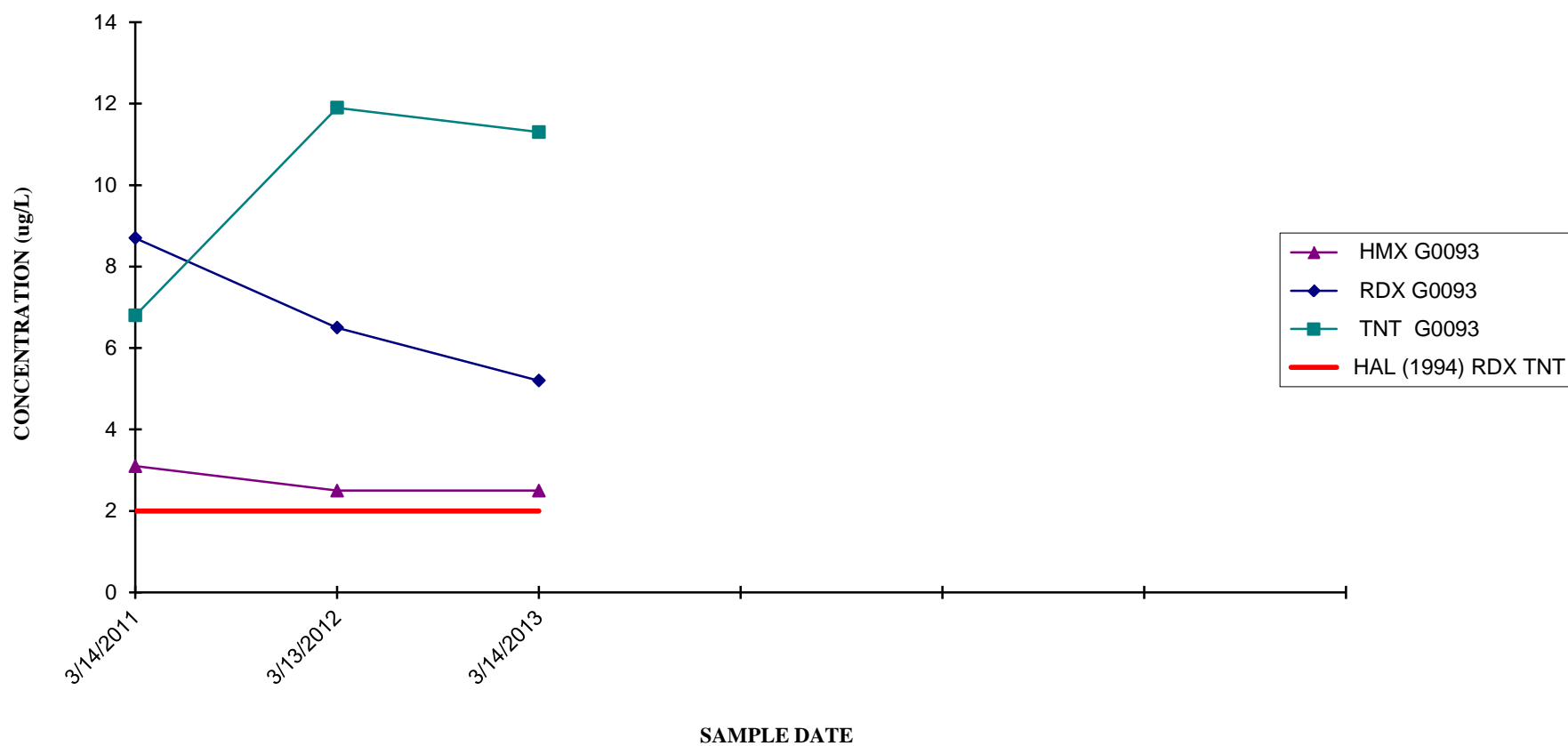
CORNHUSKER ARMY AMMUNITION PLANT WELL G0091 - HMX, RDX, AND TNT



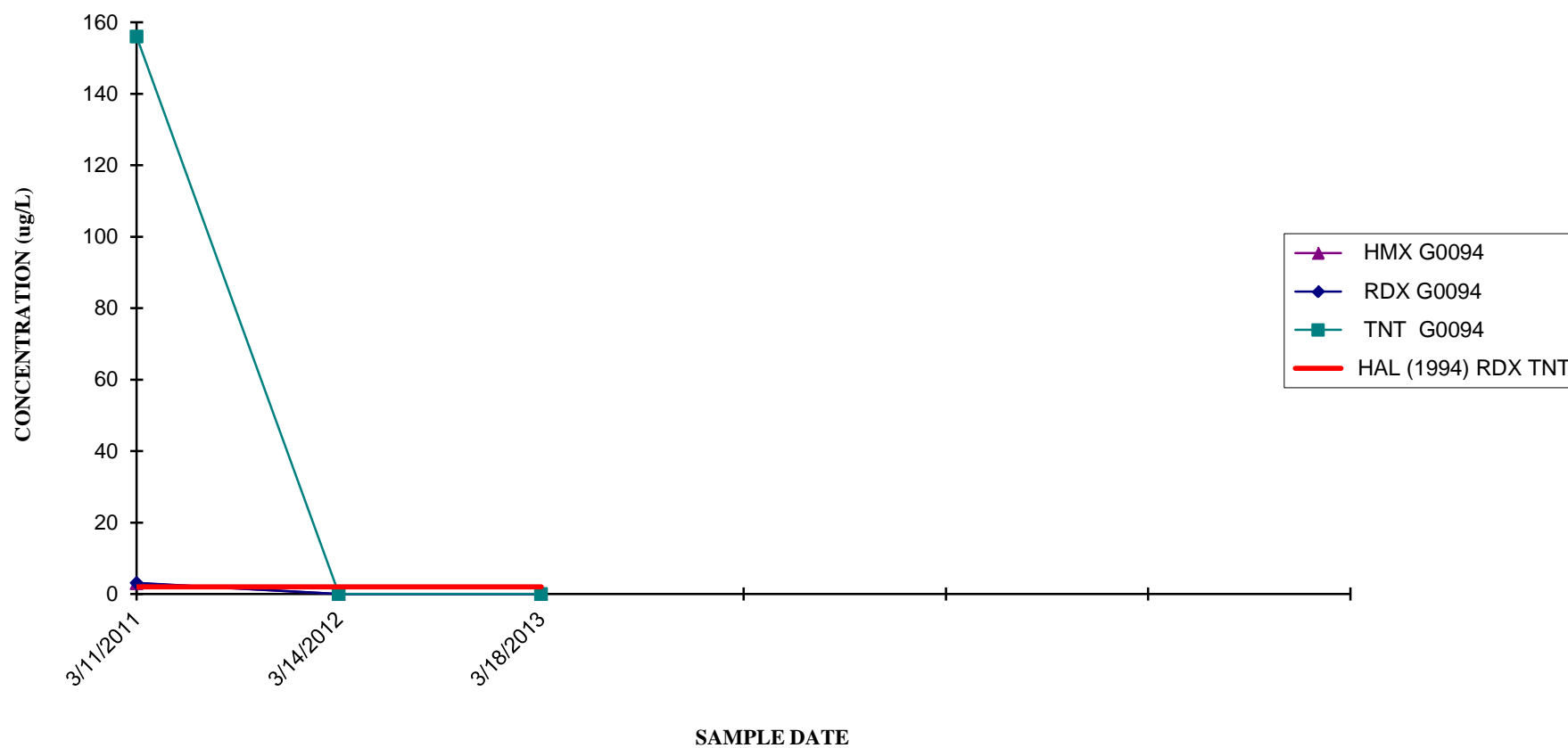
CORNHUSKER ARMY AMMUNITION PLANT WELL G0092 - HMX AND RDX



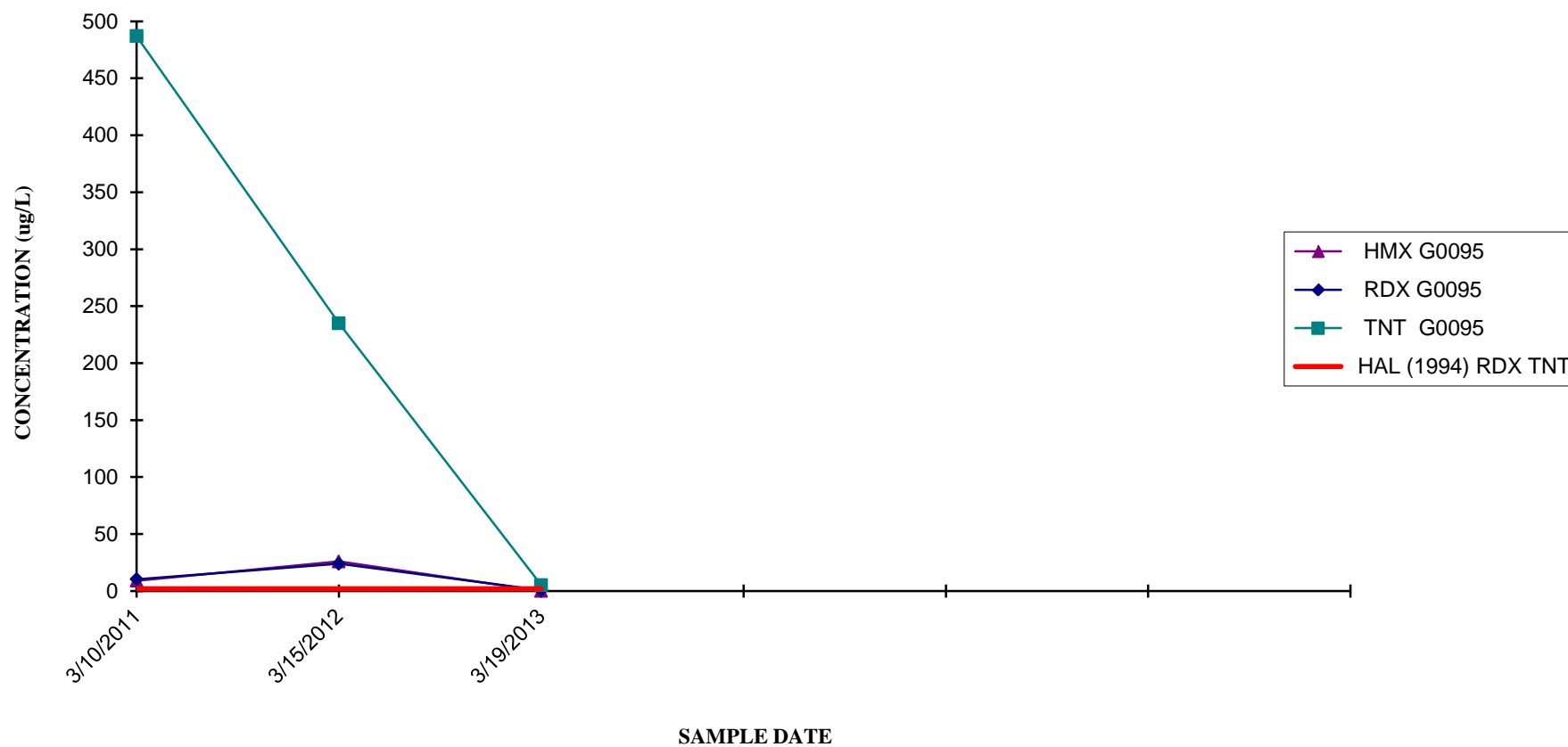
CORNHUSKER ARMY AMMUNITION PLANT WELL G0093 - HMX, RDX, AND TNT



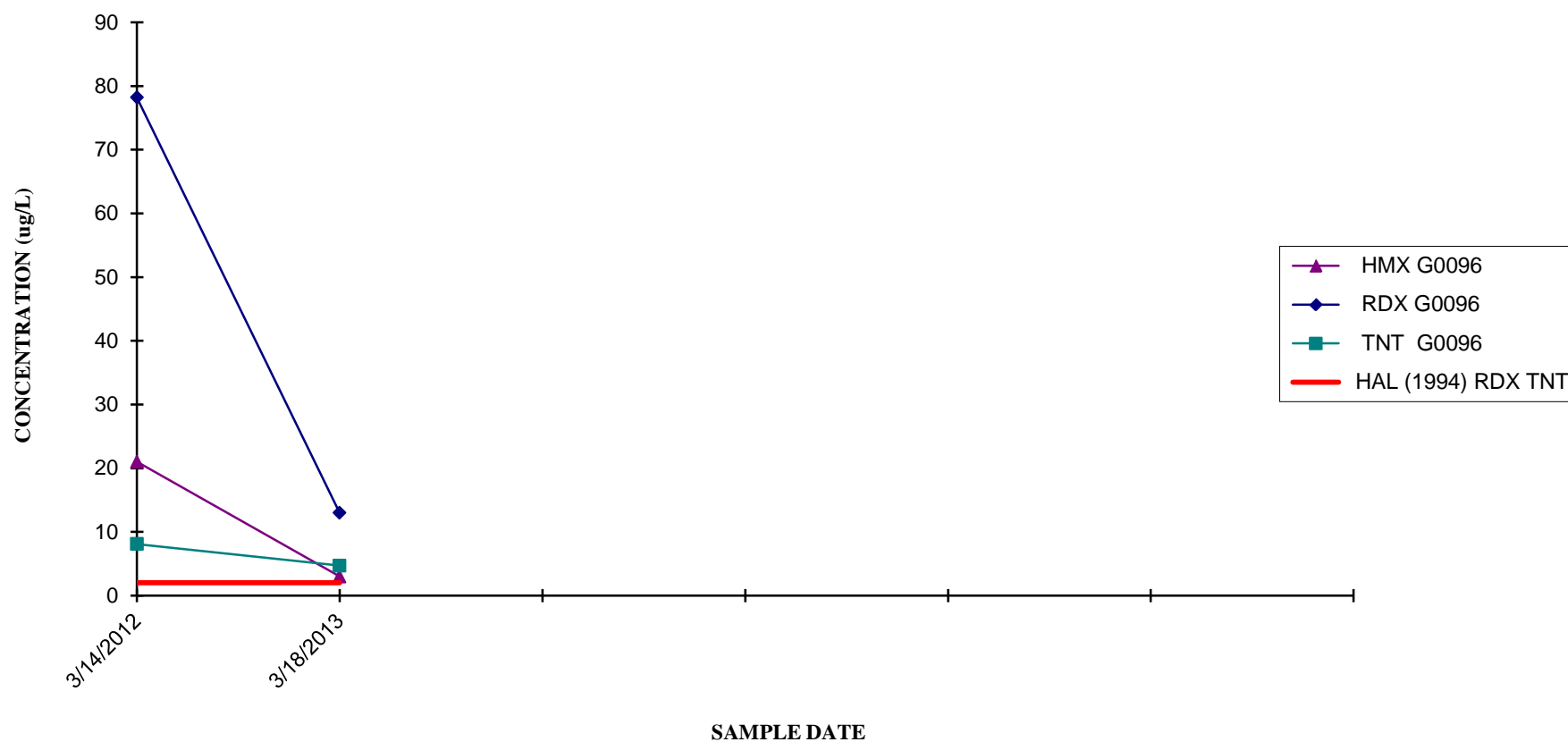
CORNHUSKER ARMY AMMUNITION PLANT WELL G0094 - HMX, RDX, AND TNT



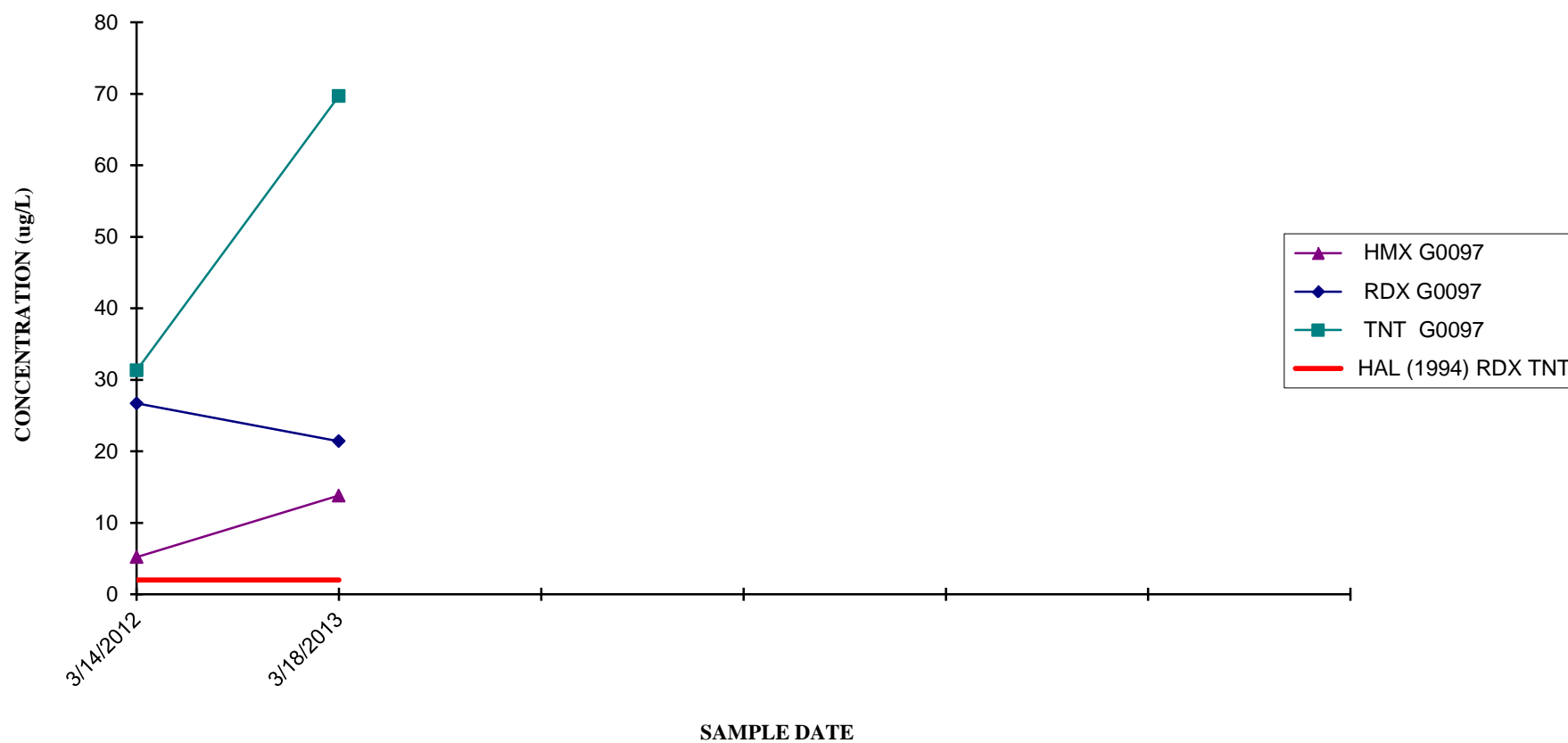
CORNHUSKER ARMY AMMUNITION PLANT WELL G0095 - HMX, RDX, AND TNT



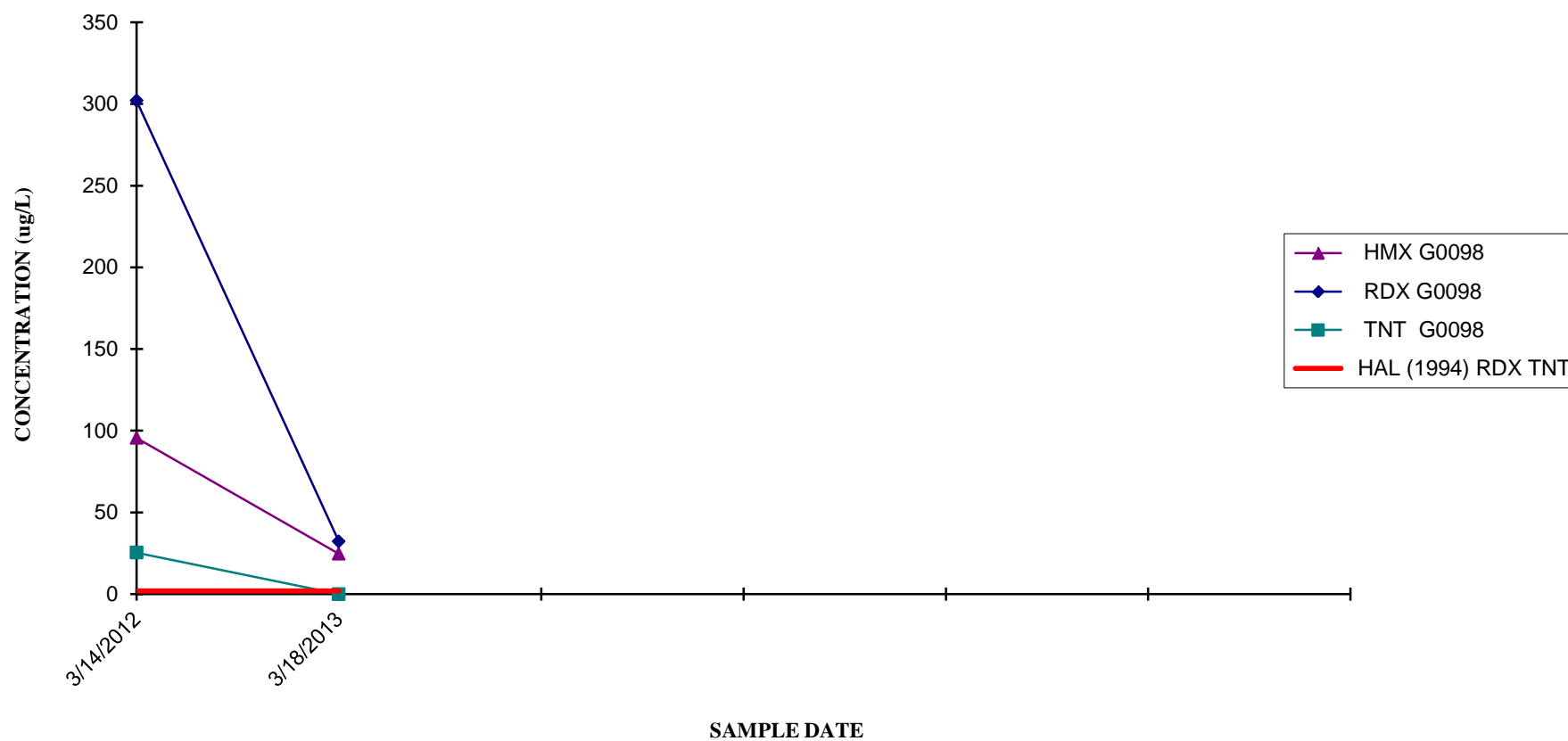
CORNHUSKER ARMY AMMUNITION PLANT WELL G0096 - HMX, RDX, AND TNT



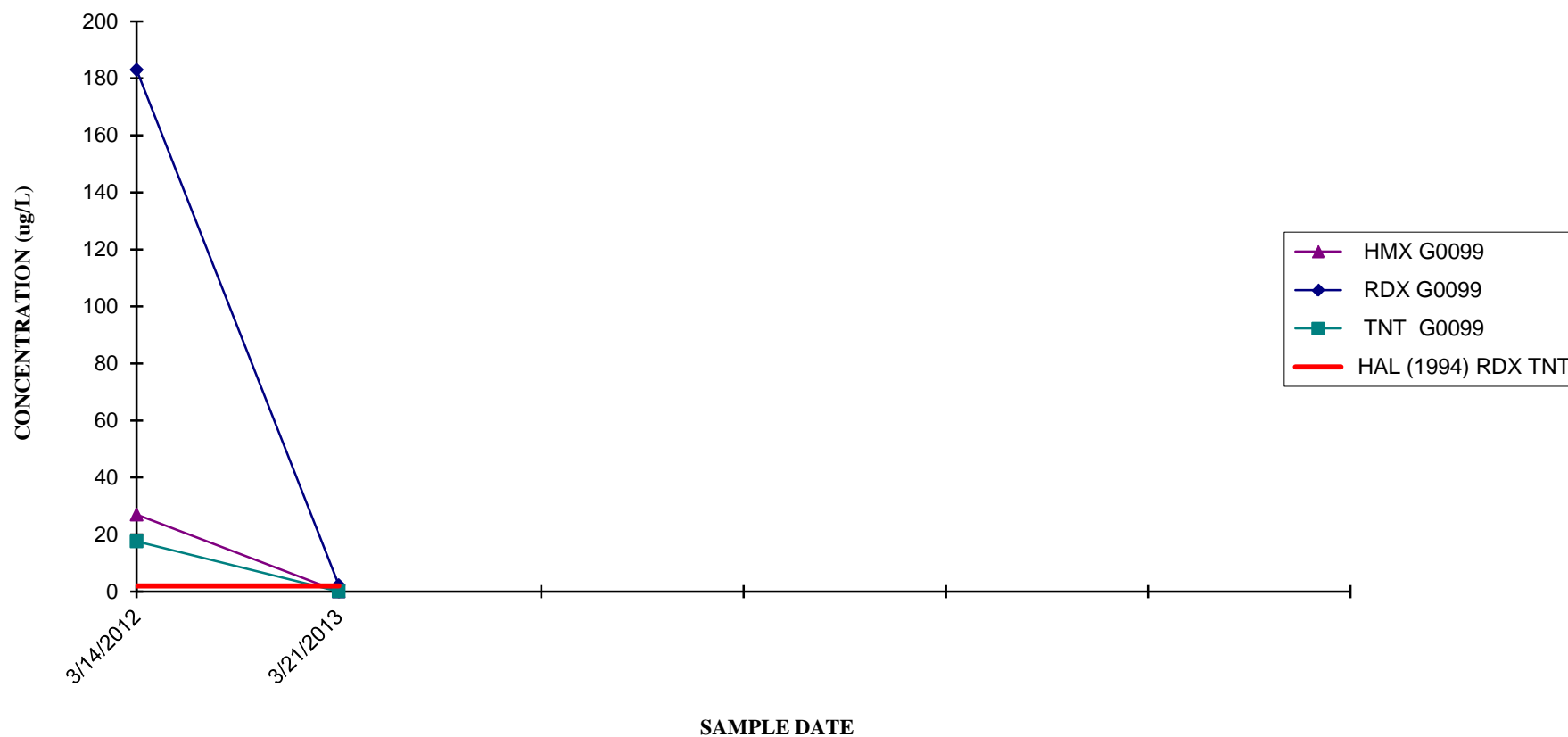
CORNHUSKER ARMY AMMUNITION PLANT WELL G0097 - HMX, RDX, AND TNT



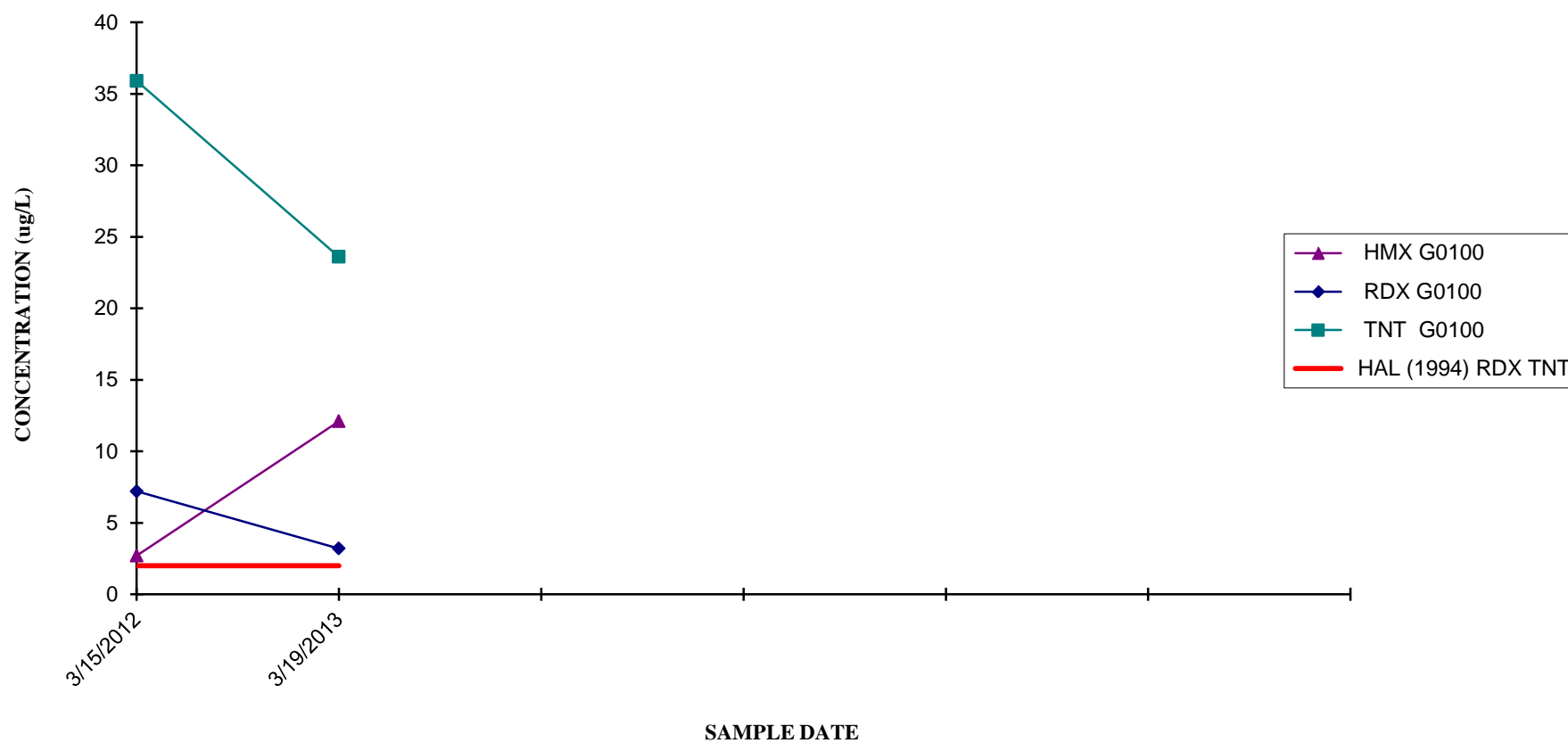
CORNHUSKER ARMY AMMUNITION PLANT WELL G0098 - HMX, RDX, AND TNT



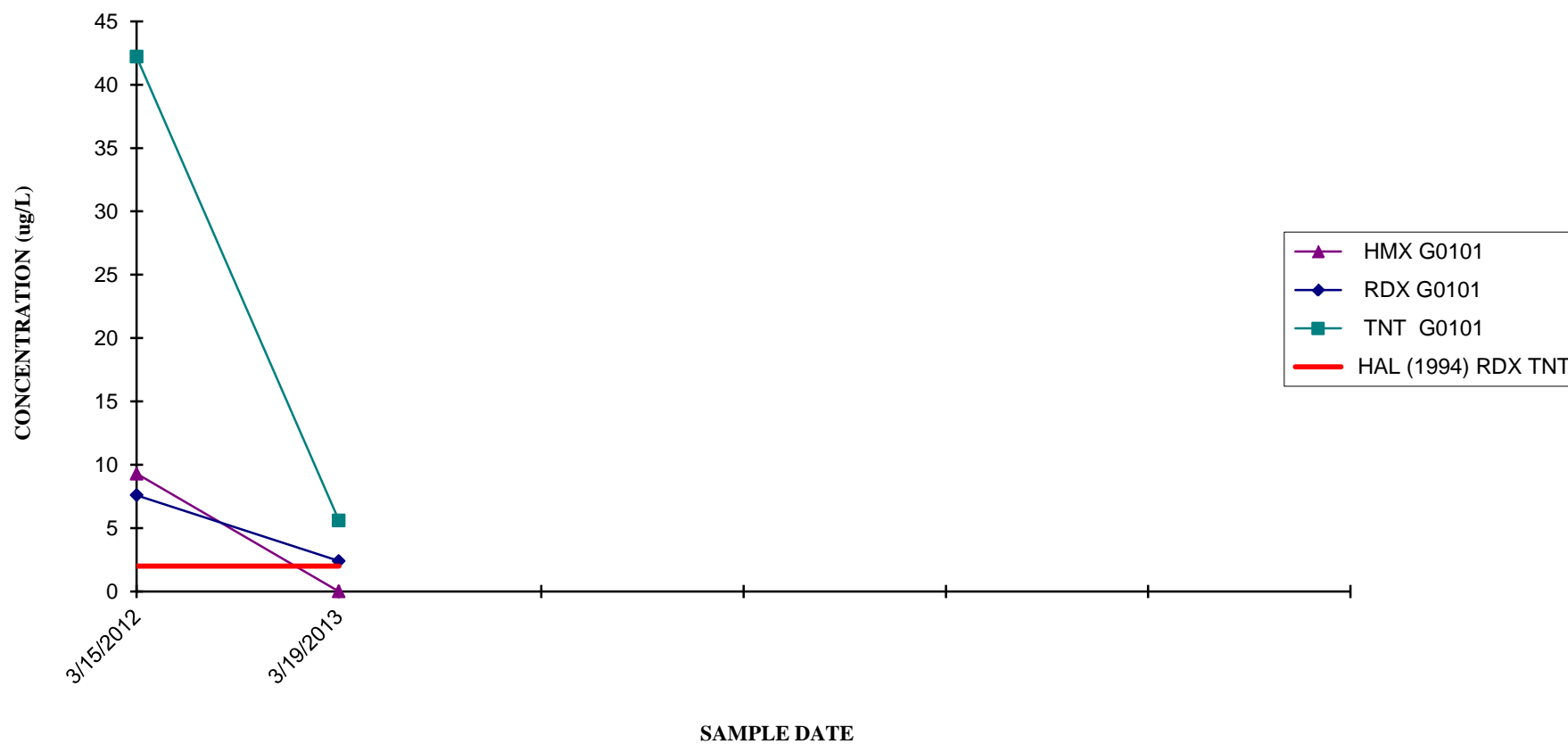
CORNHUSKER ARMY AMMUNITION PLANT WELL G0099 - HMX, RDX, AND TNT



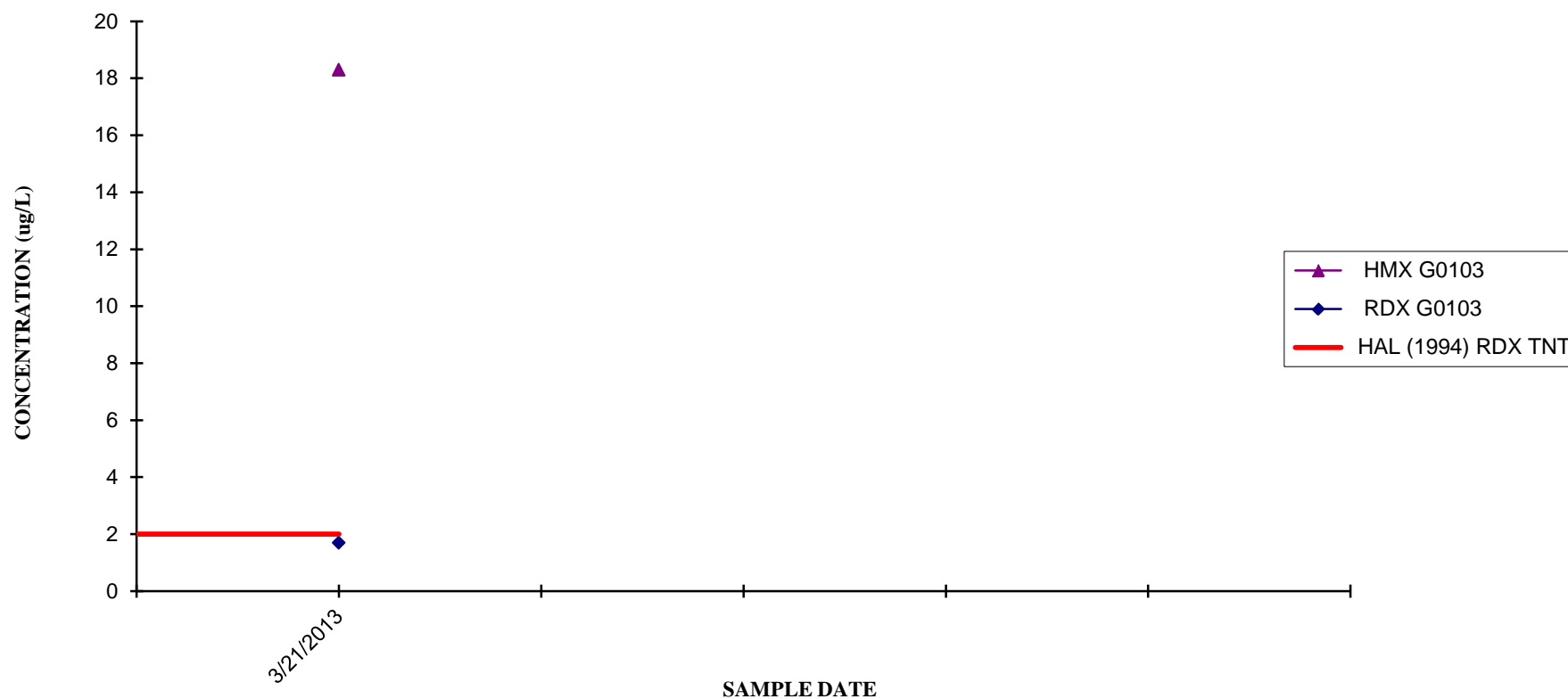
CORNHUSKER ARMY AMMUNITION PLANT WELL G0100 - HMX, RDX, AND TNT



CORNHUSKER ARMY AMMUNITION PLANT WELL G0101 - HMX, RDX, AND TNT

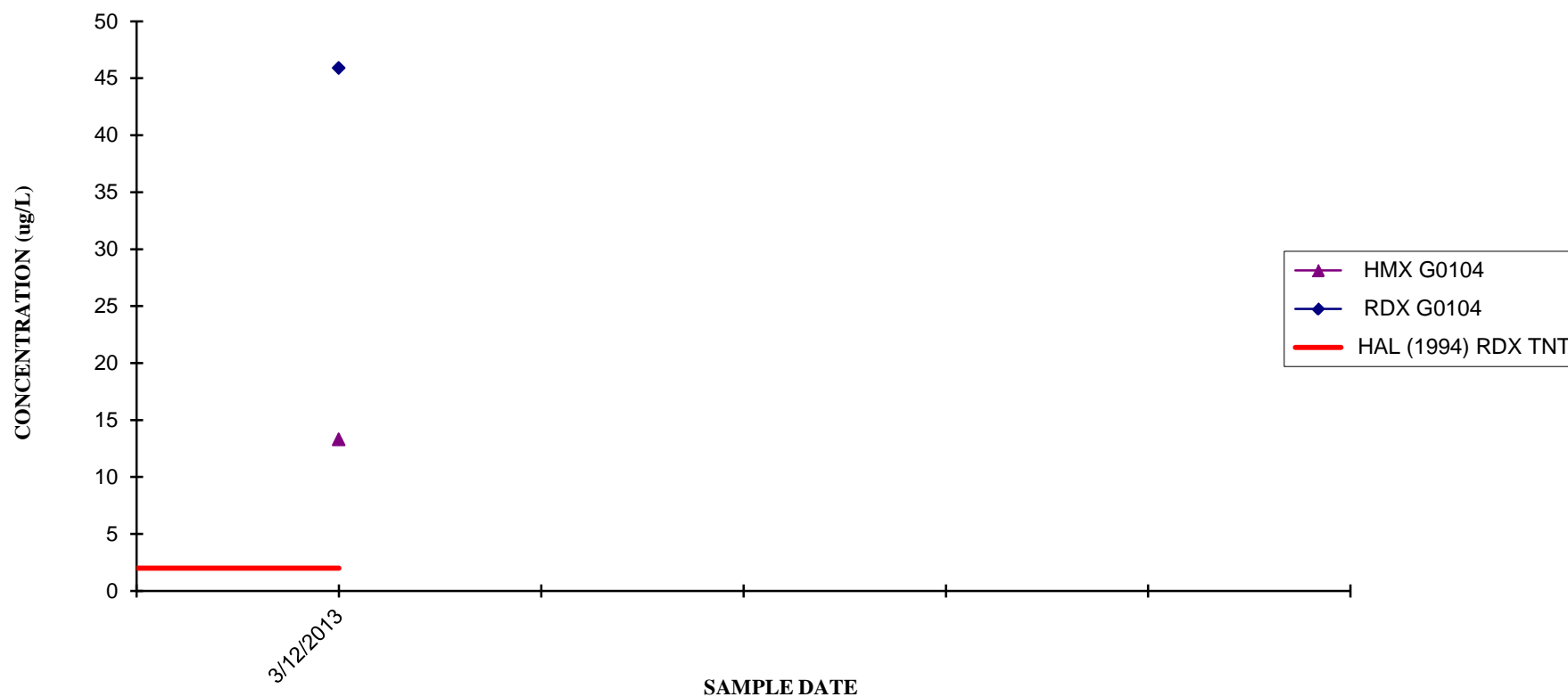


CORNHUSKER ARMY AMMUNITION PLANT WELL G0103* - HMX AND RDX



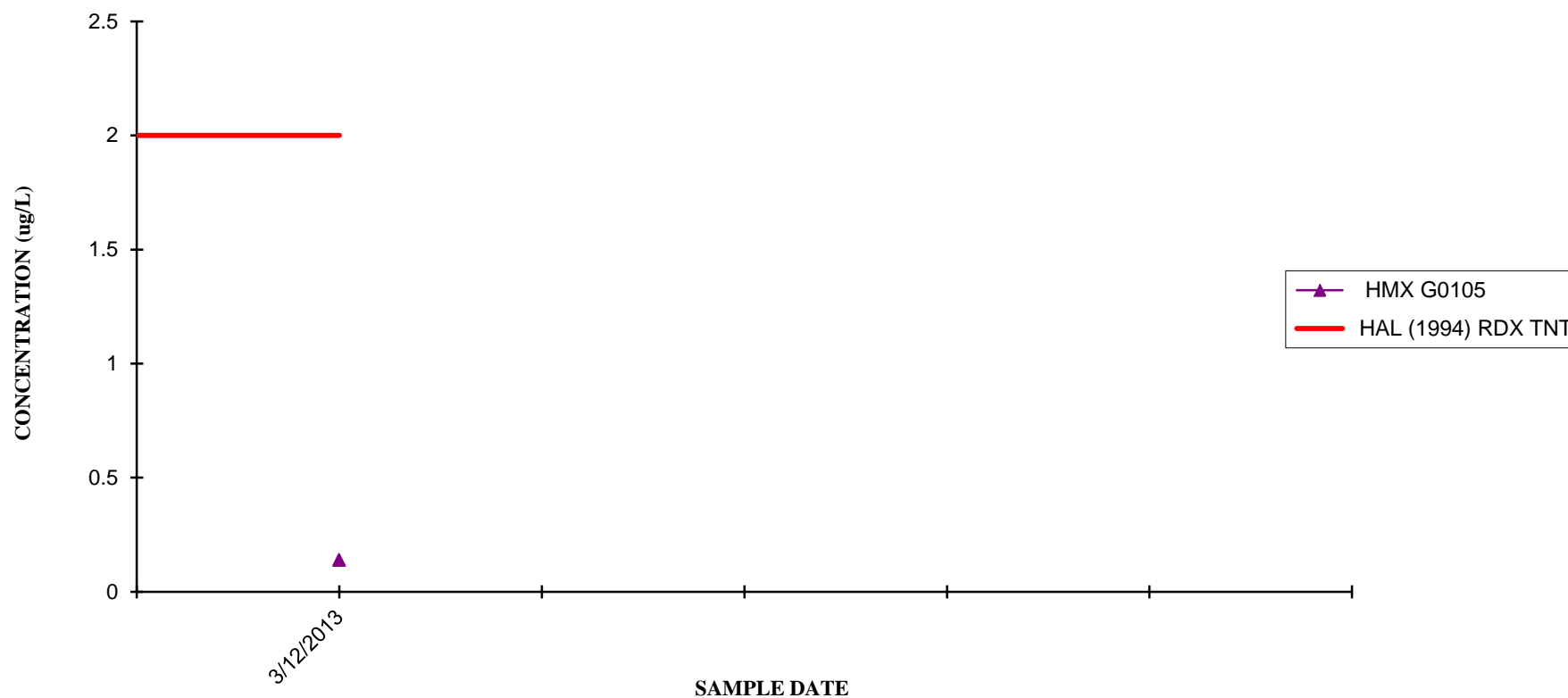
*Well G0103 was installed in April 2012 and first sampled in 2013.

CORNHUSKER ARMY AMMUNITION PLANT WELL G0104* - HMX AND RDX



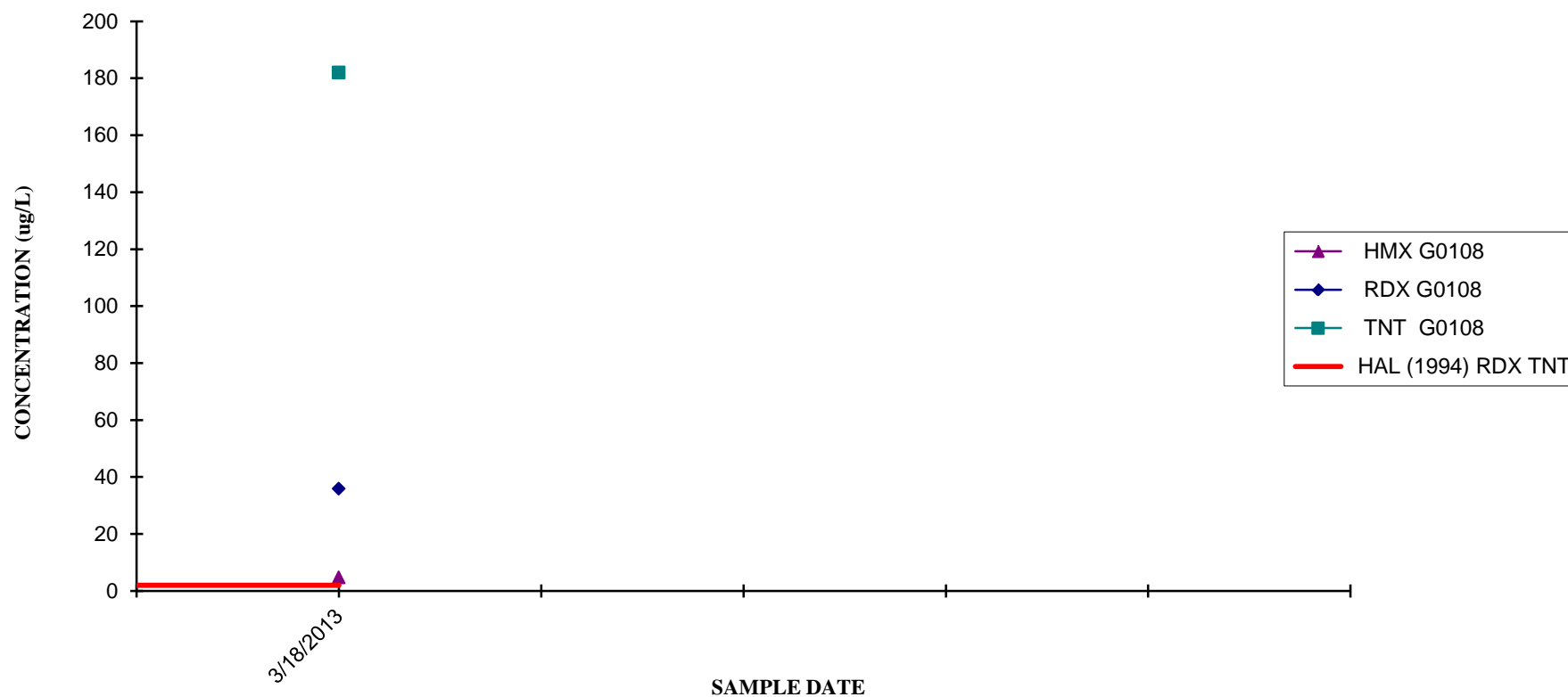
*Well G0104 was installed in April 2012 and first sampled in 2013.

CORNHUSKER ARMY AMMUNITION PLANT WELL G0105* - HMX



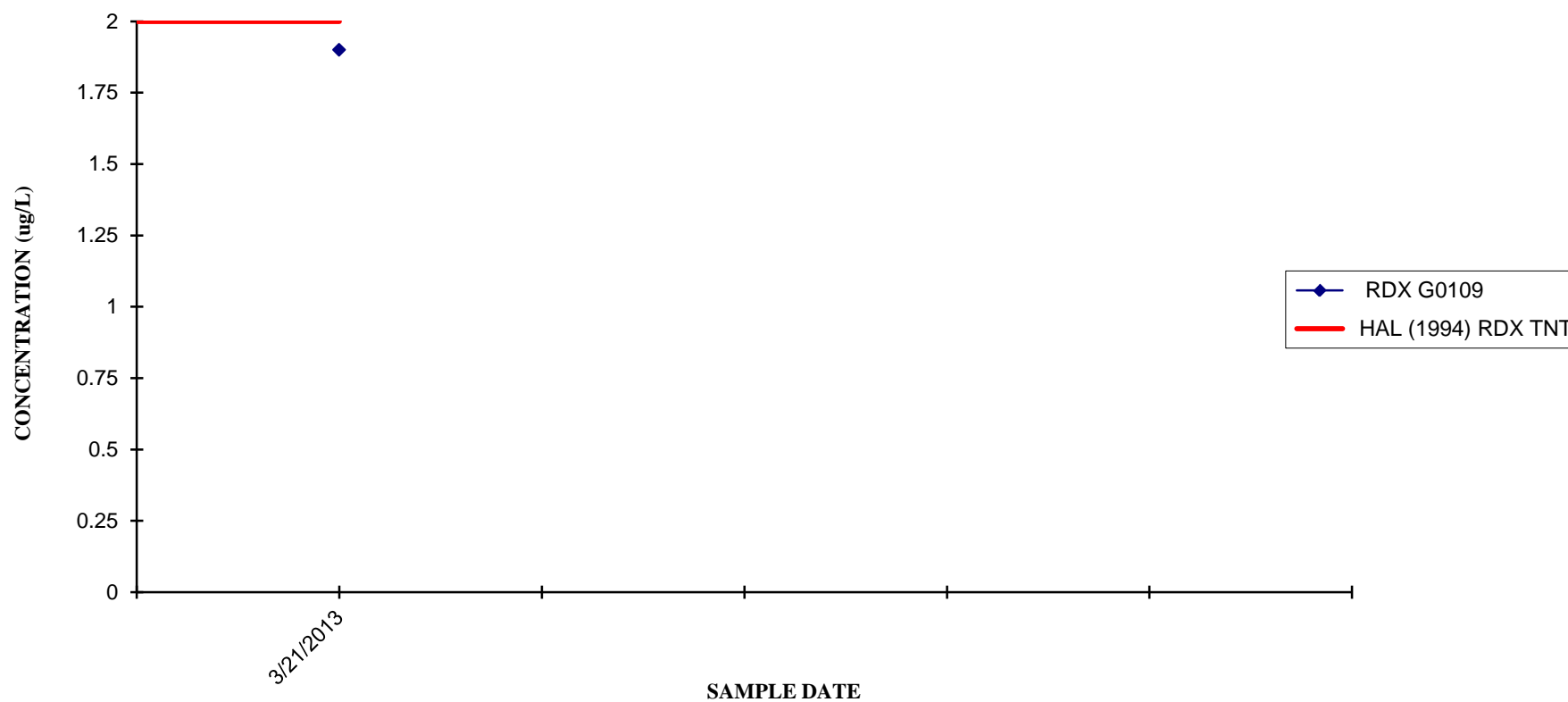
*Well G0105 was installed in April 2012 and first sampled in 2013.

CORNHUSKER ARMY AMMUNITION PLANT WELL G0108* - HMX, RDX, AND TNT



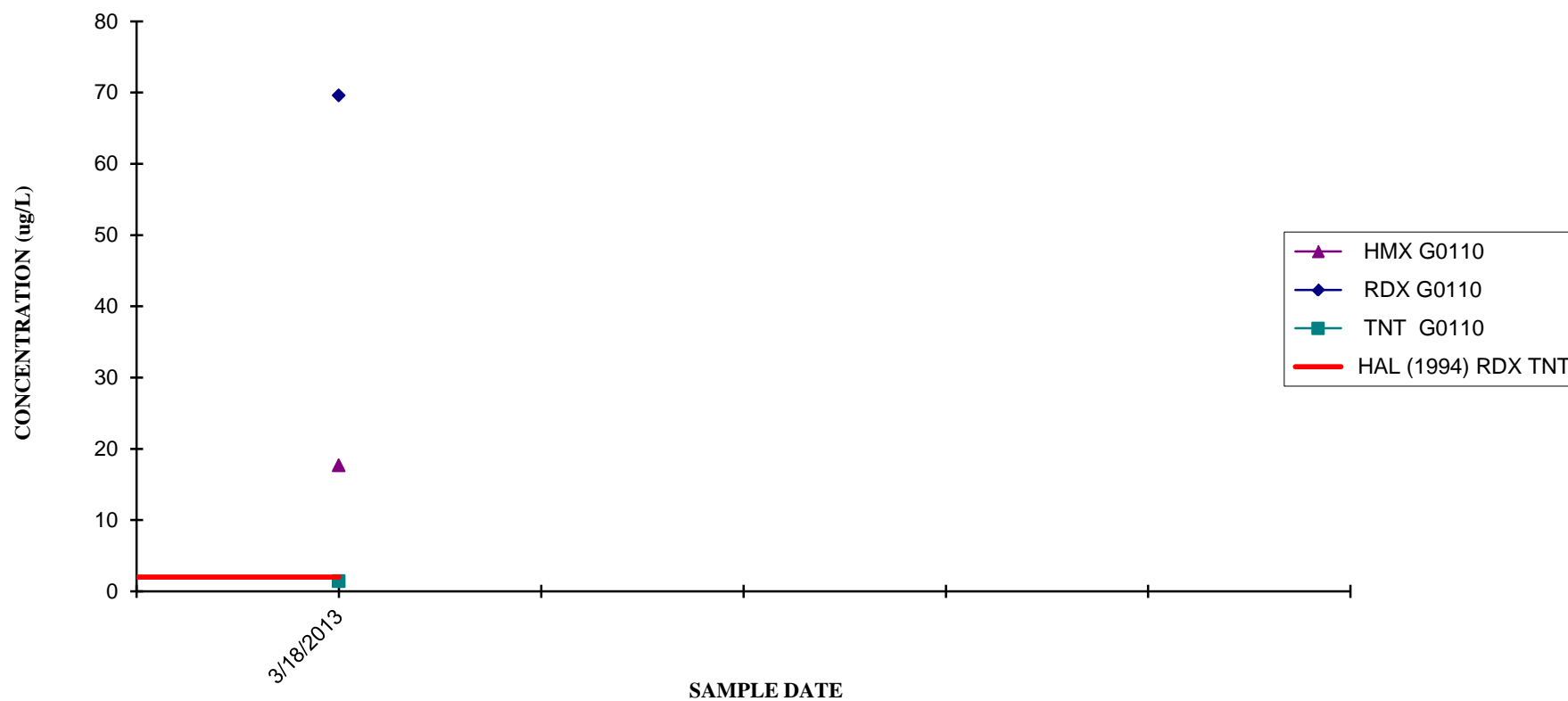
*Well G0108 was installed in October 2012 and first sampled in 2013.

CORNHUSKER ARMY AMMUNITION PLANT WELL G0109* - RDX



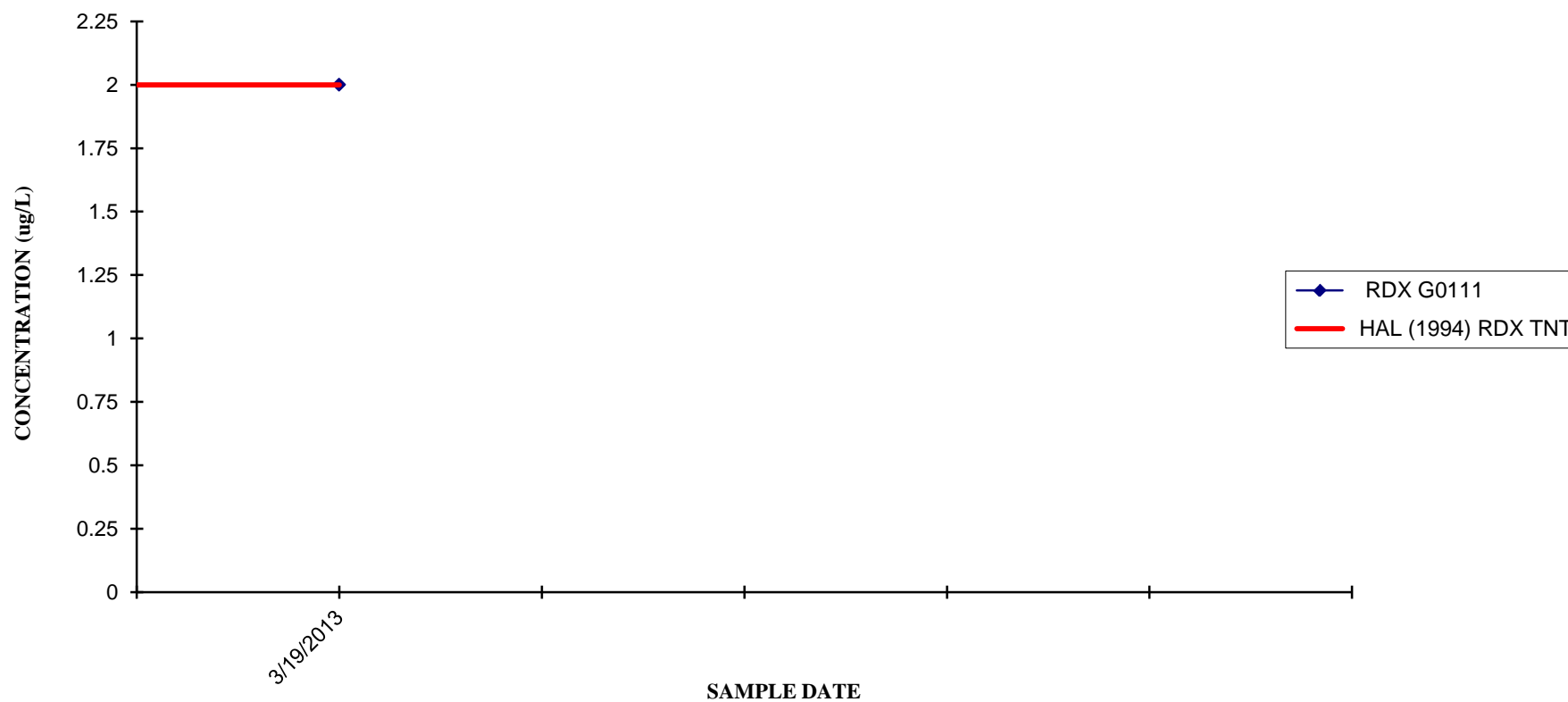
*Well G0109 was installed in October 2012 and first sampled in 2013.

CORNHUSKER ARMY AMMUNITION PLANT WELL G0110* - HMX, RDX, AND TNT



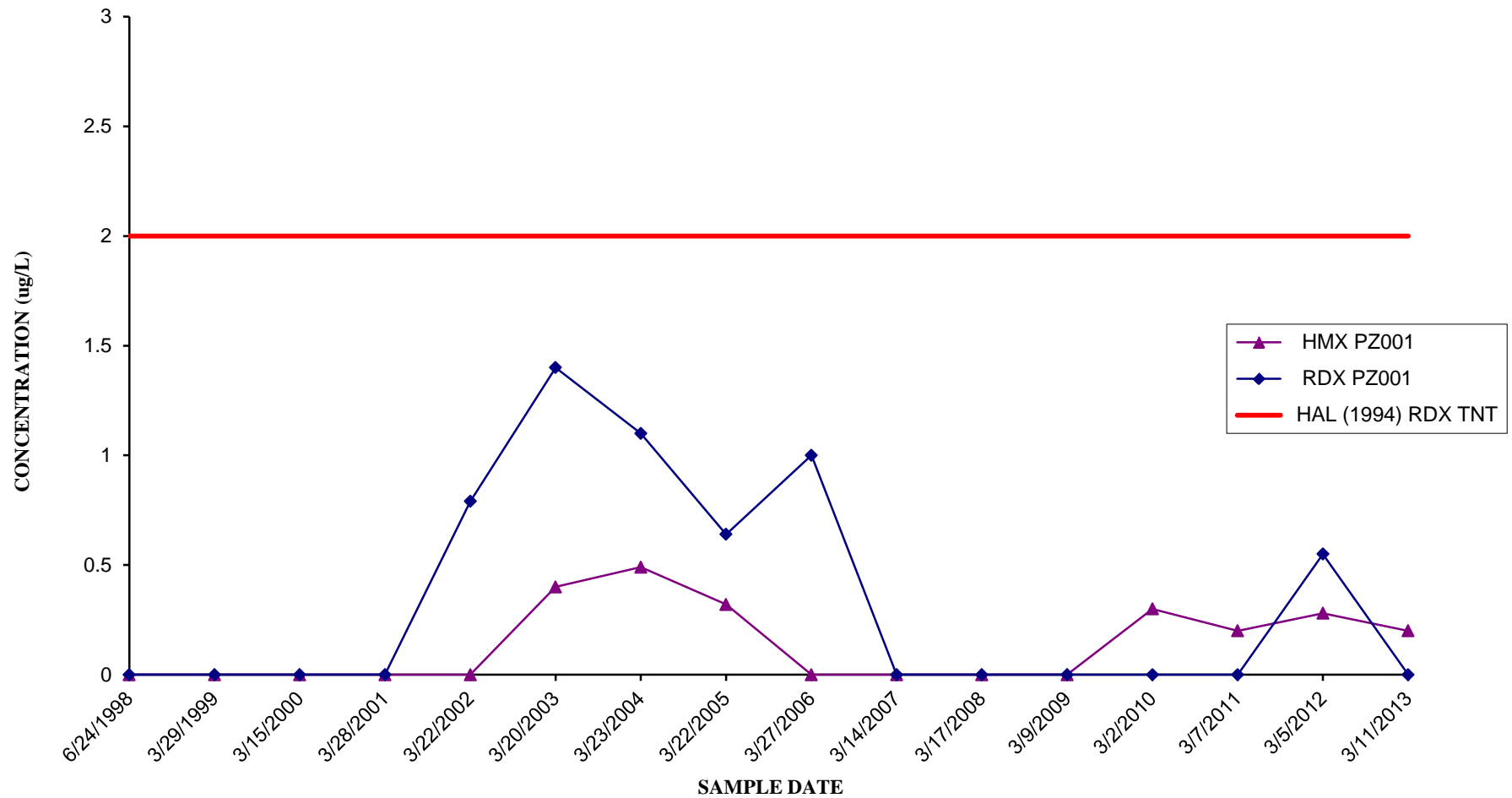
*Well G0110 was installed in October 2012 and first sampled in 2013.

CORNHUSKER ARMY AMMUNITION PLANT WELL G0111* - RDX

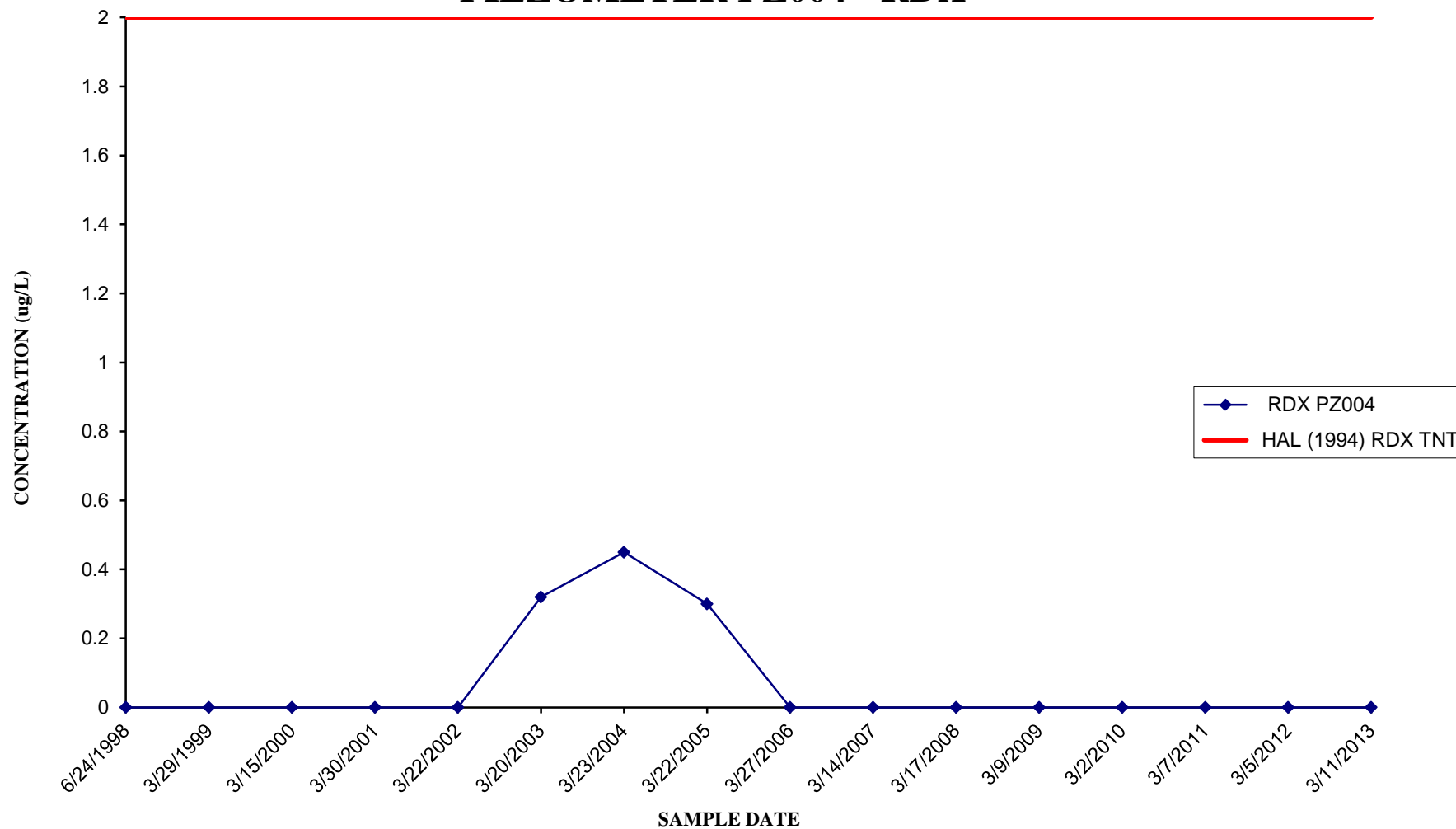


*Well G0111 was installed in October 2012 and first sampled in 2013.

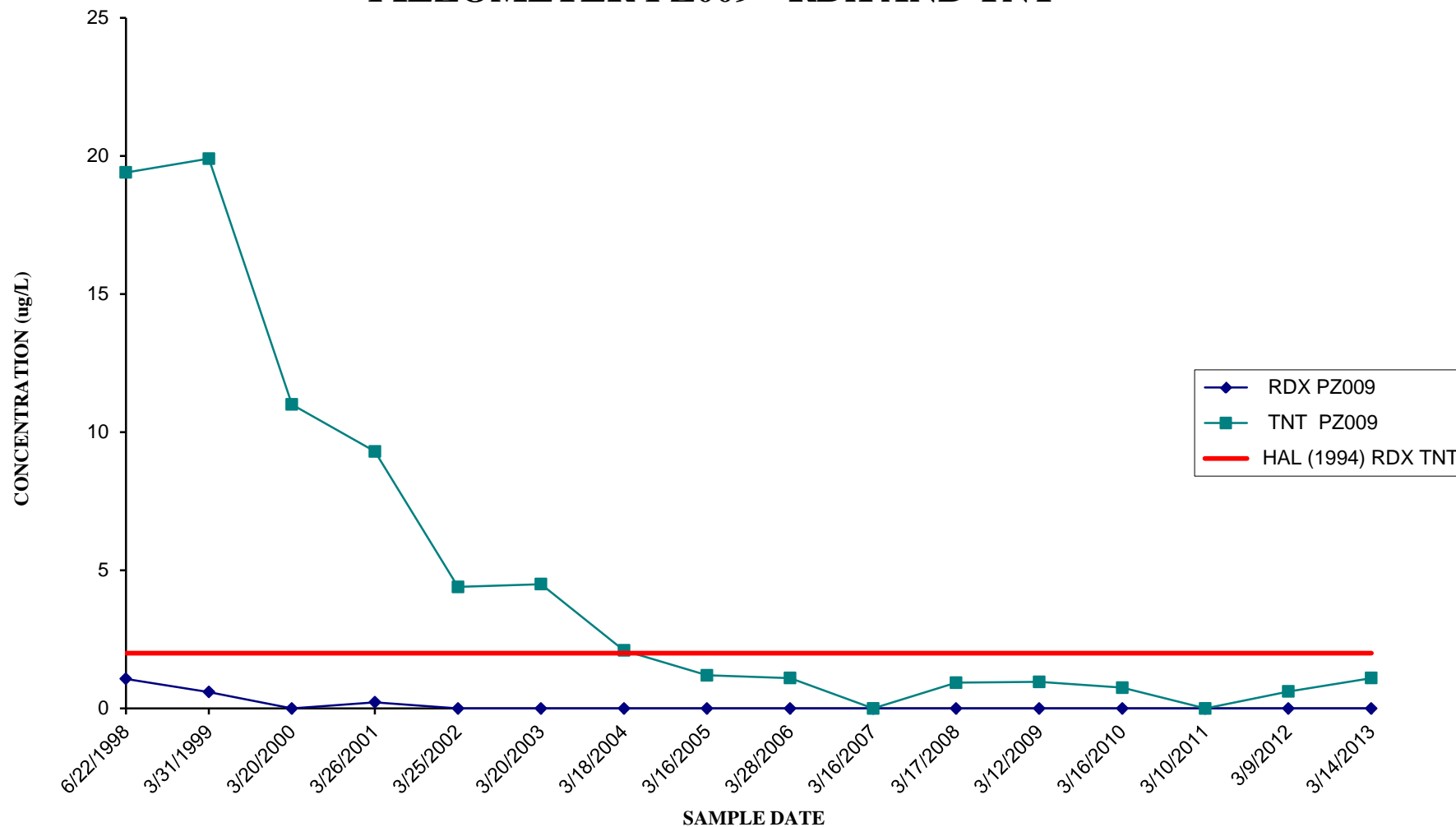
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ001 - HMX AND RDX



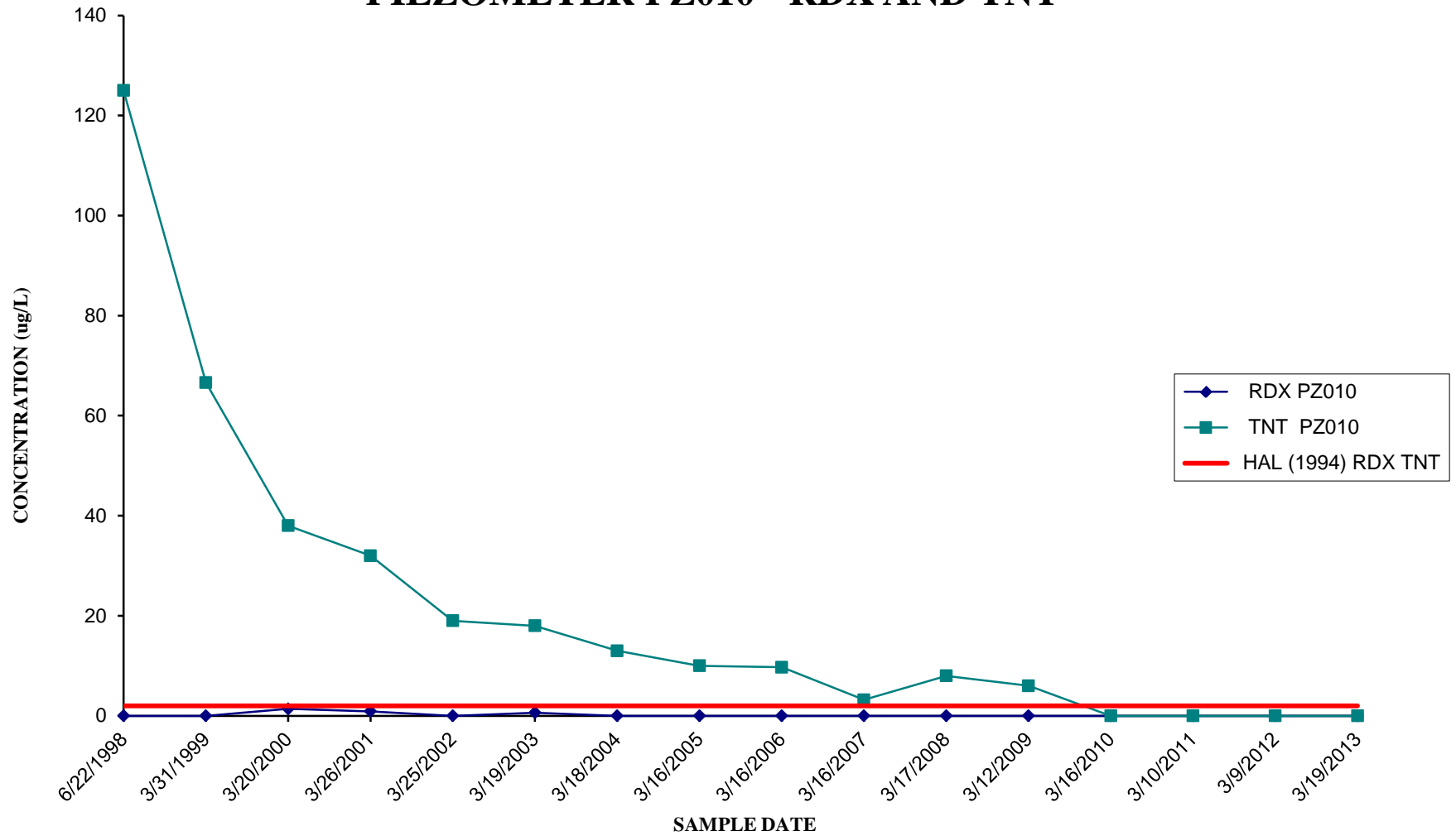
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ004 - RDX



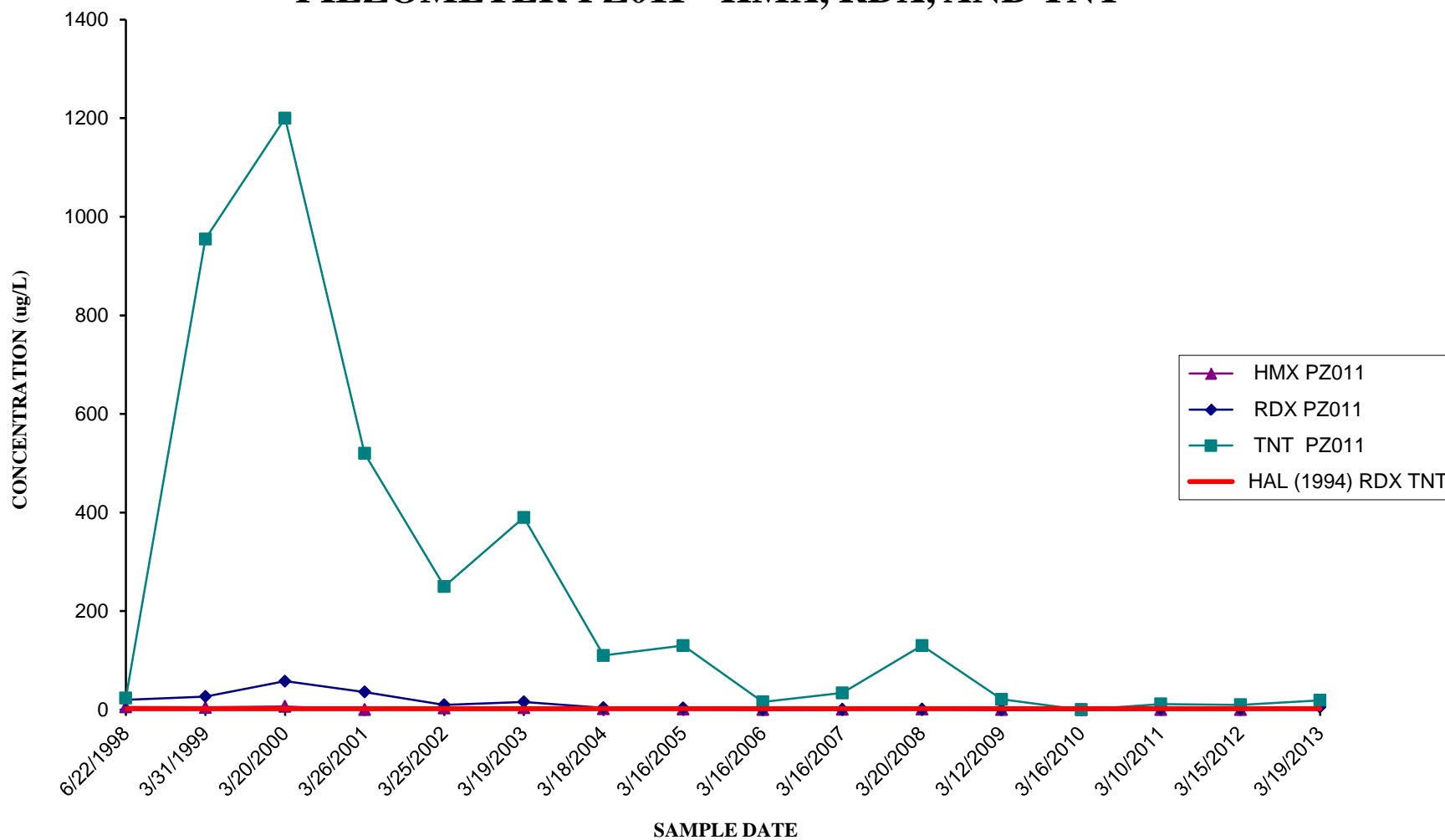
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ009 - RDX AND TNT



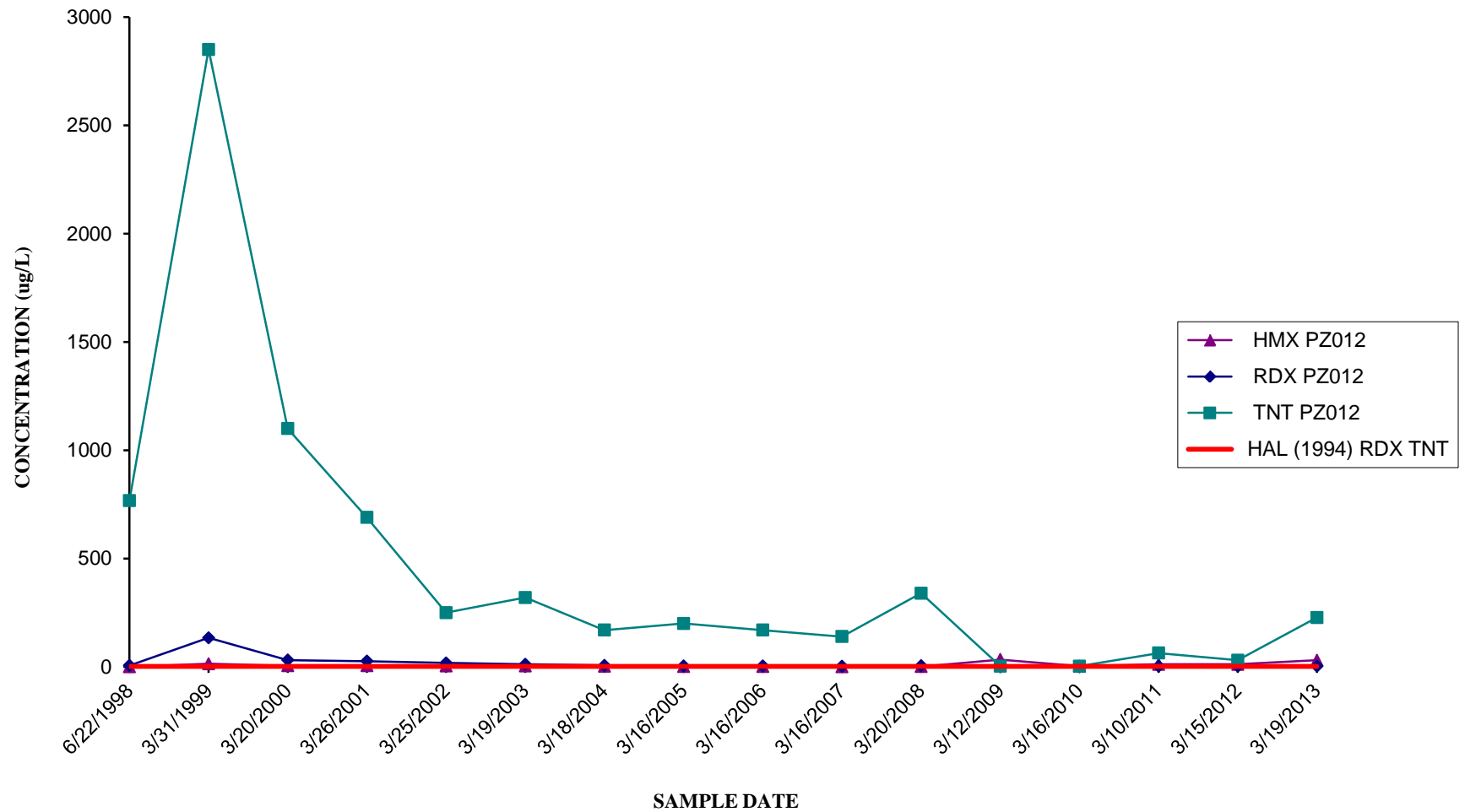
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ010 - RDX AND TNT



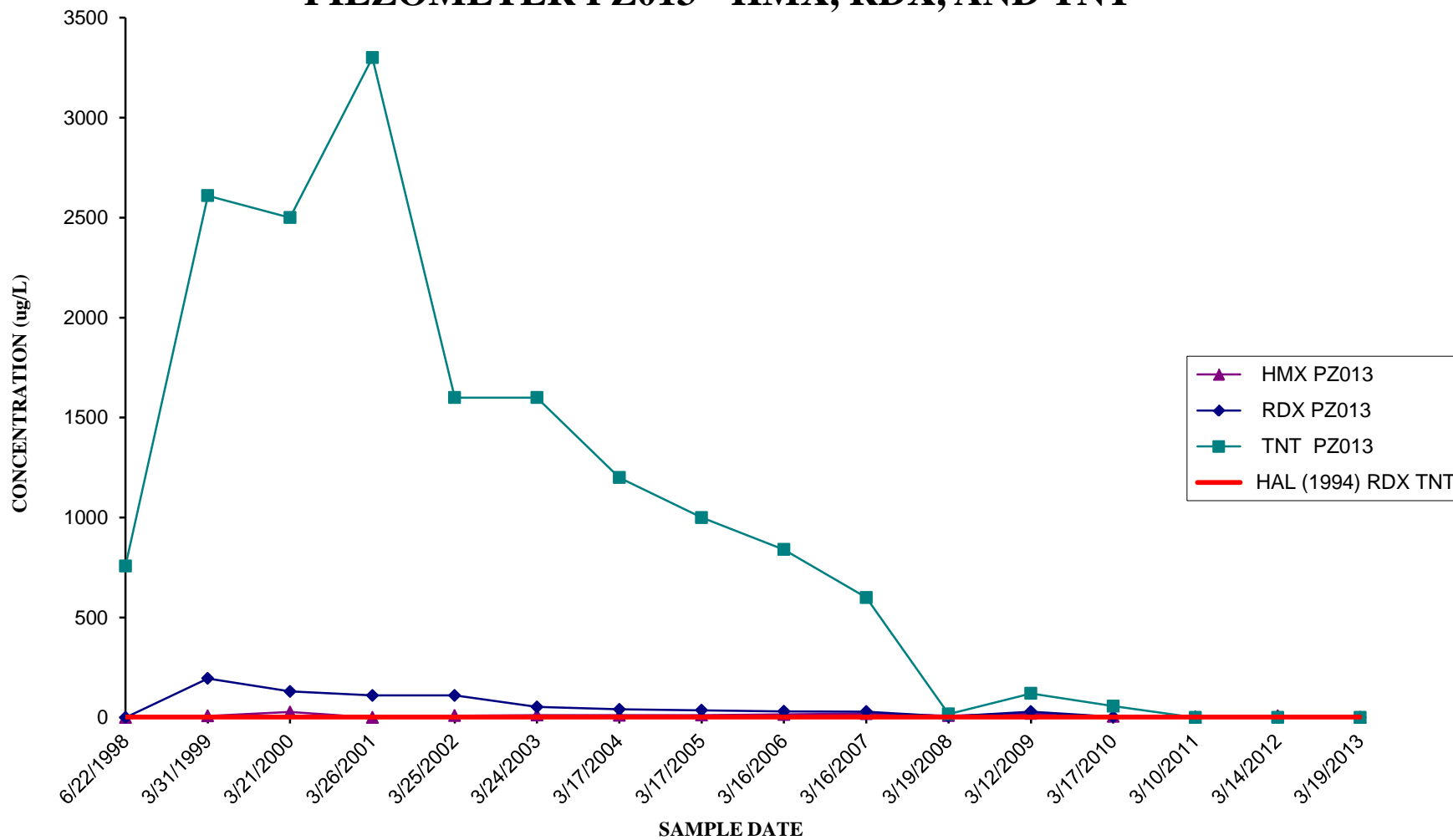
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ011 - HMX, RDX, AND TNT



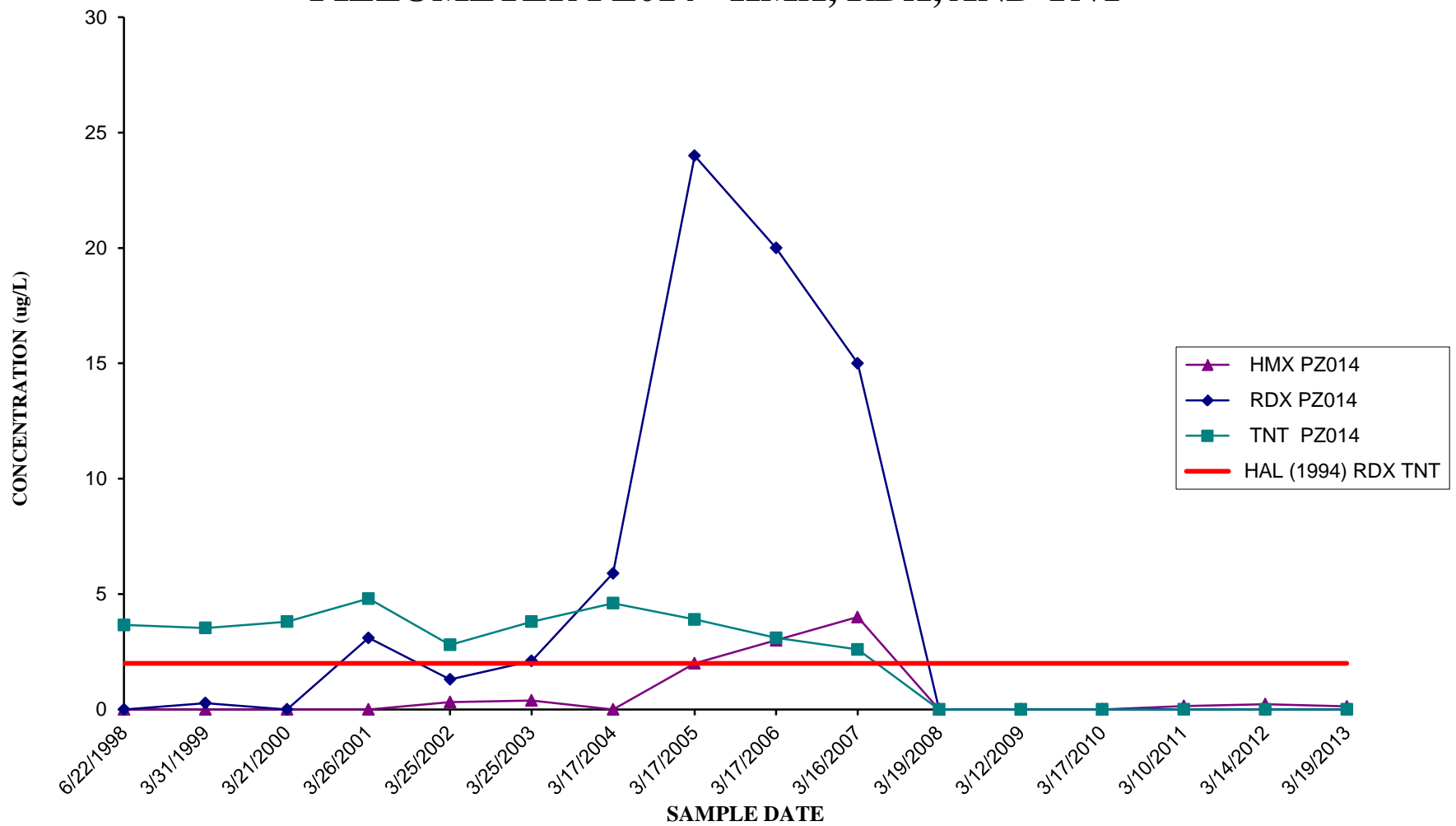
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ012 - HMX, RDX, AND TNT



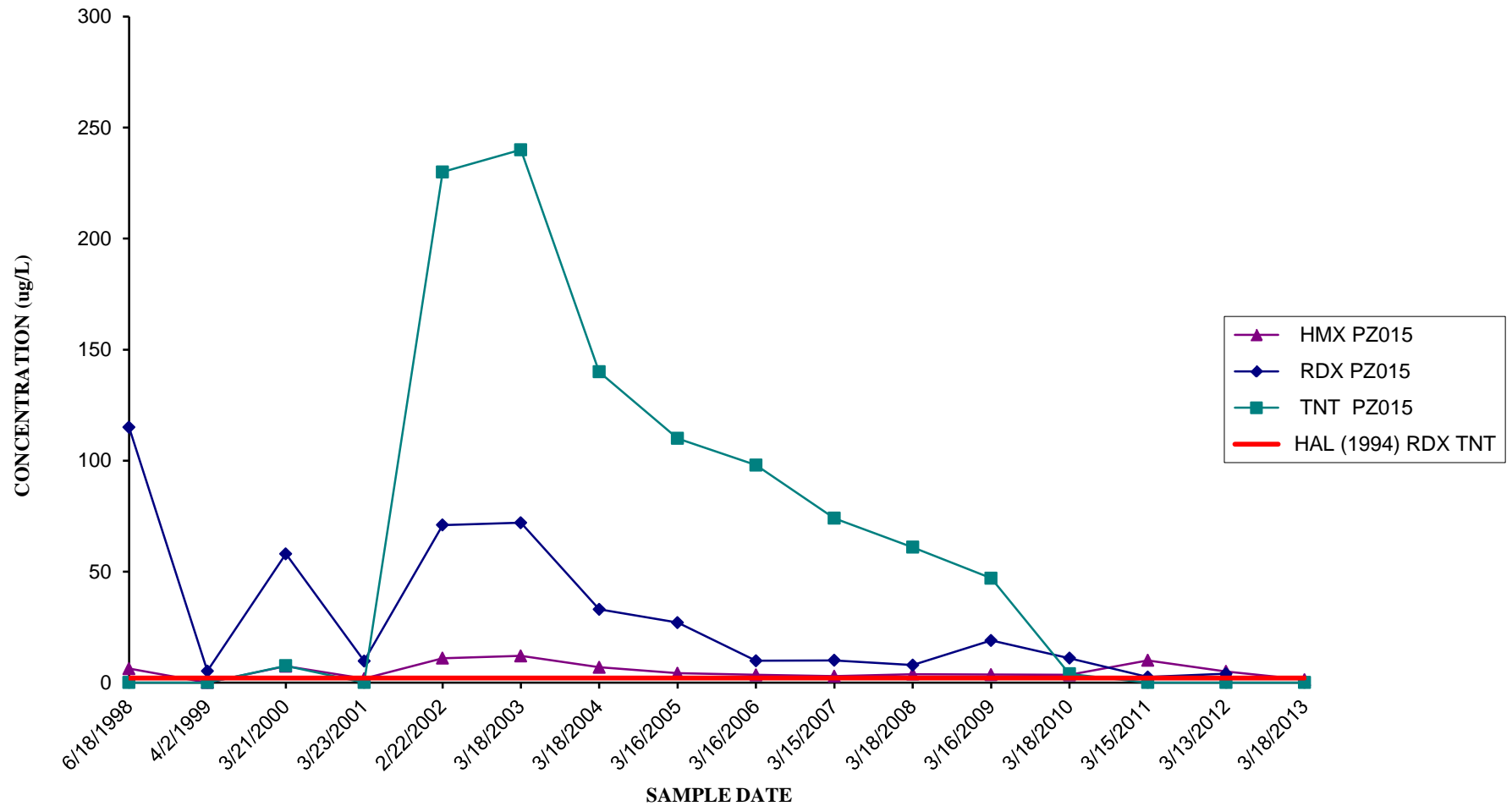
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ013 - HMX, RDX, AND TNT



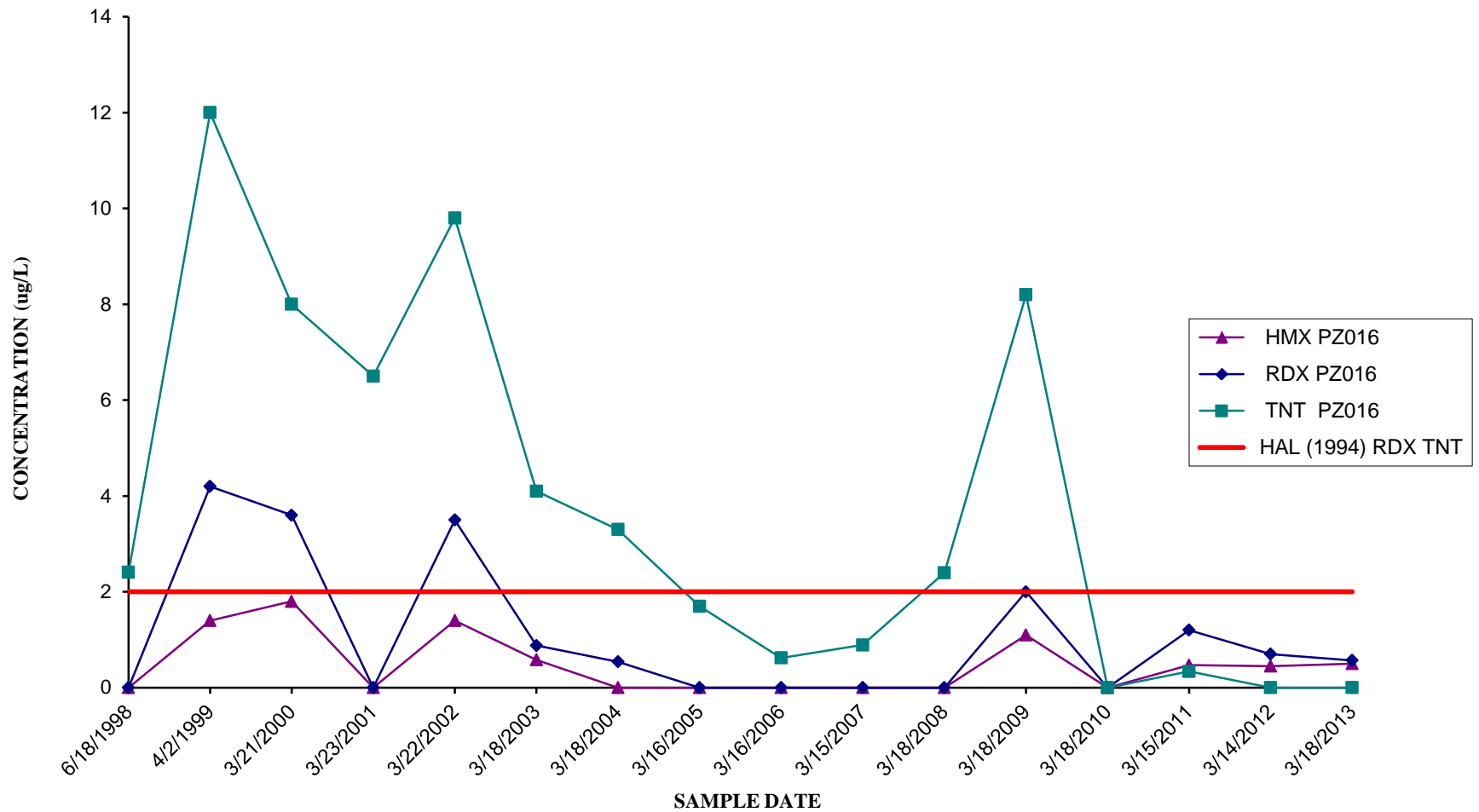
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ014 - HMX, RDX, AND TNT



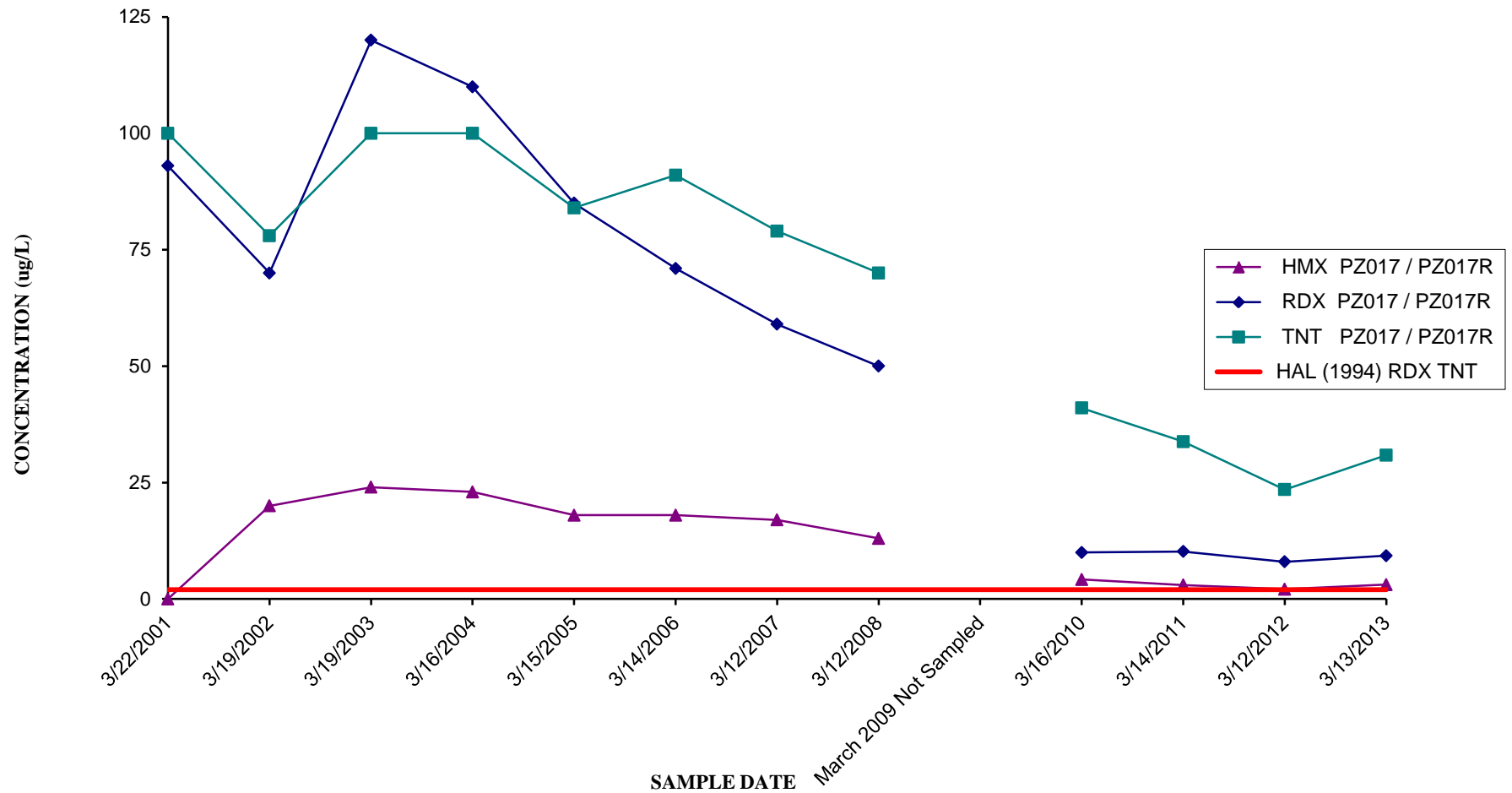
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ015 - HMX, RDX, AND TNT



CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ016 - HMX, RDX, AND TNT

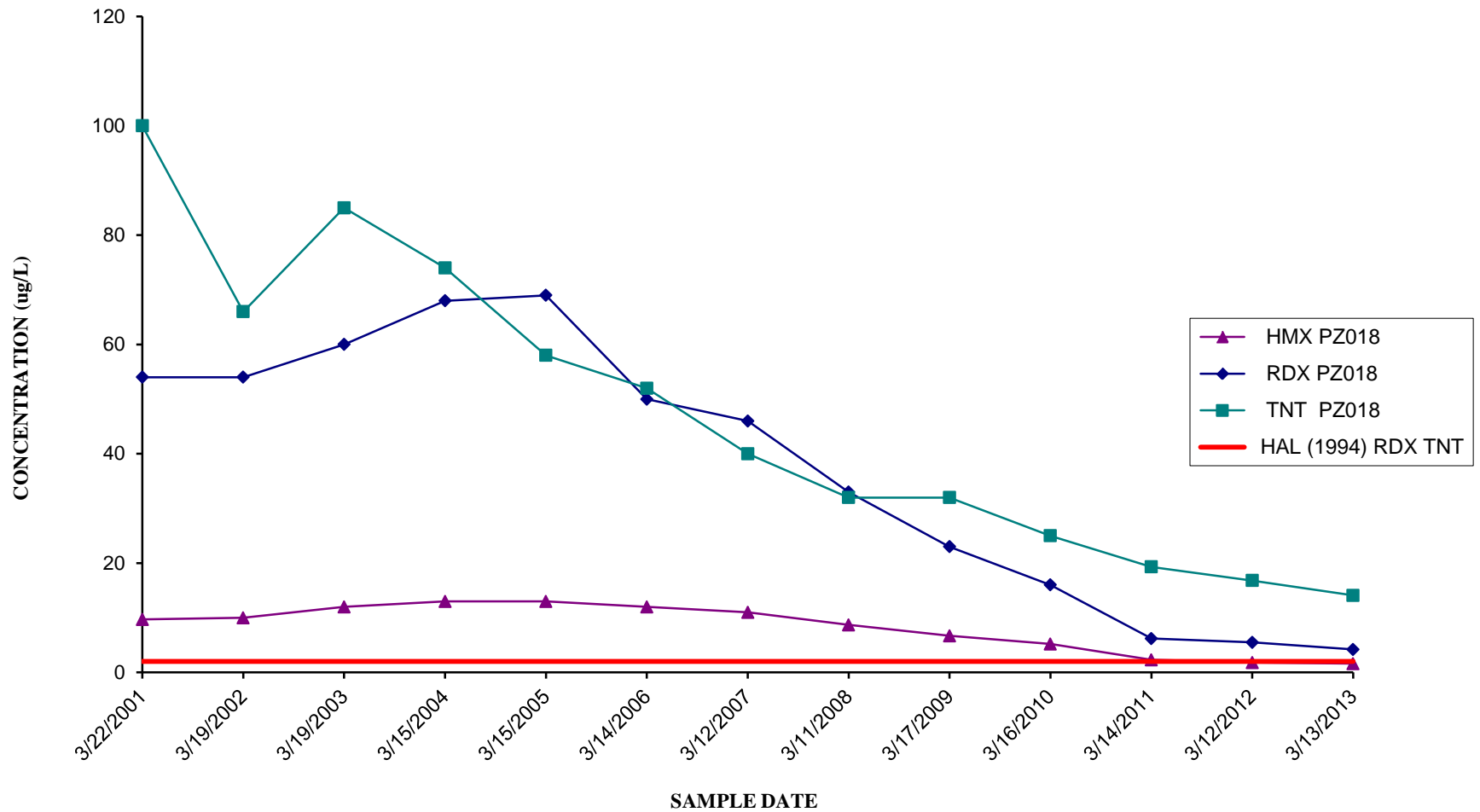


CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ017/PZ017R* - HMX, RDX, AND TNT

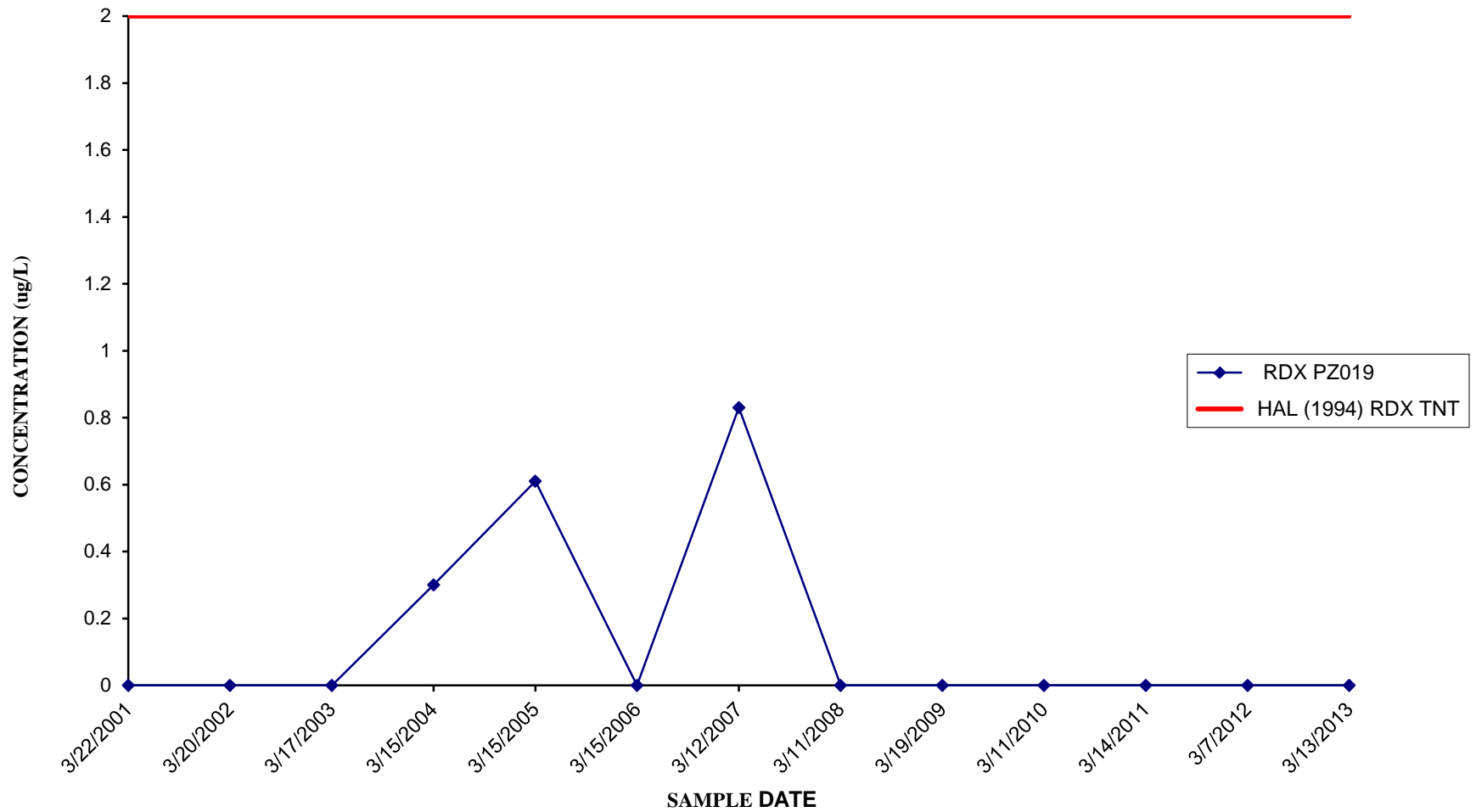


* Piezometer PZ017 was abandoned and replaced by Piezometer PZ017R in November 2009.

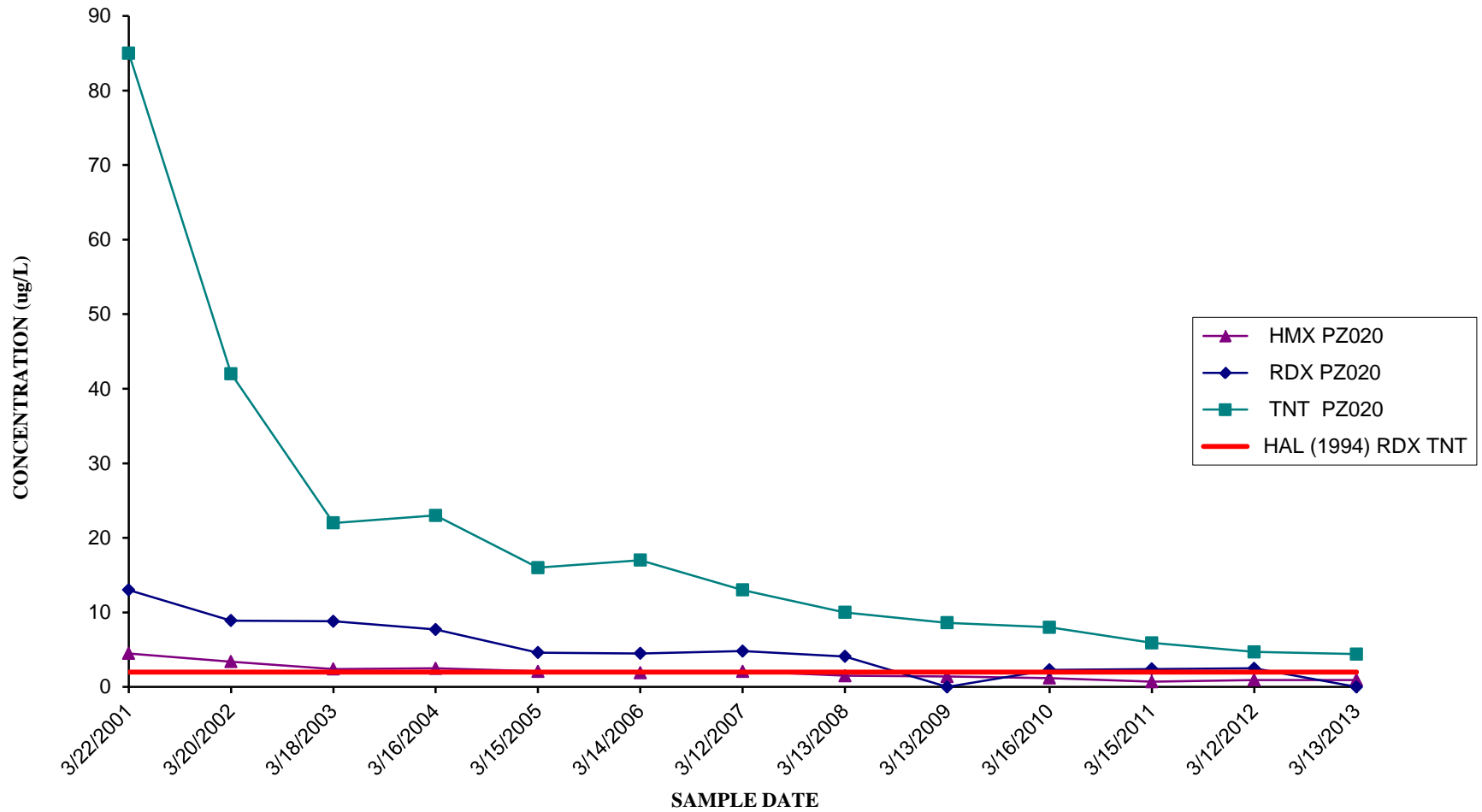
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ018 - HMX, RDX, AND TNT



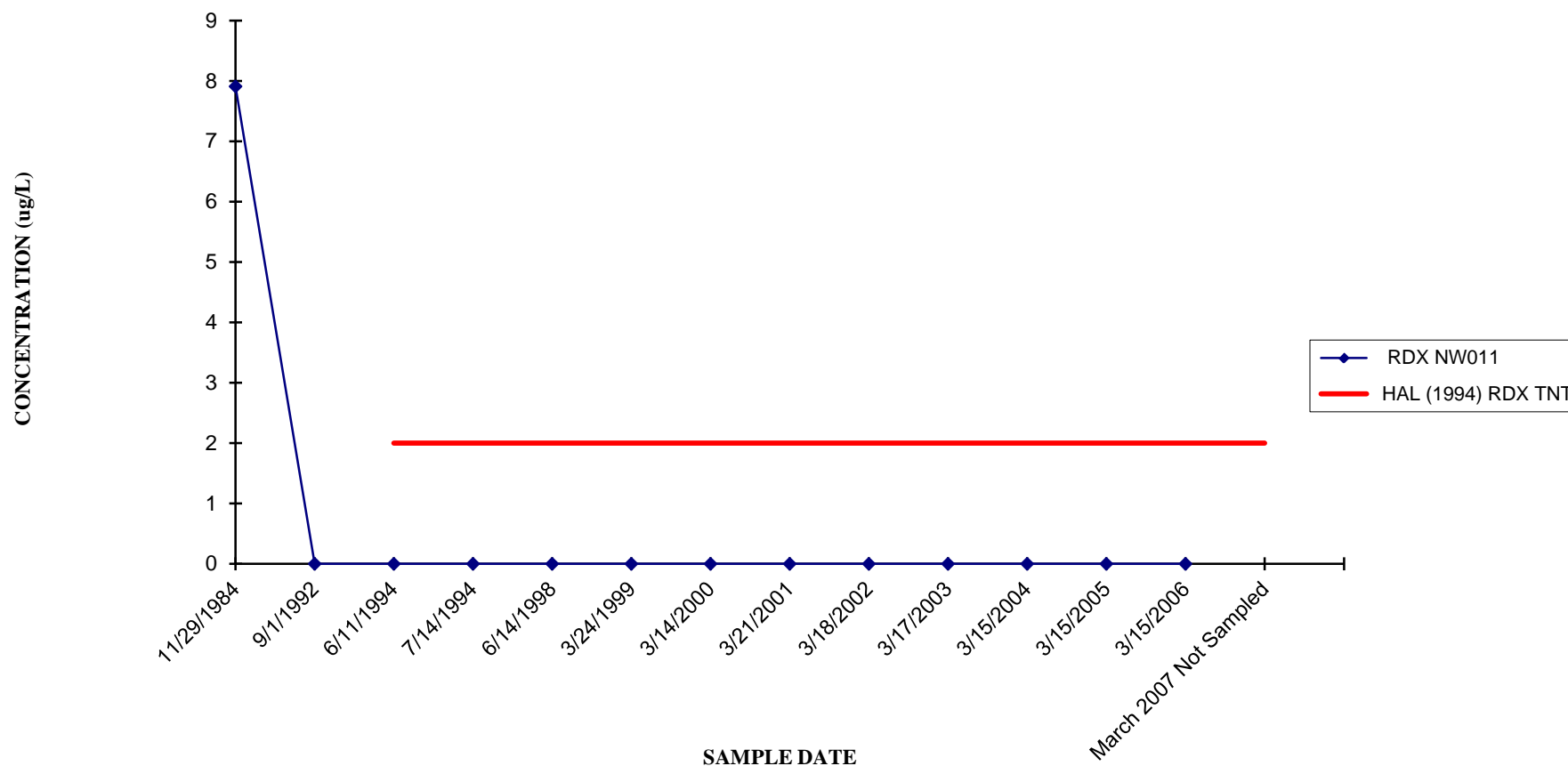
CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ019 - RDX



CORNHUSKER ARMY AMMUNITION PLANT PIEZOMETER PZ020 - HMX, RDX, AND TNT

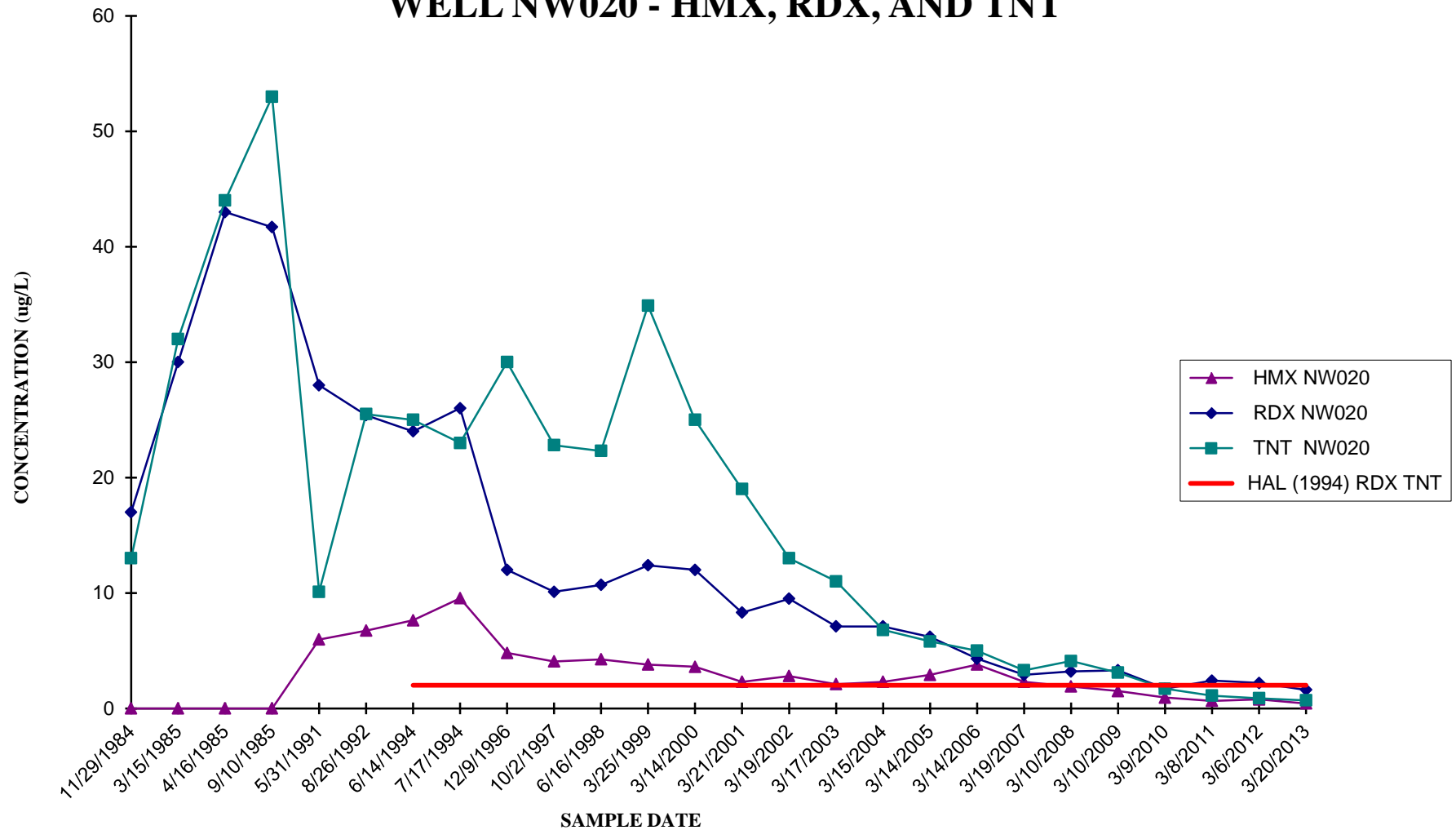


CORNHUSKER ARMY AMMUNITION PLANT WELL NW011 - RDX

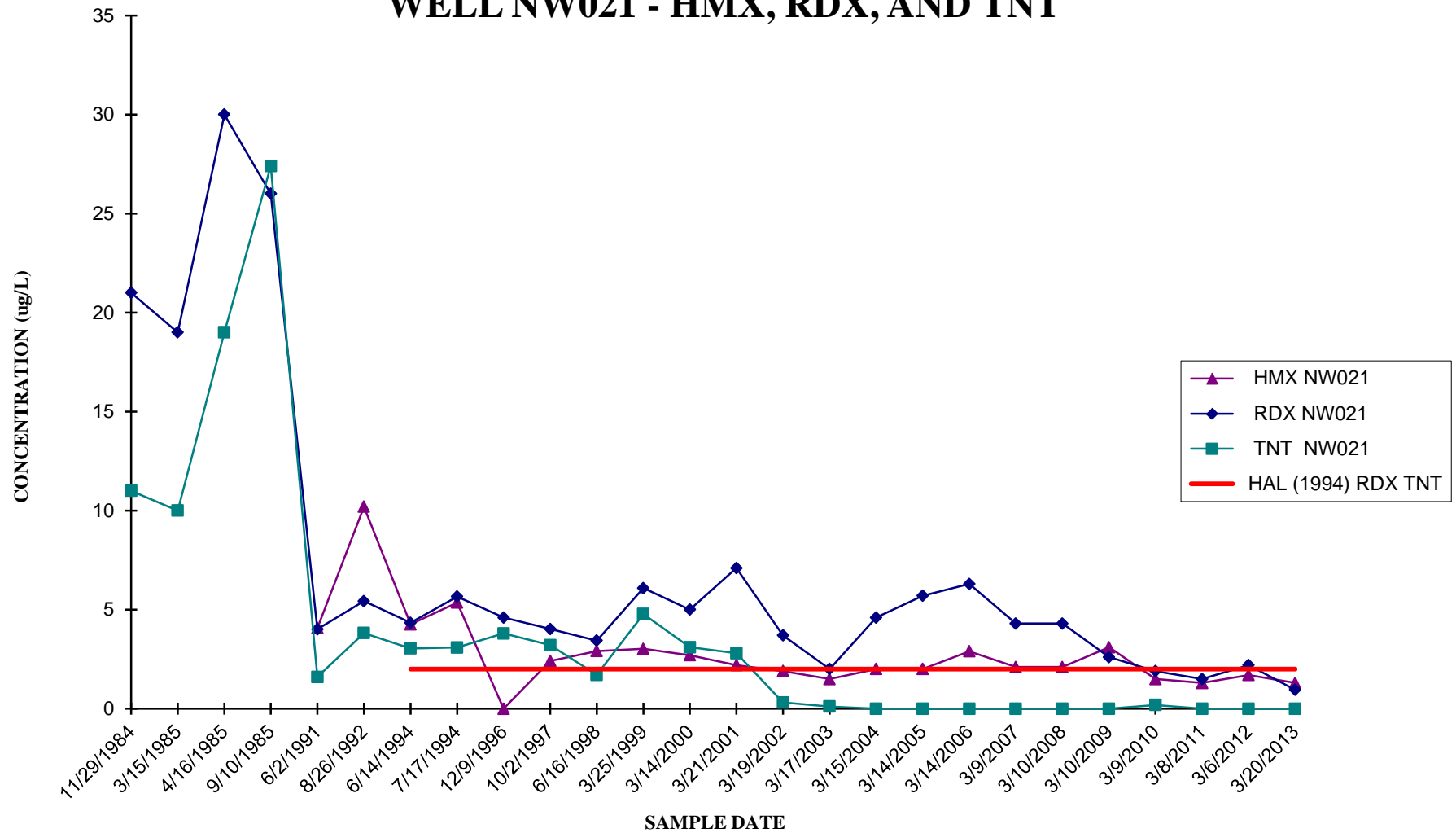


NOTE: Well NW011 was abandoned in 2008.

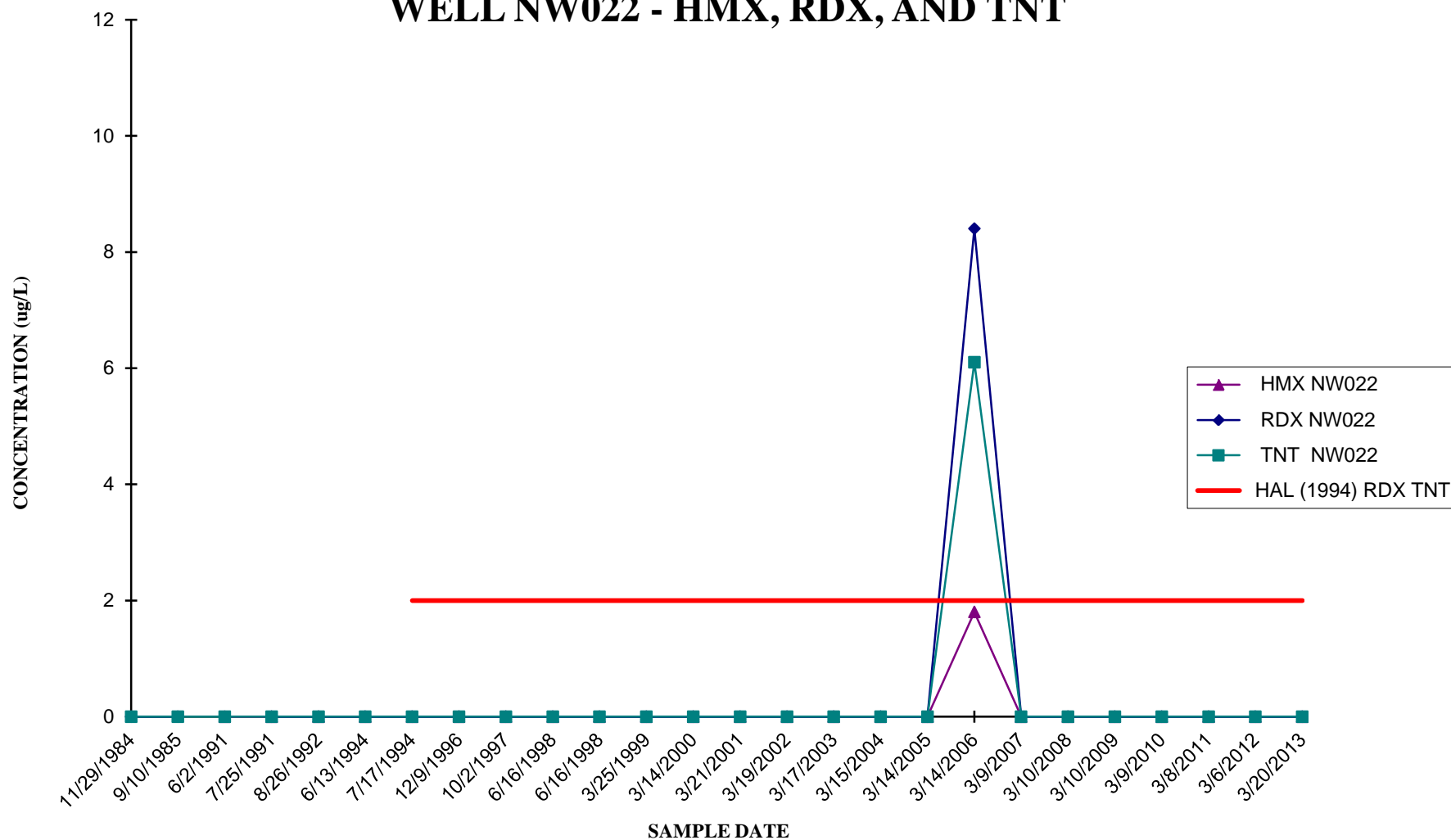
CORNHUSKER ARMY AMMUNITION PLANT WELL NW020 - HMX, RDX, AND TNT



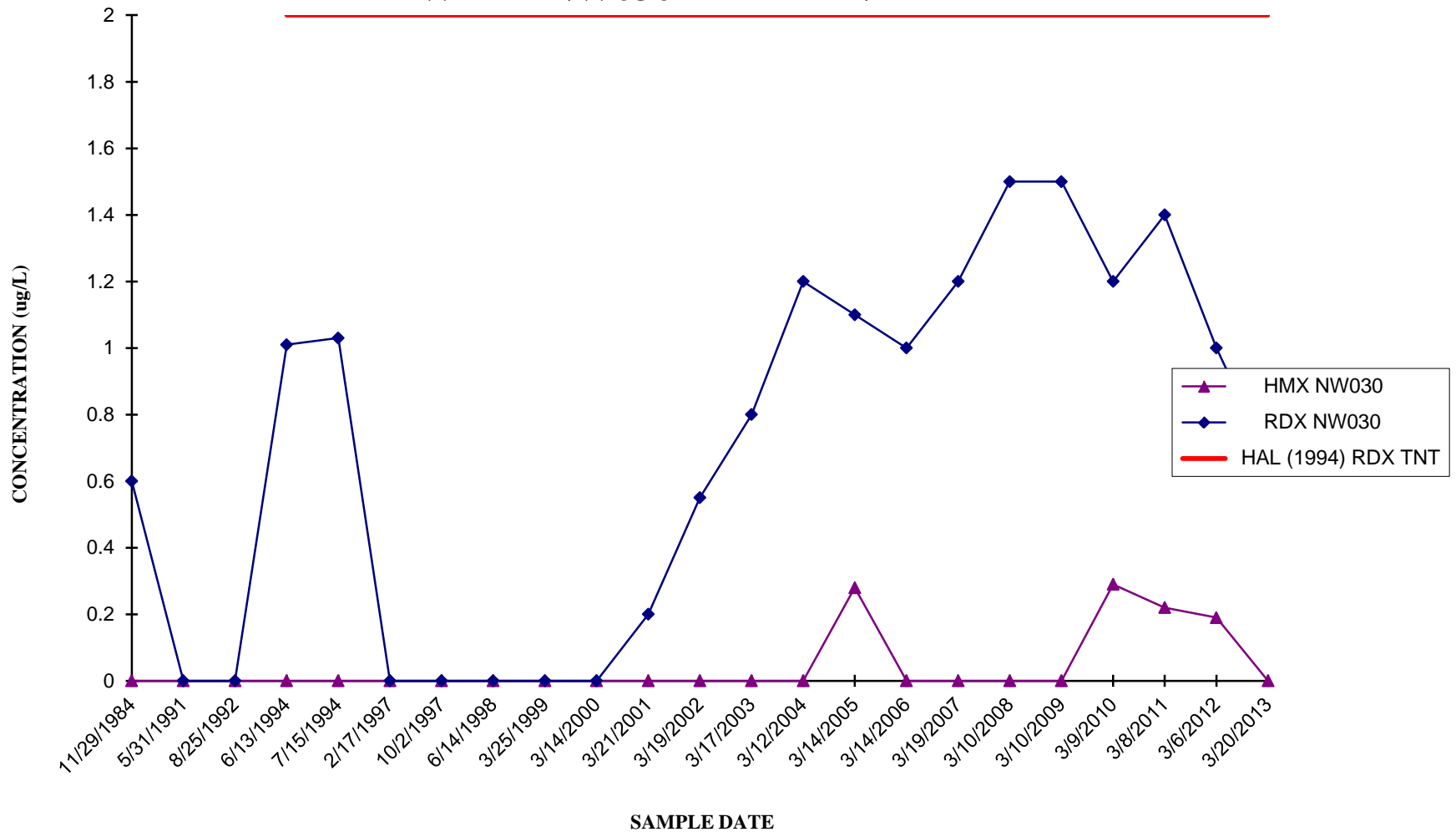
CORNHUSKER ARMY AMMUNITION PLANT WELL NW021 - HMX, RDX, AND TNT



CORNHUSKER ARMY AMMUNITION PLANT WELL NW022 - HMX, RDX, AND TNT

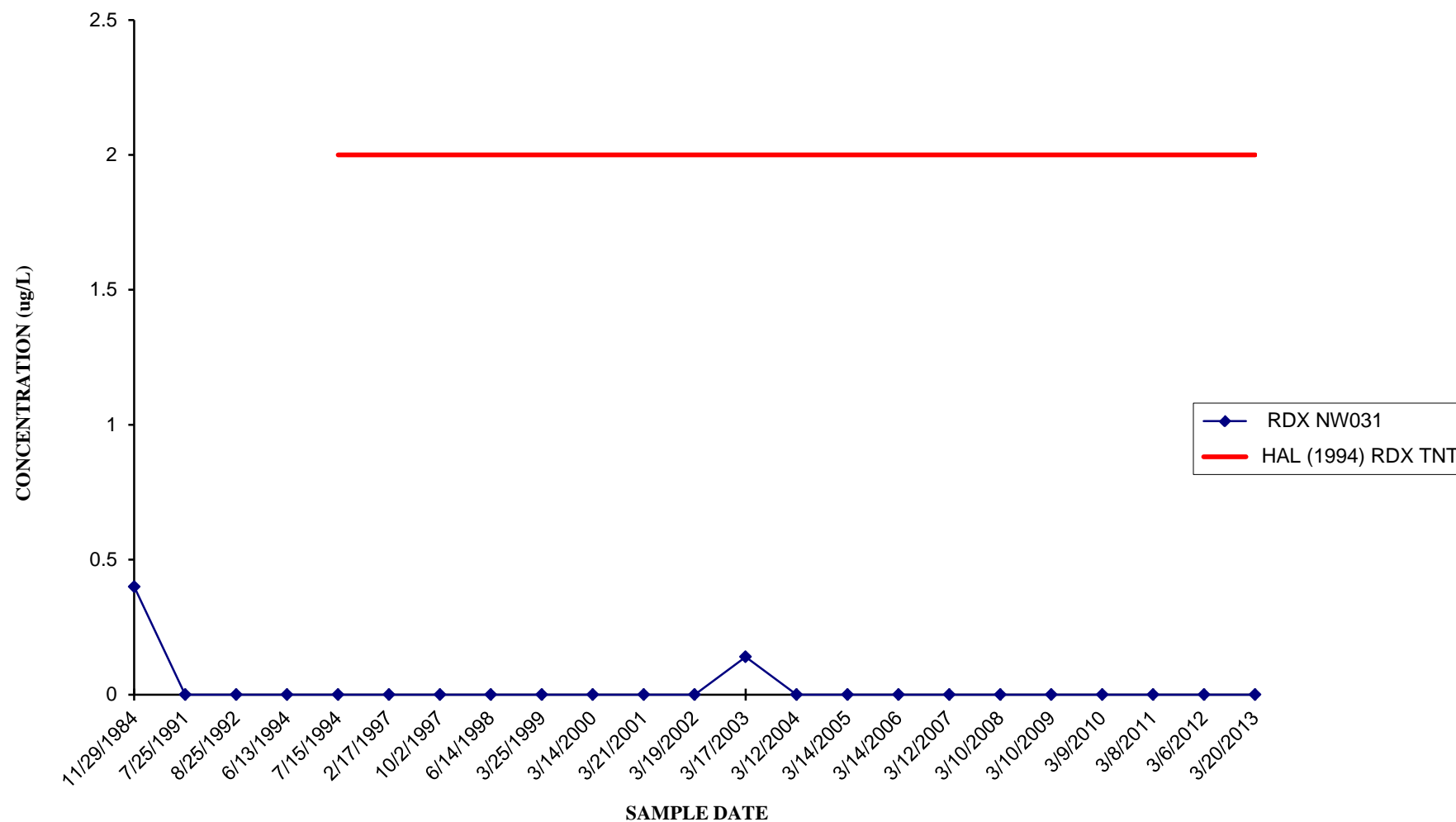


CORNHUSKER ARMY AMMUNITION PLANT WELL NW030 - HMX AND RDX

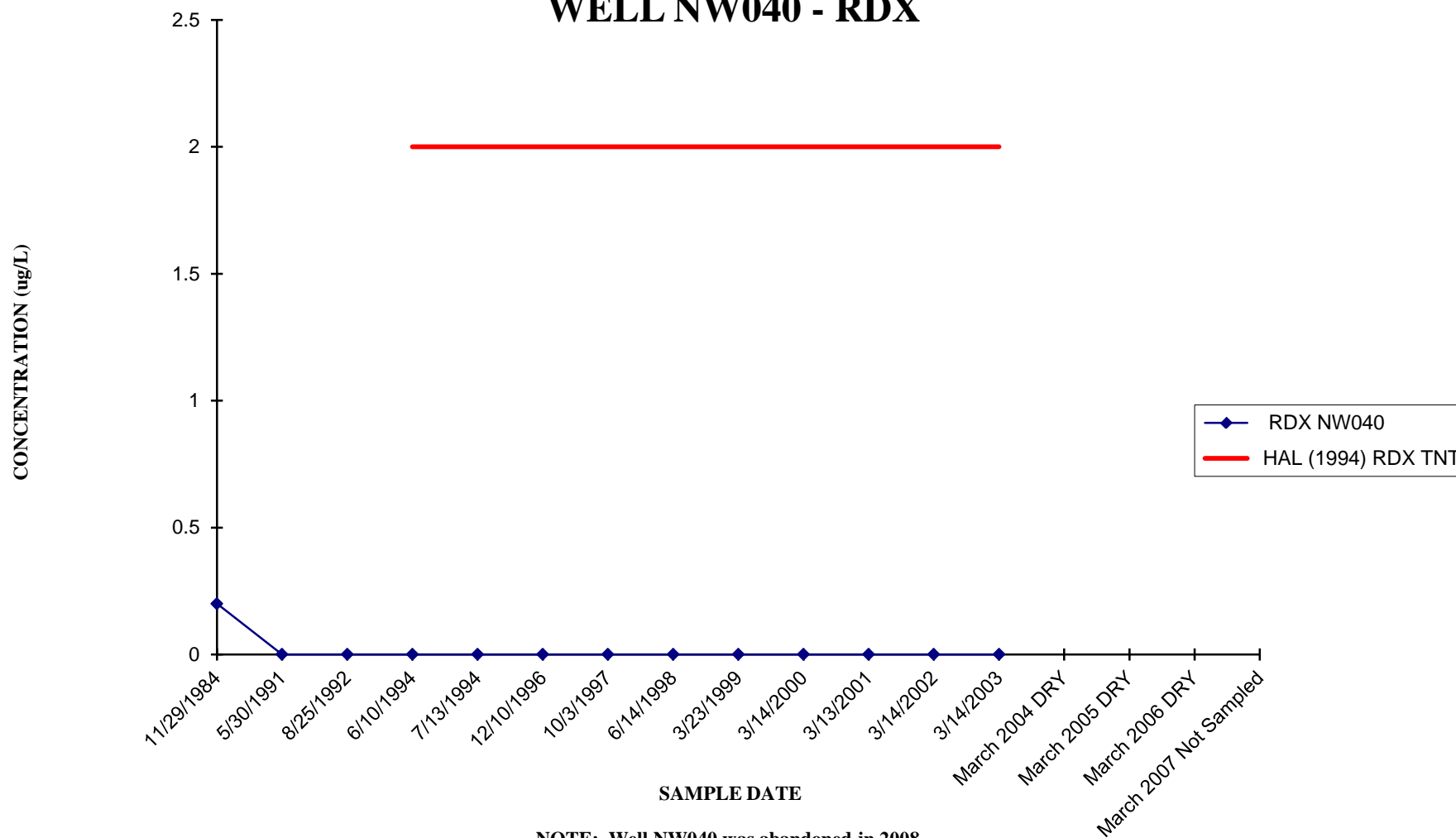


CORNHUSKER ARMY AMMUNITION PLANT

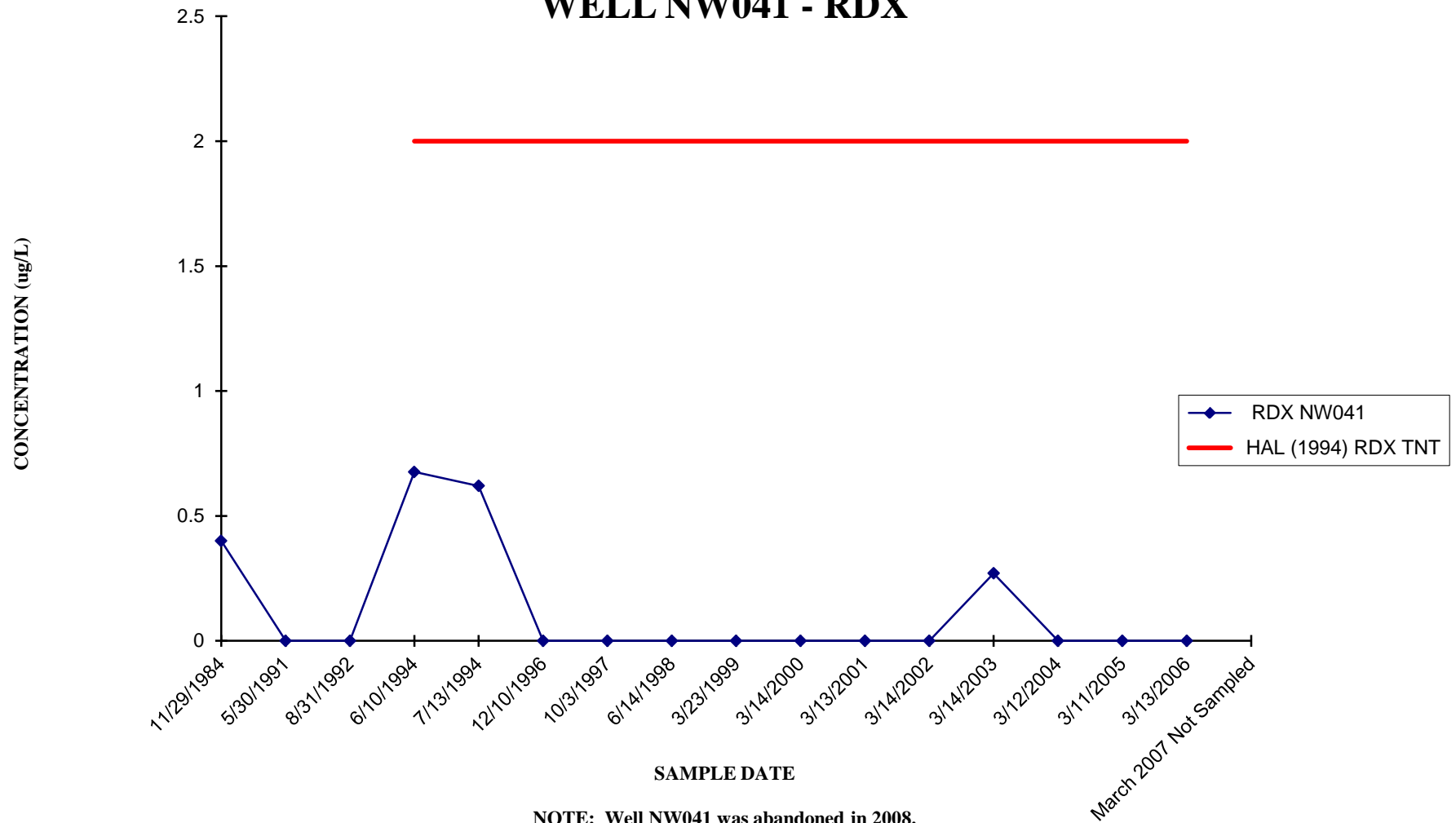
WELL NW031 - RDX



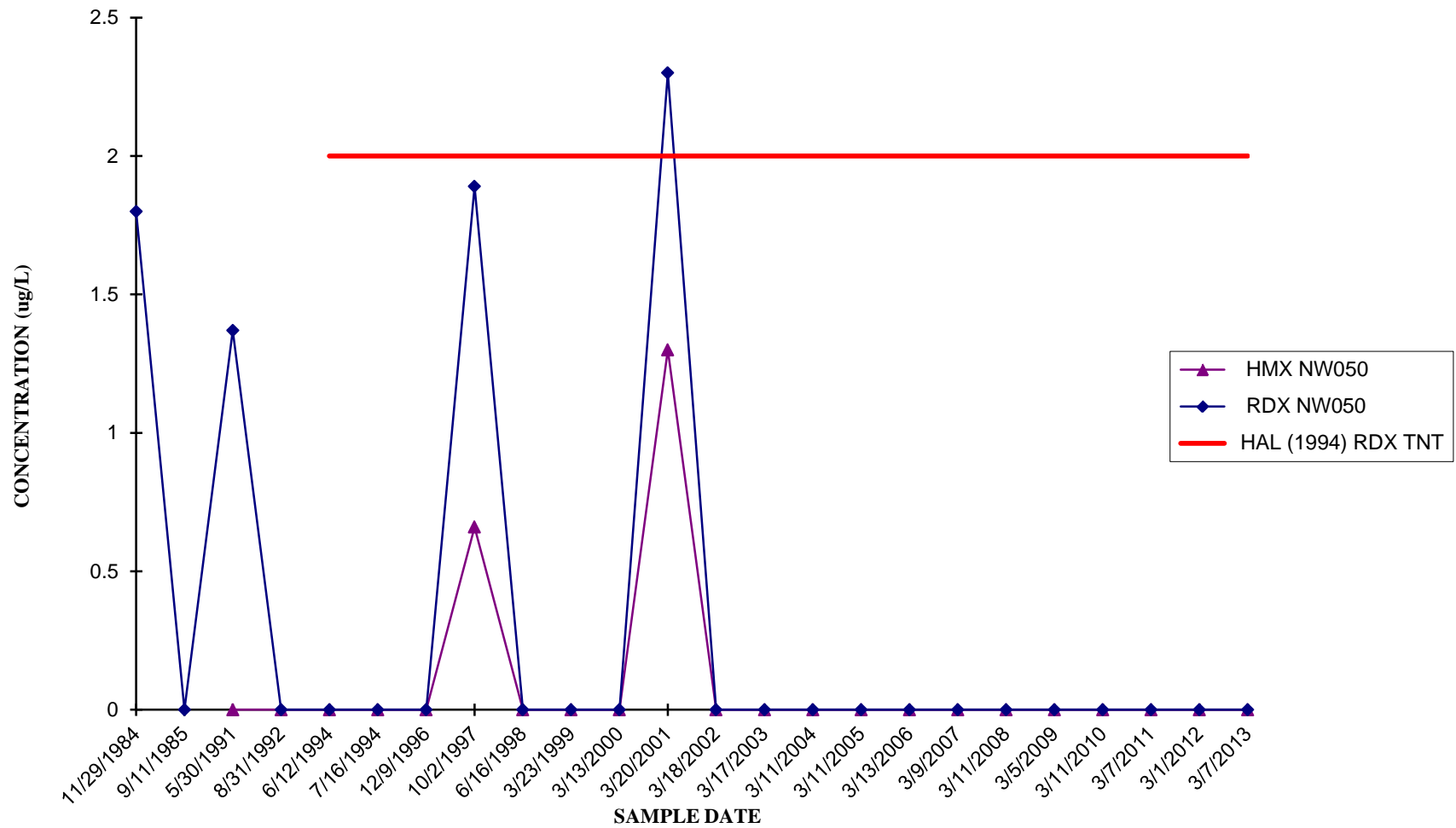
CORNHUSKER ARMY AMMUNITION PLANT WELL NW040 - RDX



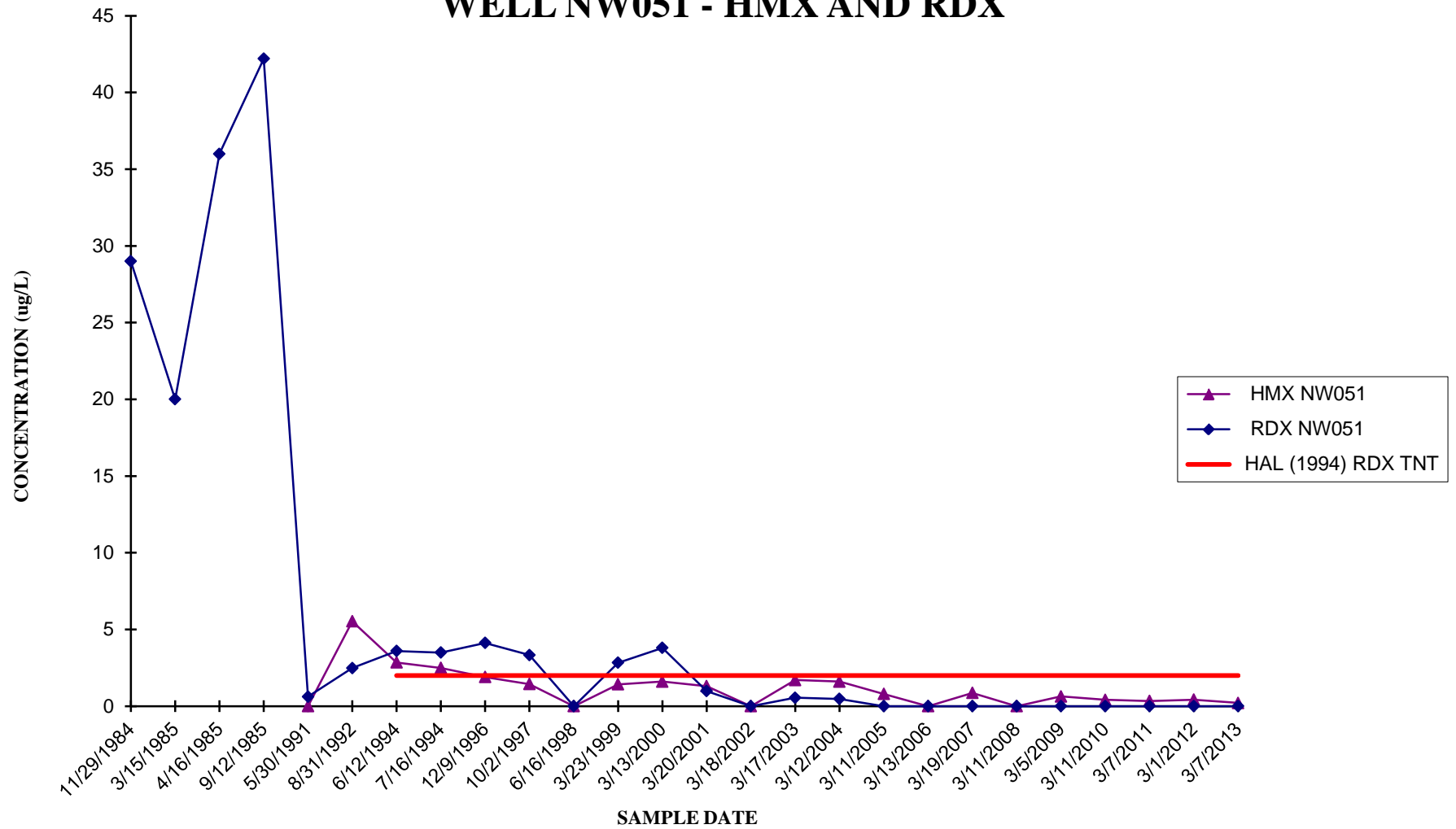
CORNHUSKER ARMY AMMUNITION PLANT WELL NW041 - RDX



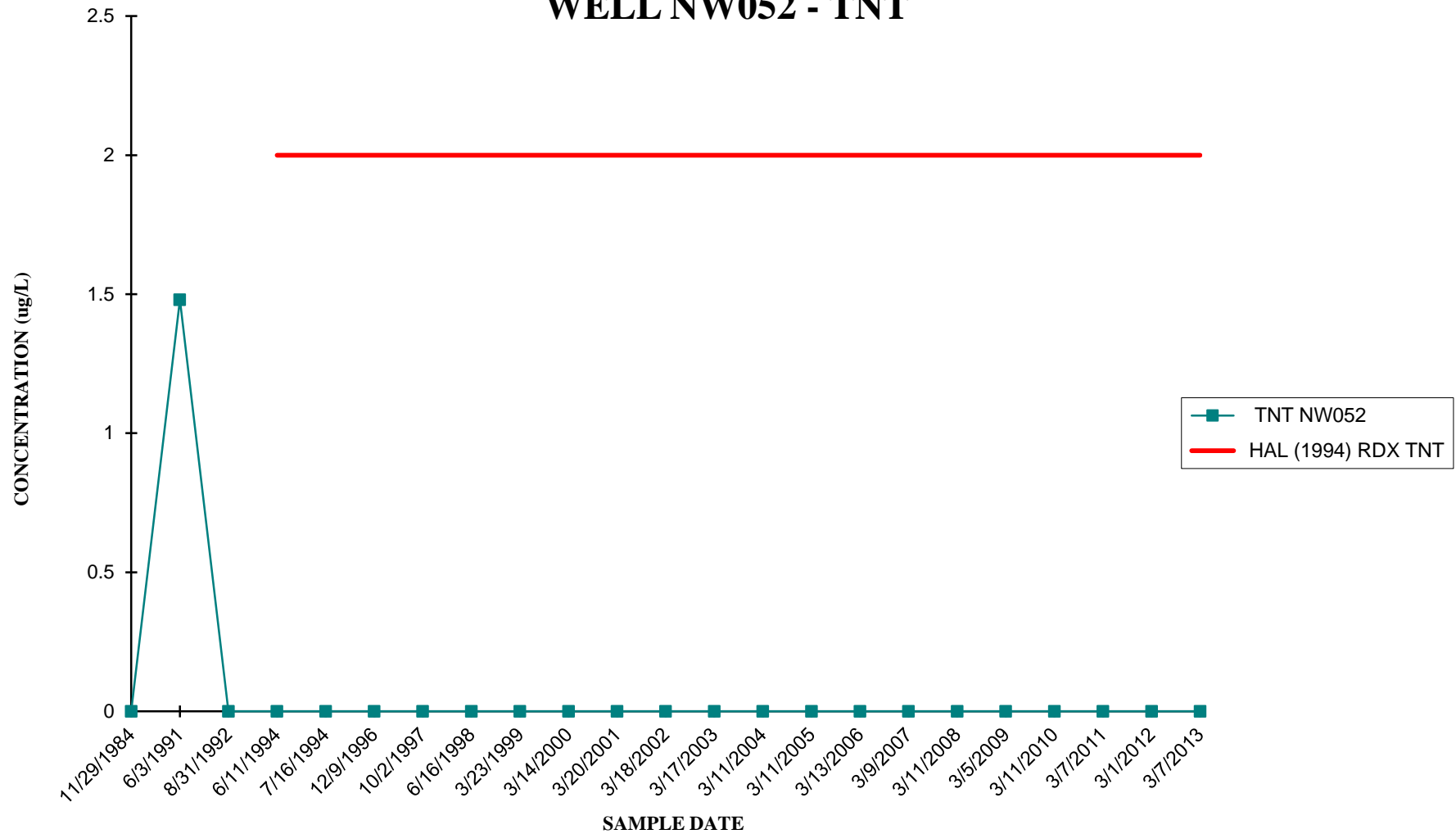
CORNHUSKER ARMY AMMUNITION PLANT WELL NW050 - HMX AND RDX



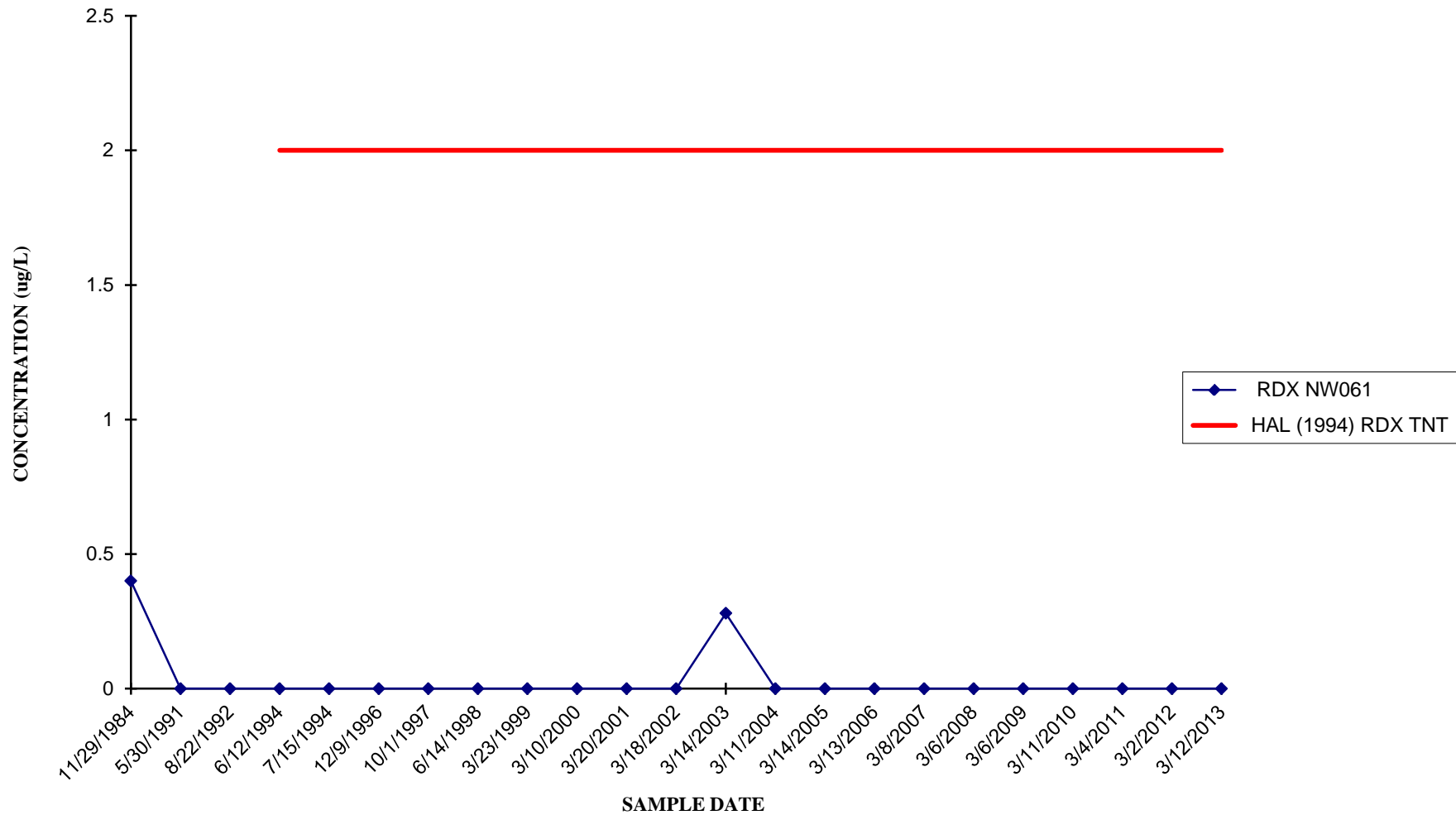
CORNHUSKER ARMY AMMUNITION PLANT WELL NW051 - HMX AND RDX



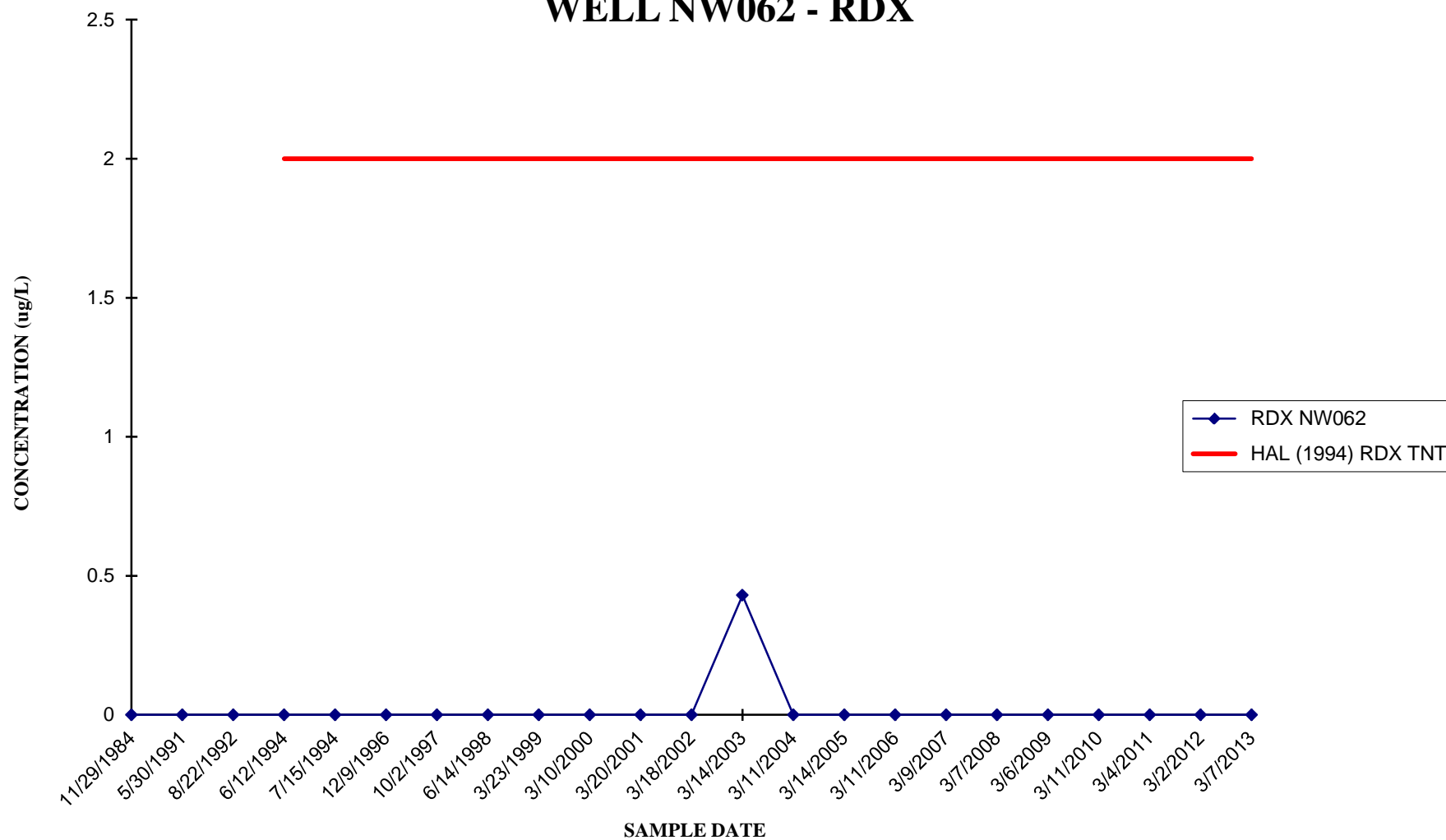
CORNHUSKER ARMY AMMUNITION PLANT WELL NW052 - TNT



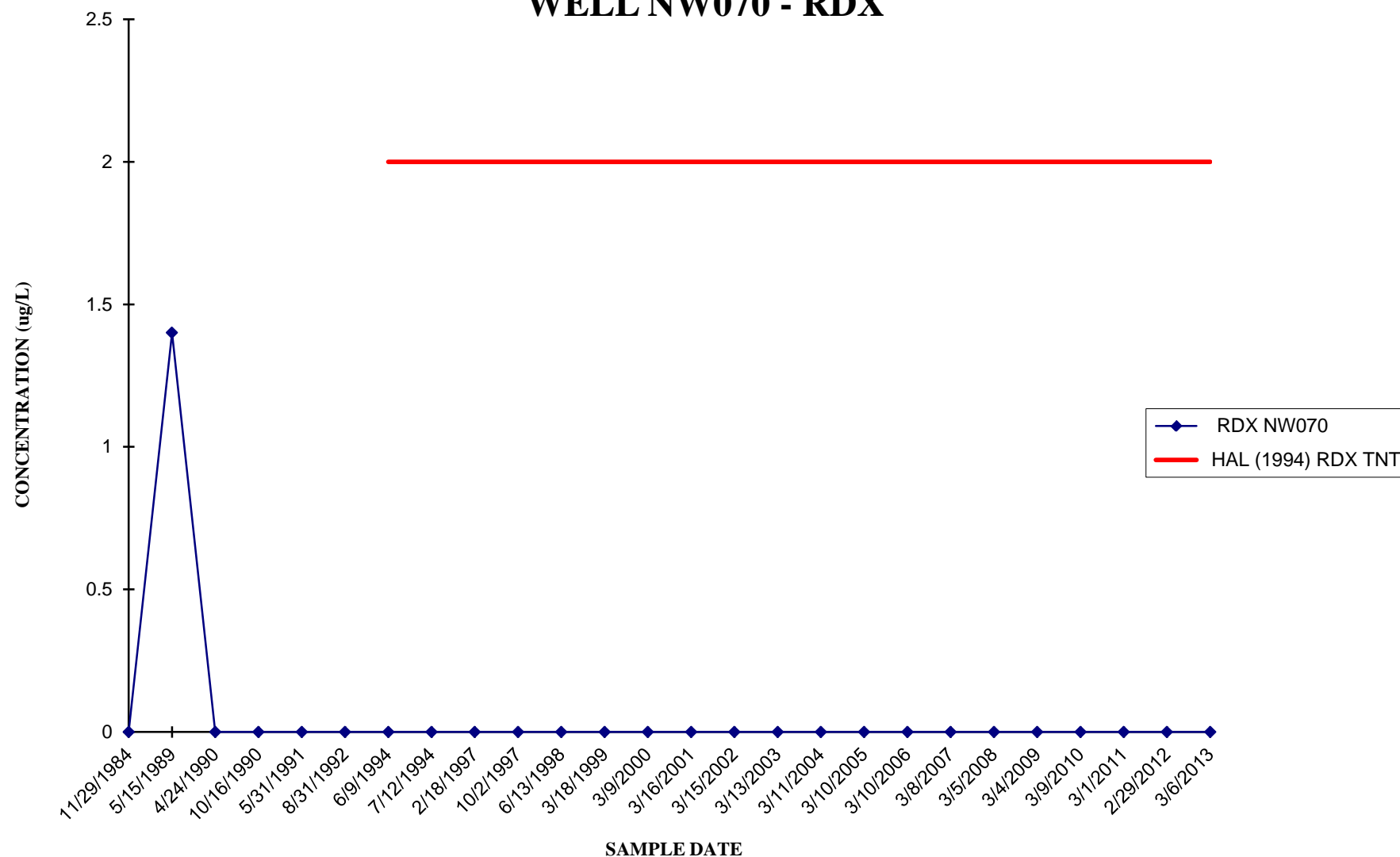
CORNHUSKER ARMY AMMUNITION PLANT WELL NW061 - RDX



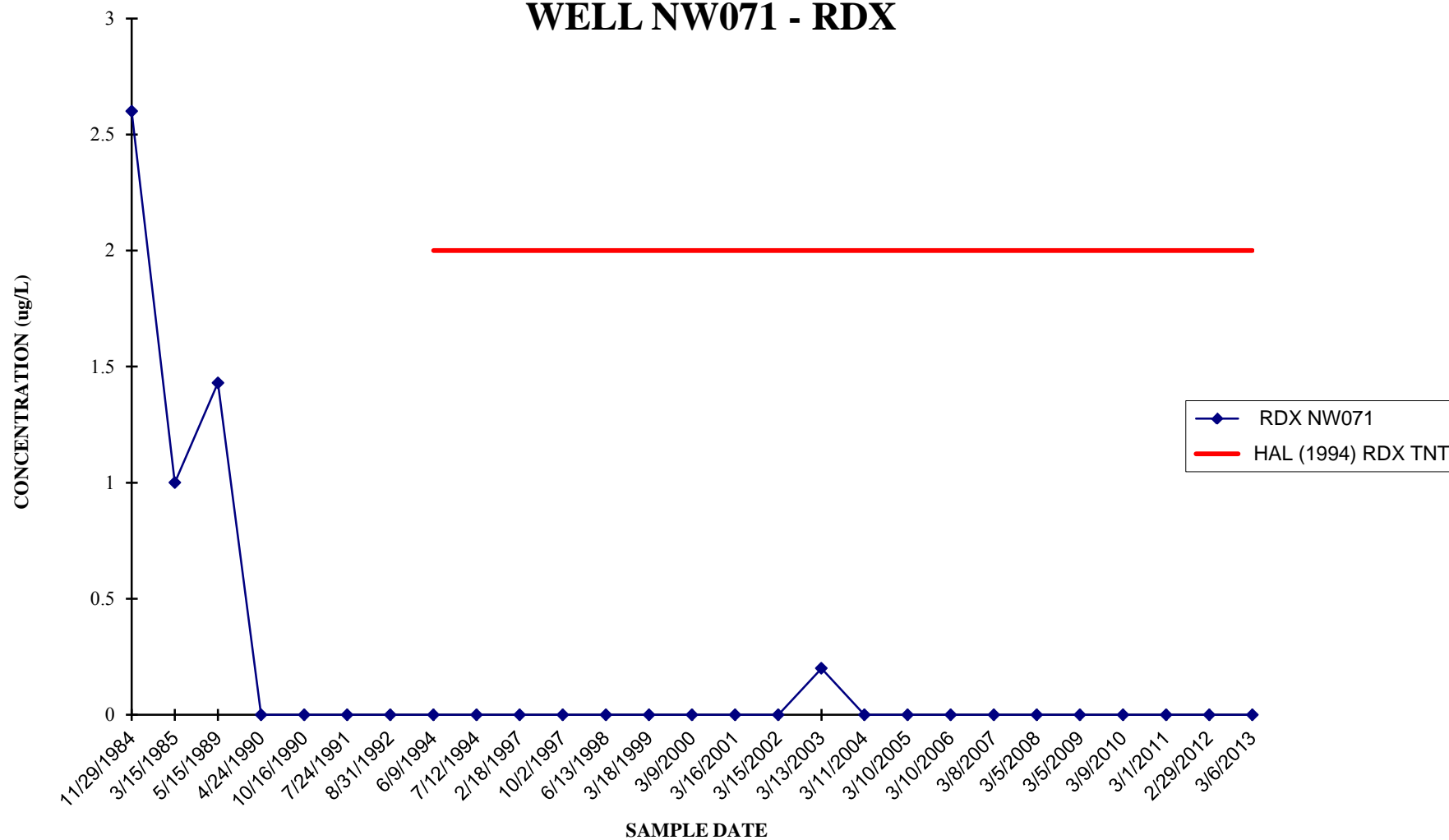
CORNHUSKER ARMY AMMUNITION PLANT WELL NW062 - RDX



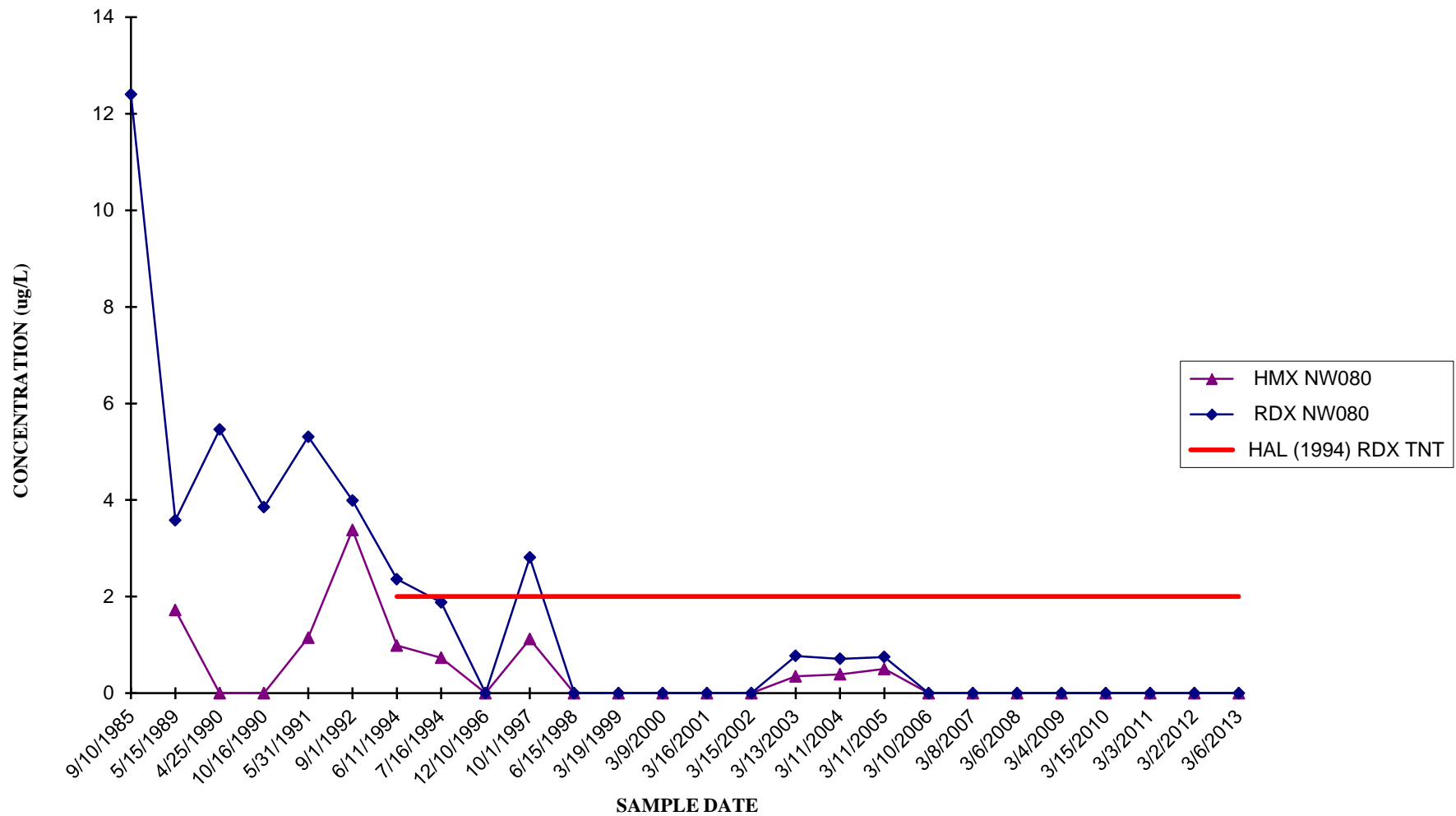
CORNHUSKER ARMY AMMUNITION PLANT WELL NW070 - RDX



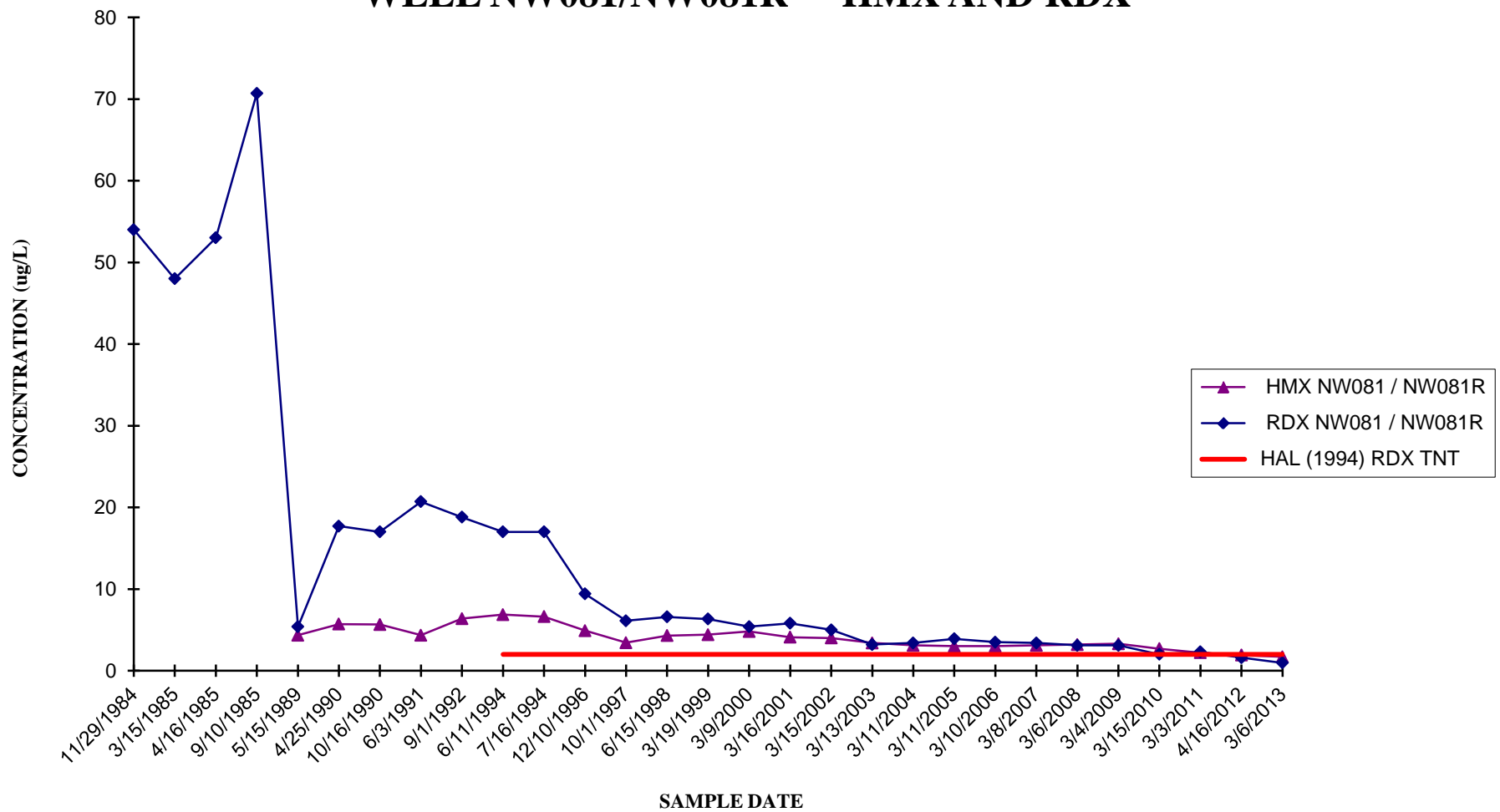
CORNHUSKER ARMY AMMUNITION PLANT WELL NW071 - RDX



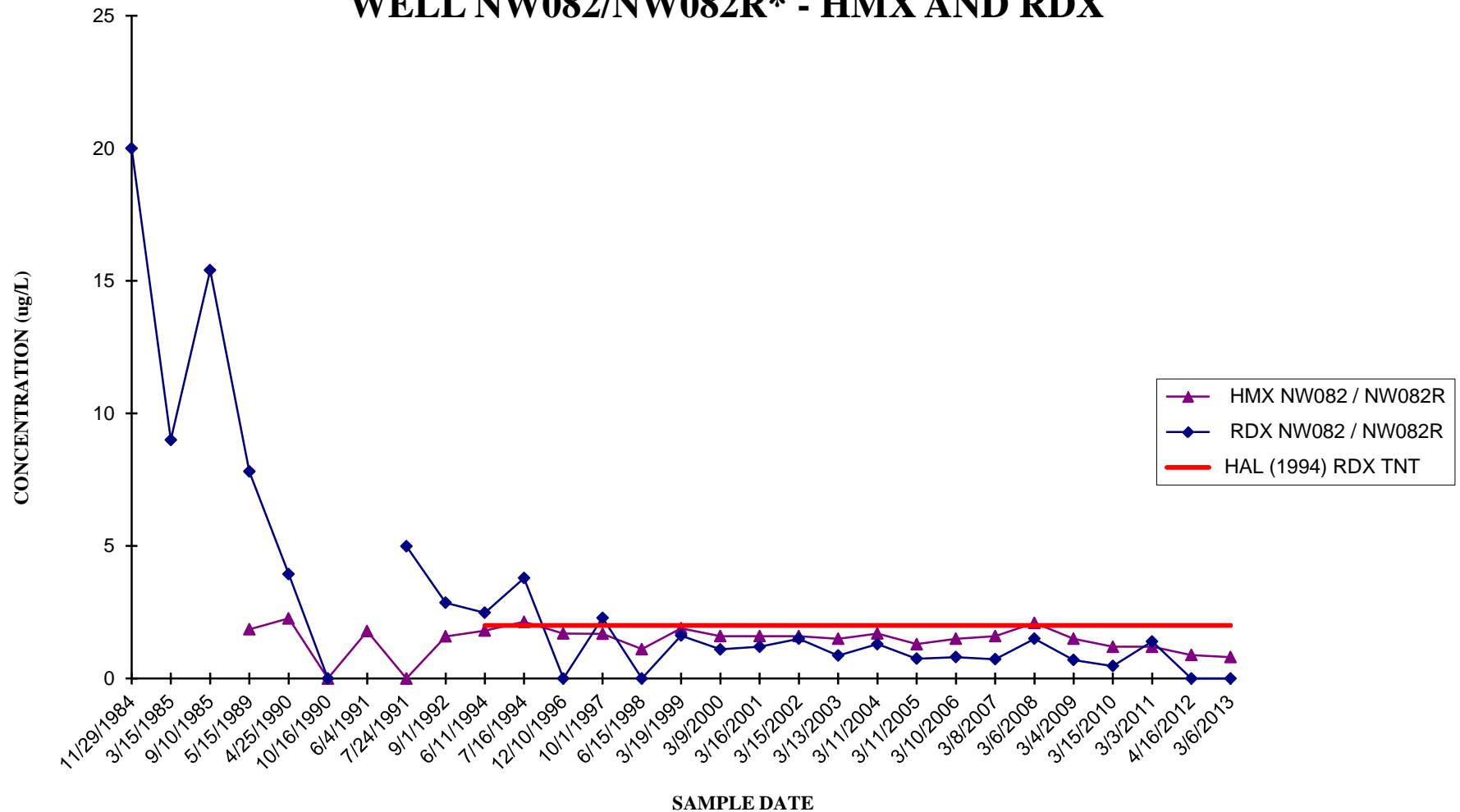
CORNHUSKER ARMY AMMUNITION PLANT WELL NW080 - HMX AND RDX



CORNHUSKER ARMY AMMUNITION PLANT WELL NW081/NW081R* - HMX AND RDX



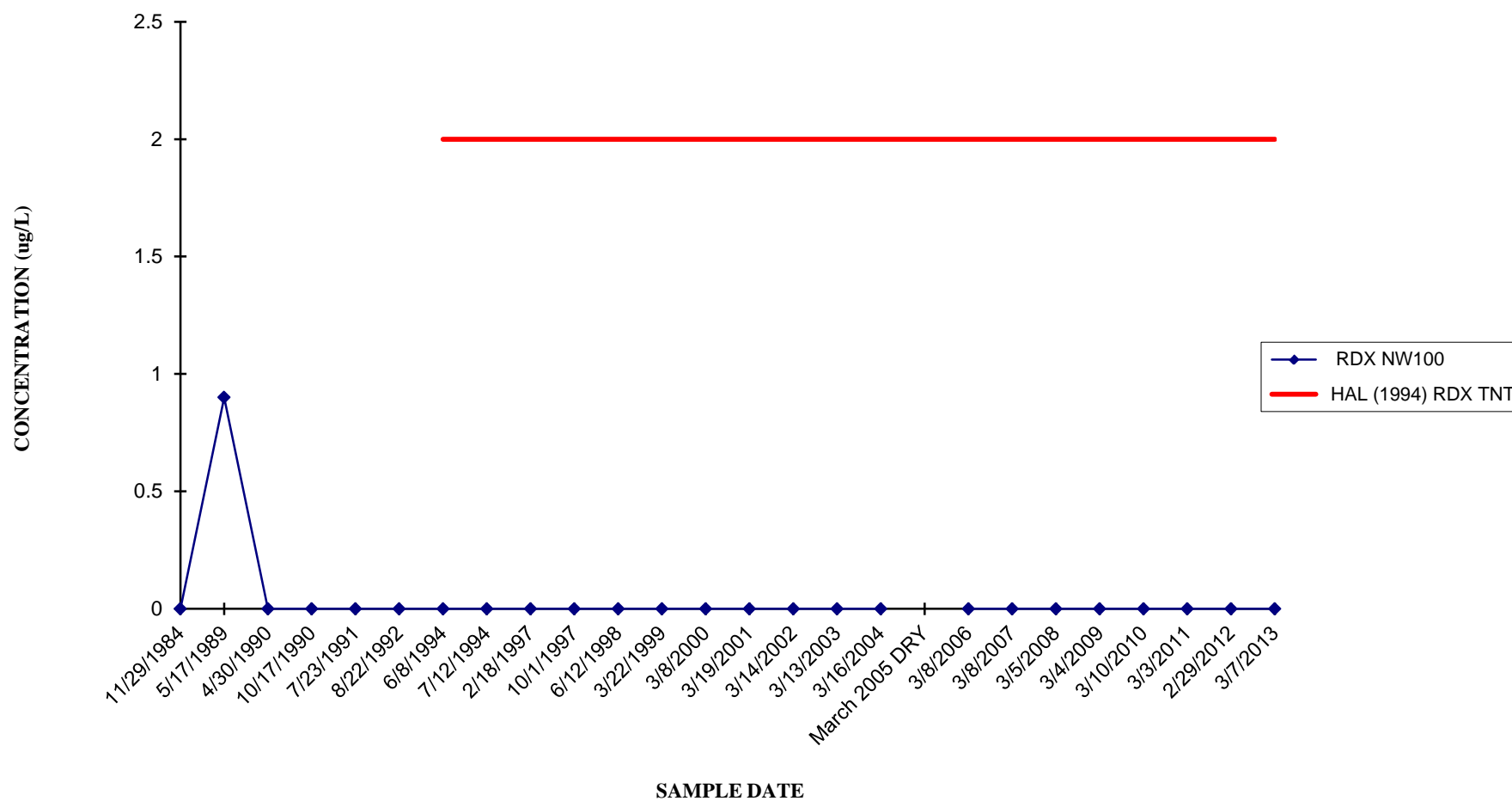
CORNHUSKER ARMY AMMUNITION PLANT WELL NW082/NW082R* - HMX AND RDX



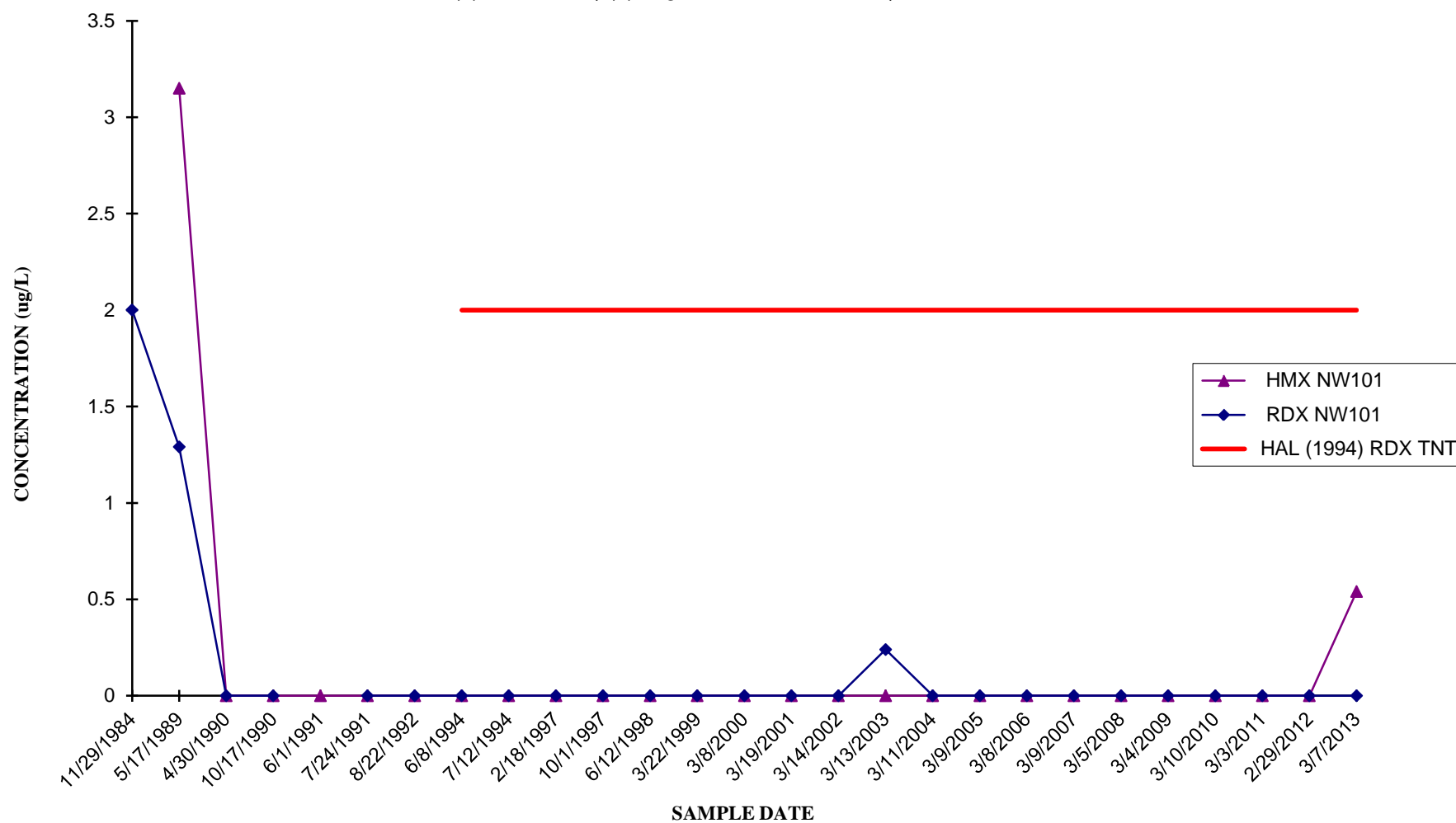
* Well NW082 was abandoned and replaced by well NW082R in April 2012

CORNHUSKER ARMY AMMUNITION PLANT

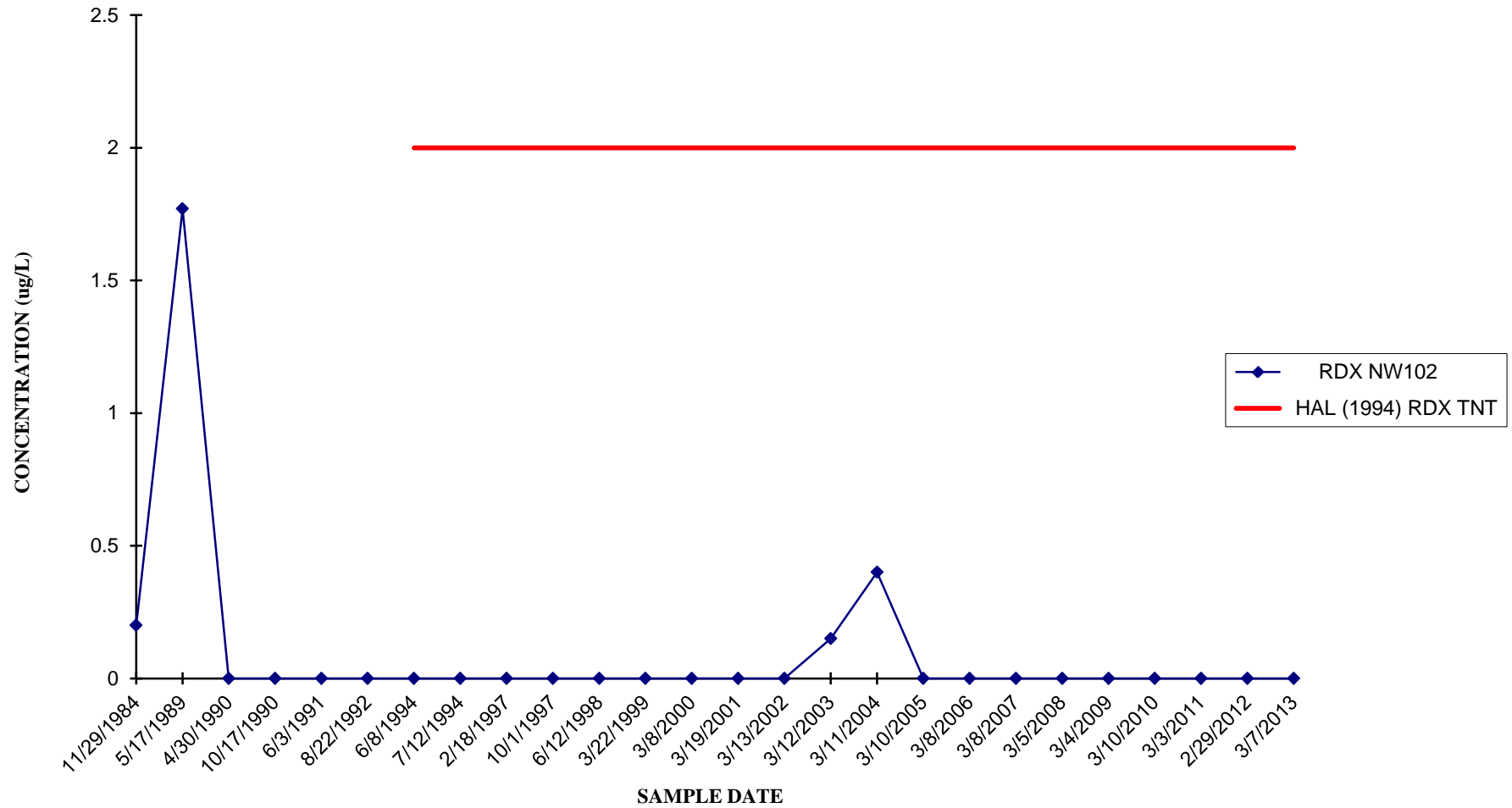
WELL NW100 - RDX



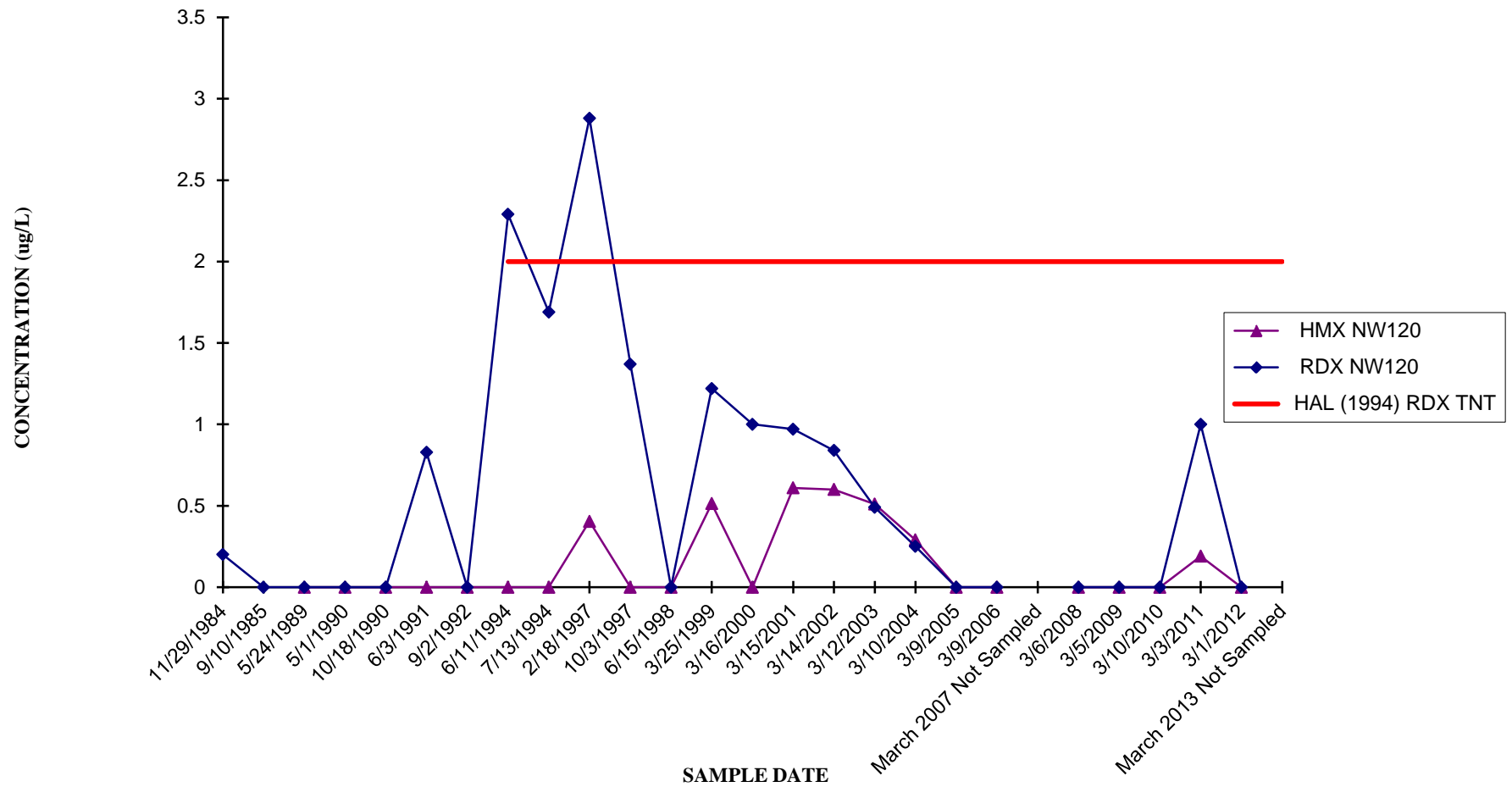
CORNHUSKER ARMY AMMUNITION PLANT WELL NW101 - HMX AND RDX



CORNHUSKER ARMY AMMUNITION PLANT WELL NW102 - RDX

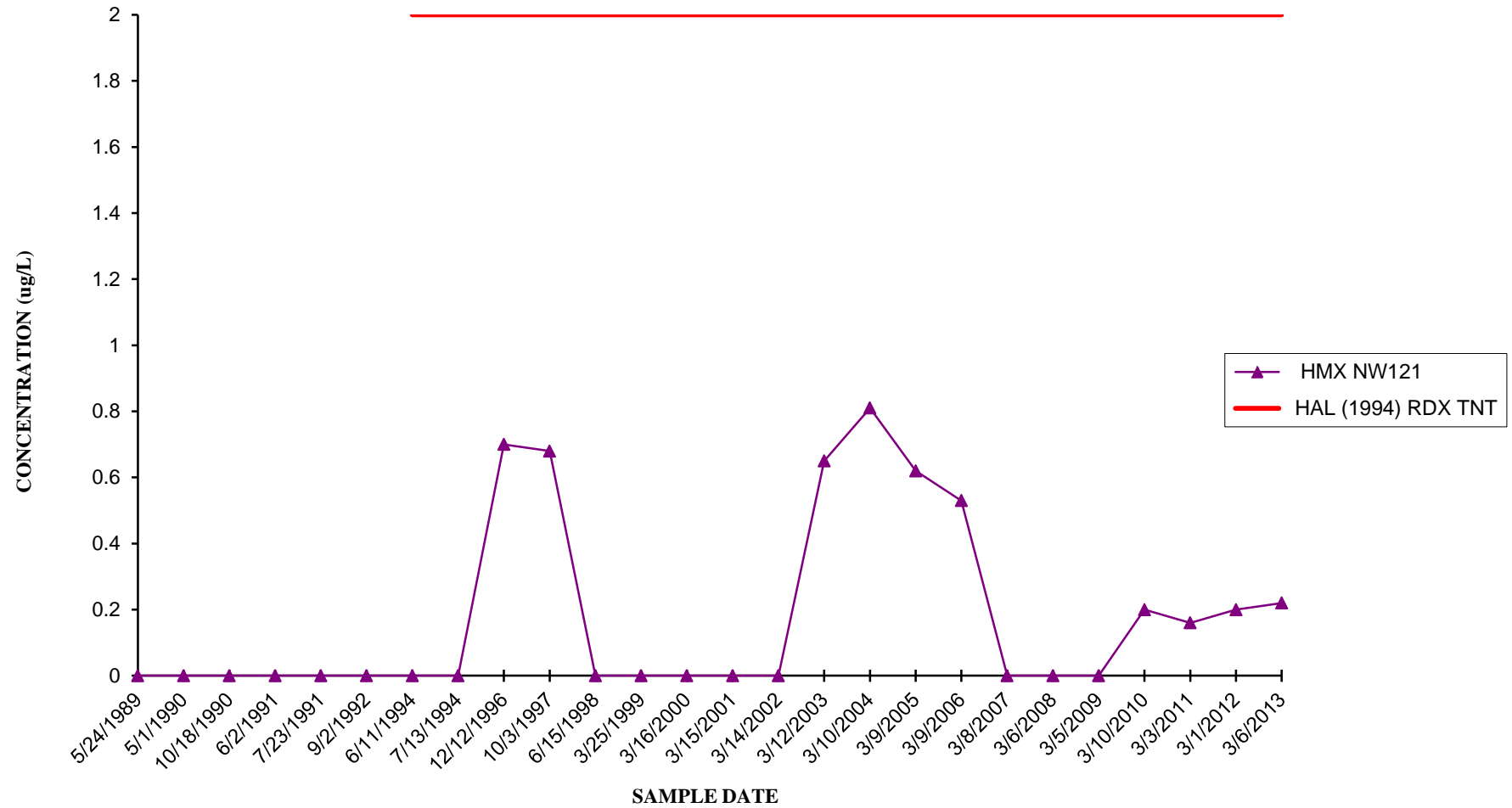


CORNHUSKER ARMY AMMUNITION PLANT WELL NW120 - HMX AND RDX

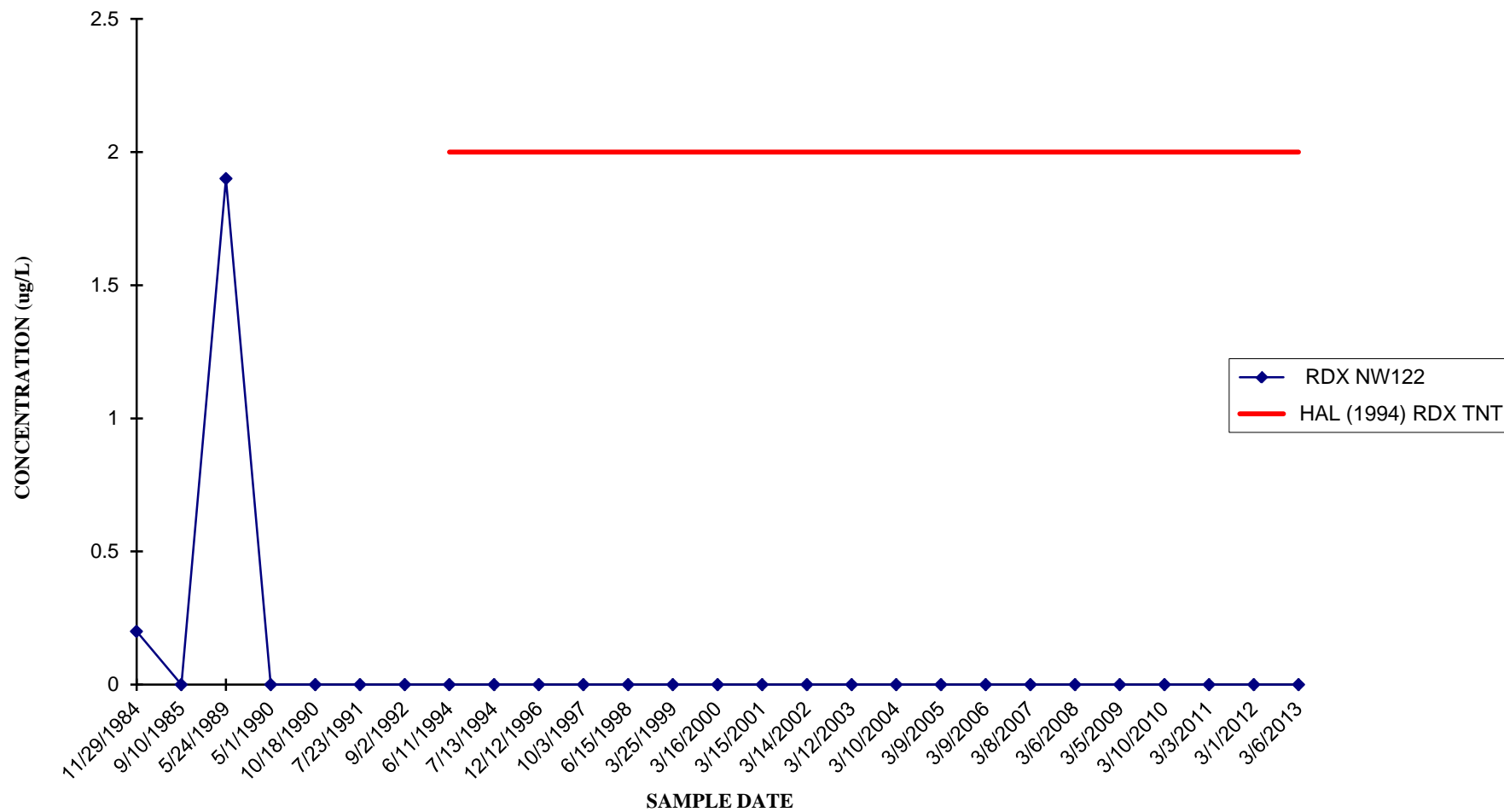


CORNHUSKER ARMY AMMUNITION PLANT

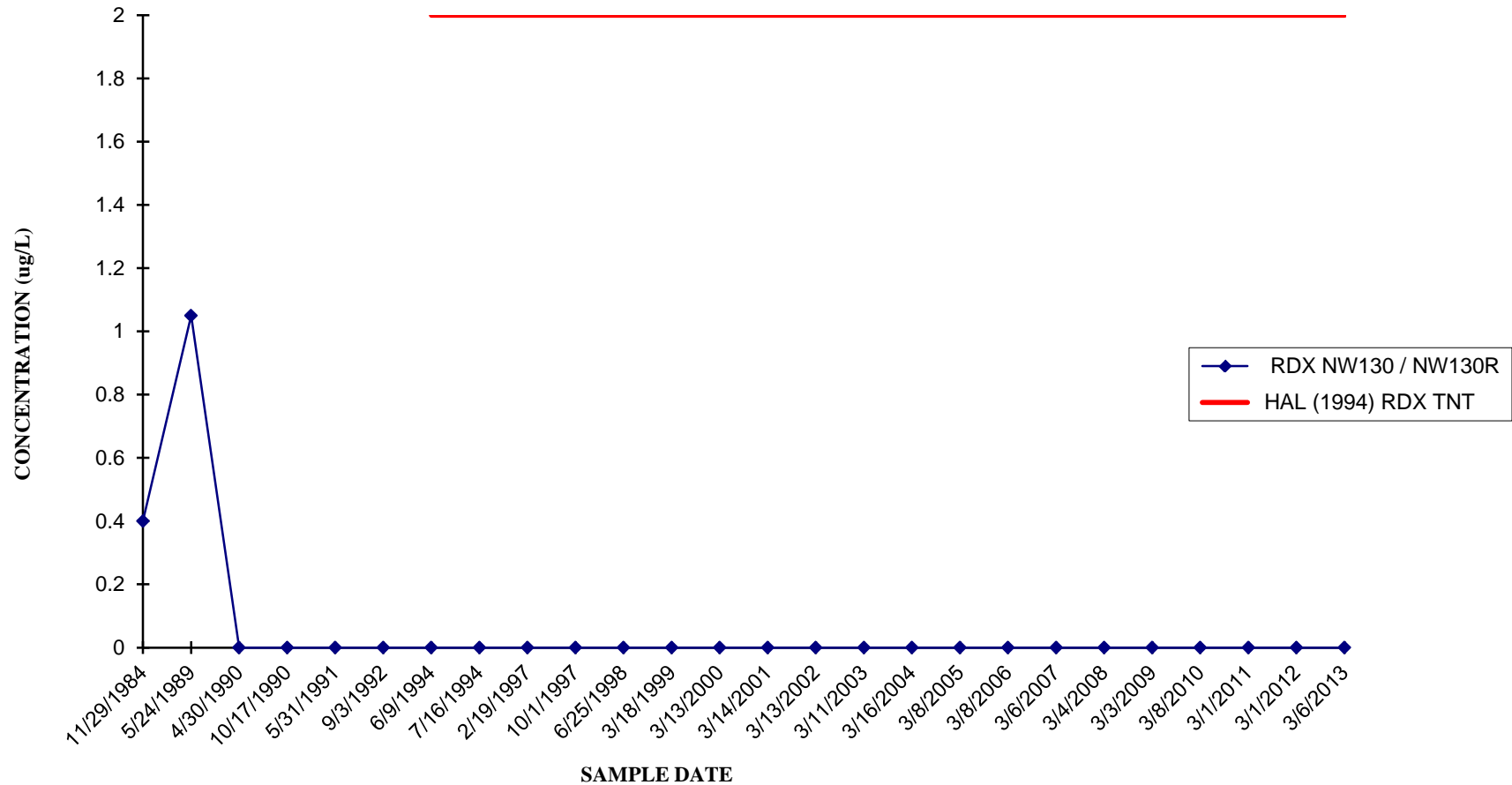
WELL NW121 - HMX



CORNHUSKER ARMY AMMUNITION PLANT WELL NW122 - RDX

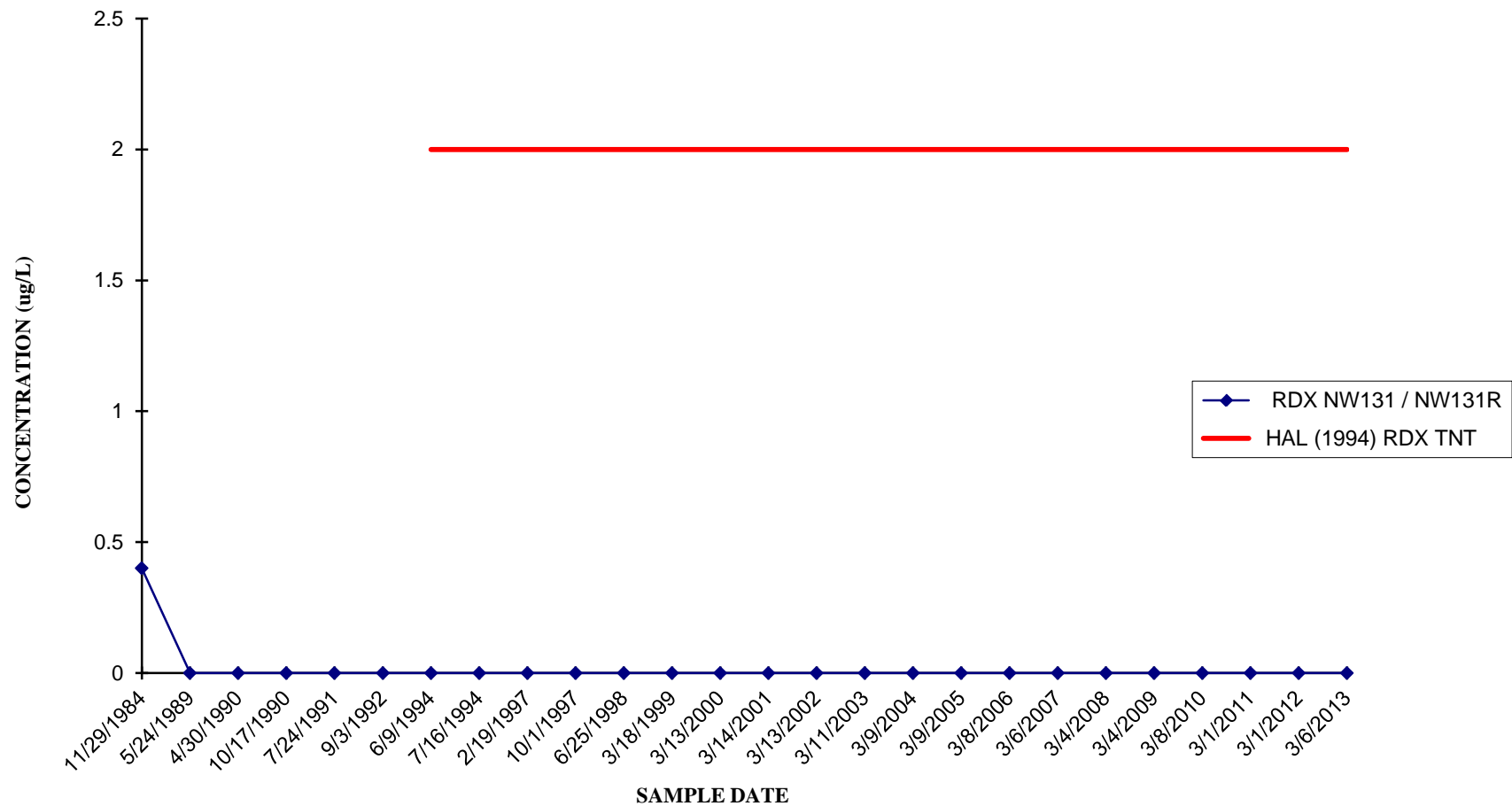


CORNHUSKER ARMY AMMUNITION PLANT WELL NW130/NW130R* - RDX



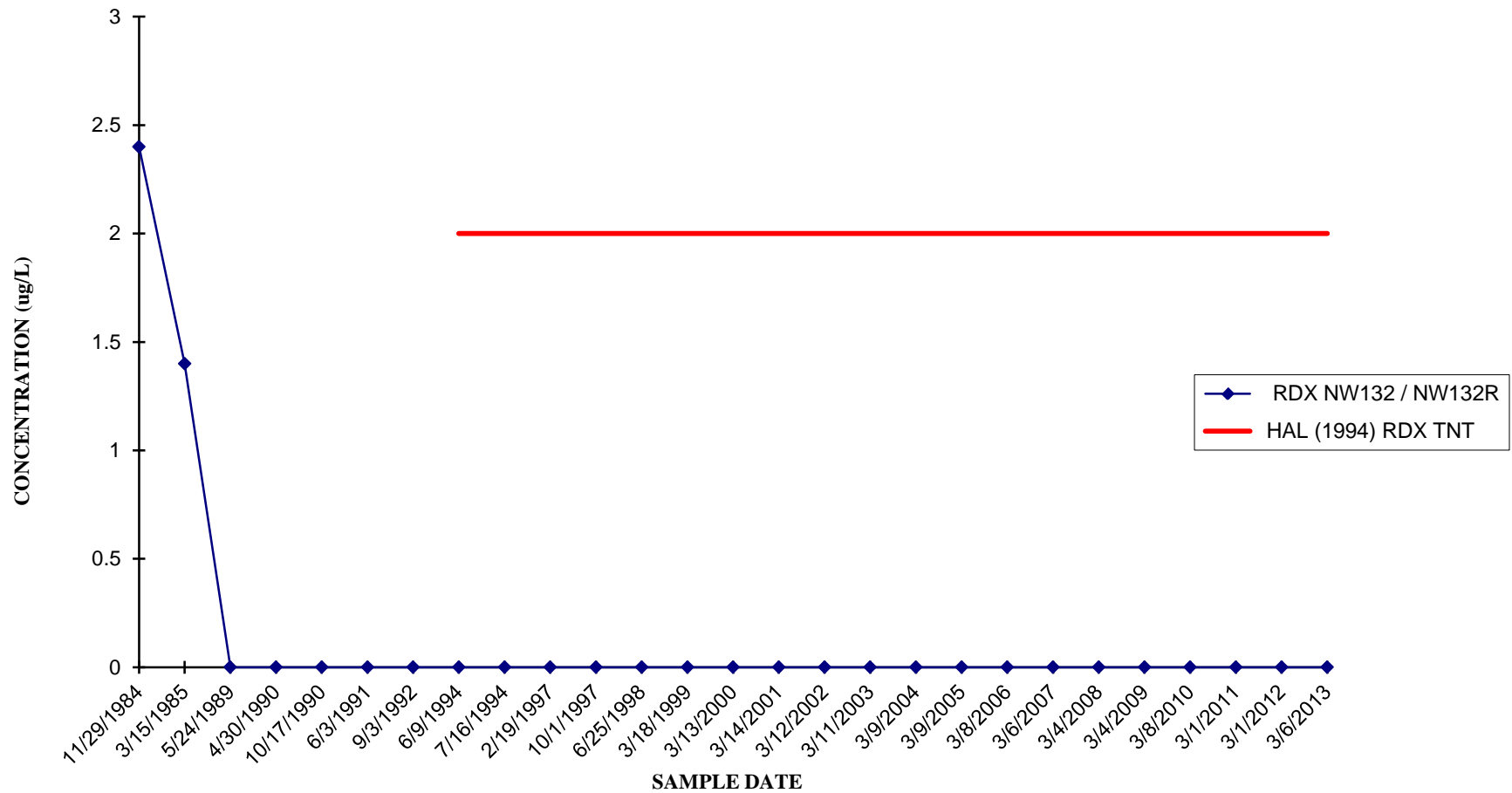
* Well NW130 was abandoned and replaced by well NW130R in February 2004.

CORNHUSKER ARMY AMMUNITION PLANT WELL NW131/NW131R* - RDX



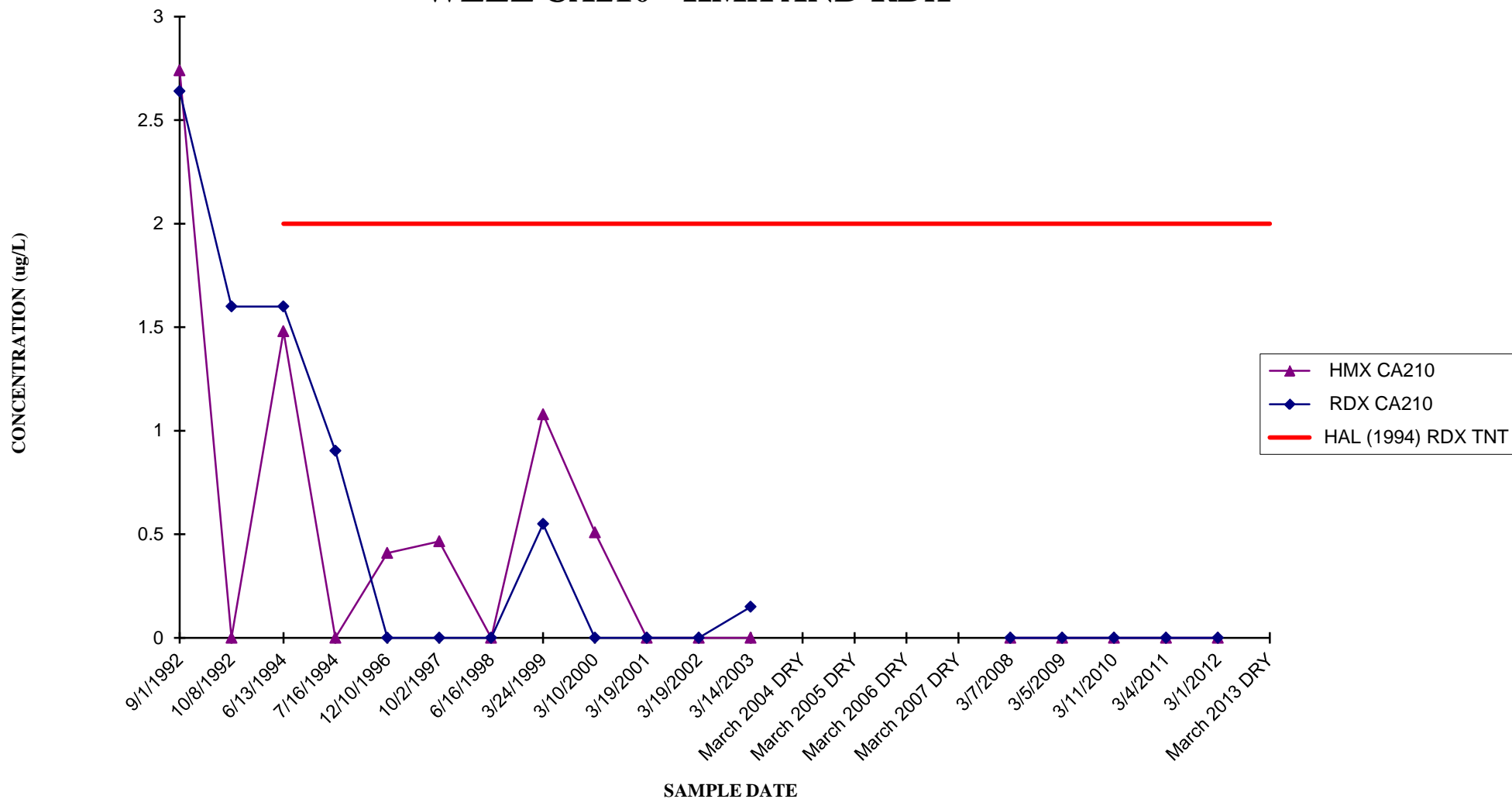
* Well NW131 was abandoned and replaced by well NW131R in February 2004.

CORNHUSKER ARMY AMMUNITION PLANT WELL NW132/NW132R* - RDX

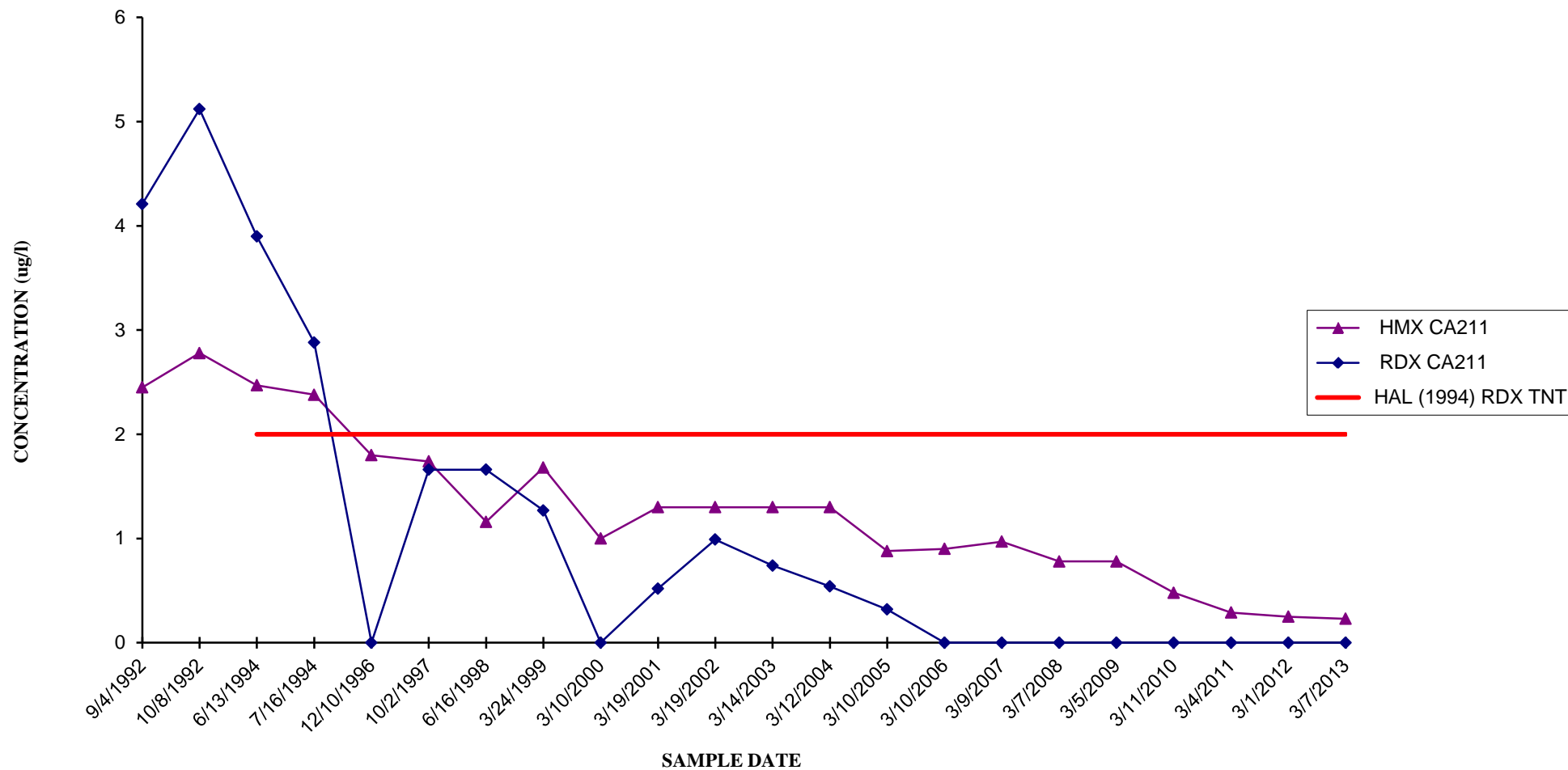


* Well NW132 was abandoned and replaced by well NW132R in February 2004.

CORNHUSKER ARMY AMMUNITION PLANT WELL CA210 - HMX AND RDX

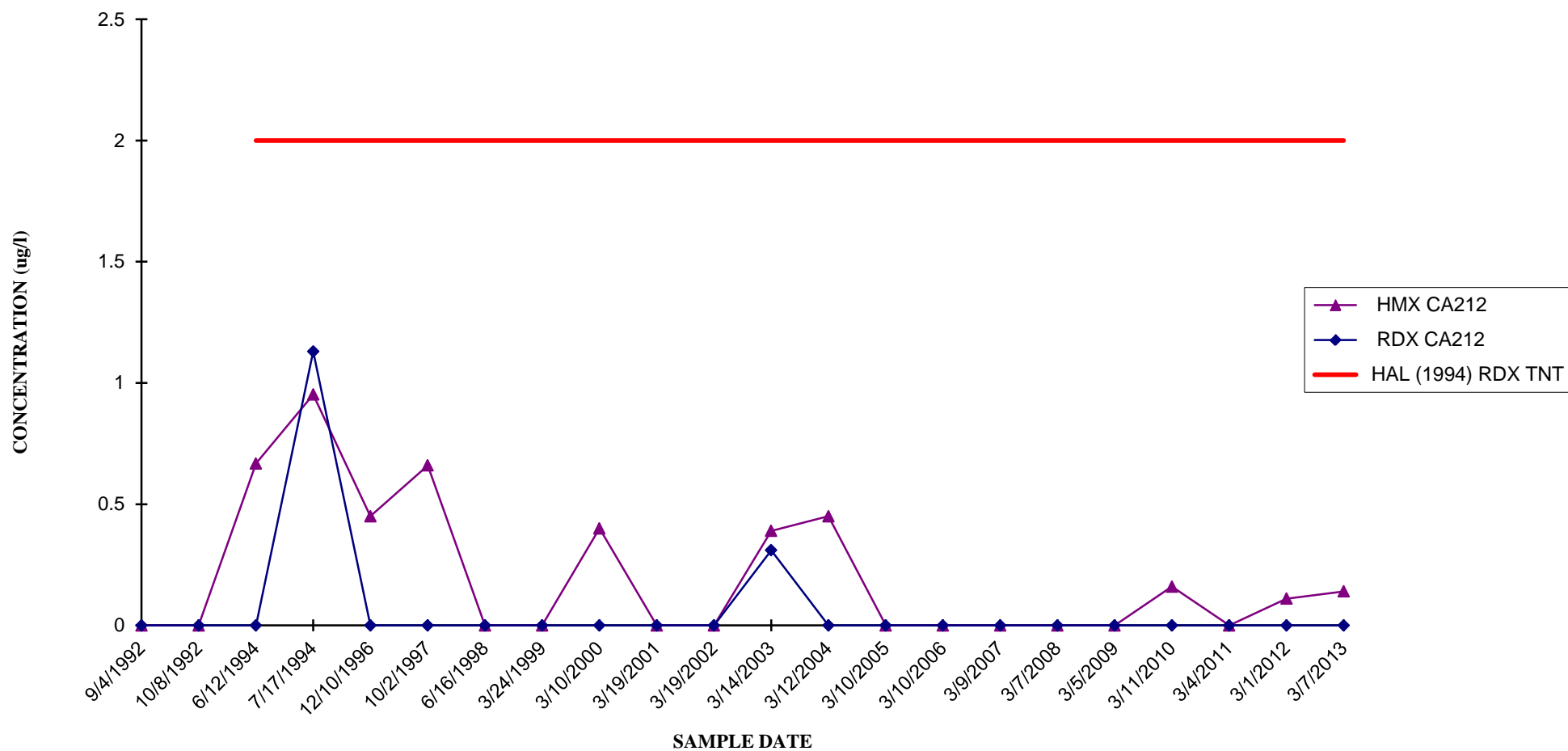


CORNHUSKER ARMY AMMUNITION PLANT WELL CA211 - HMX AND RDX

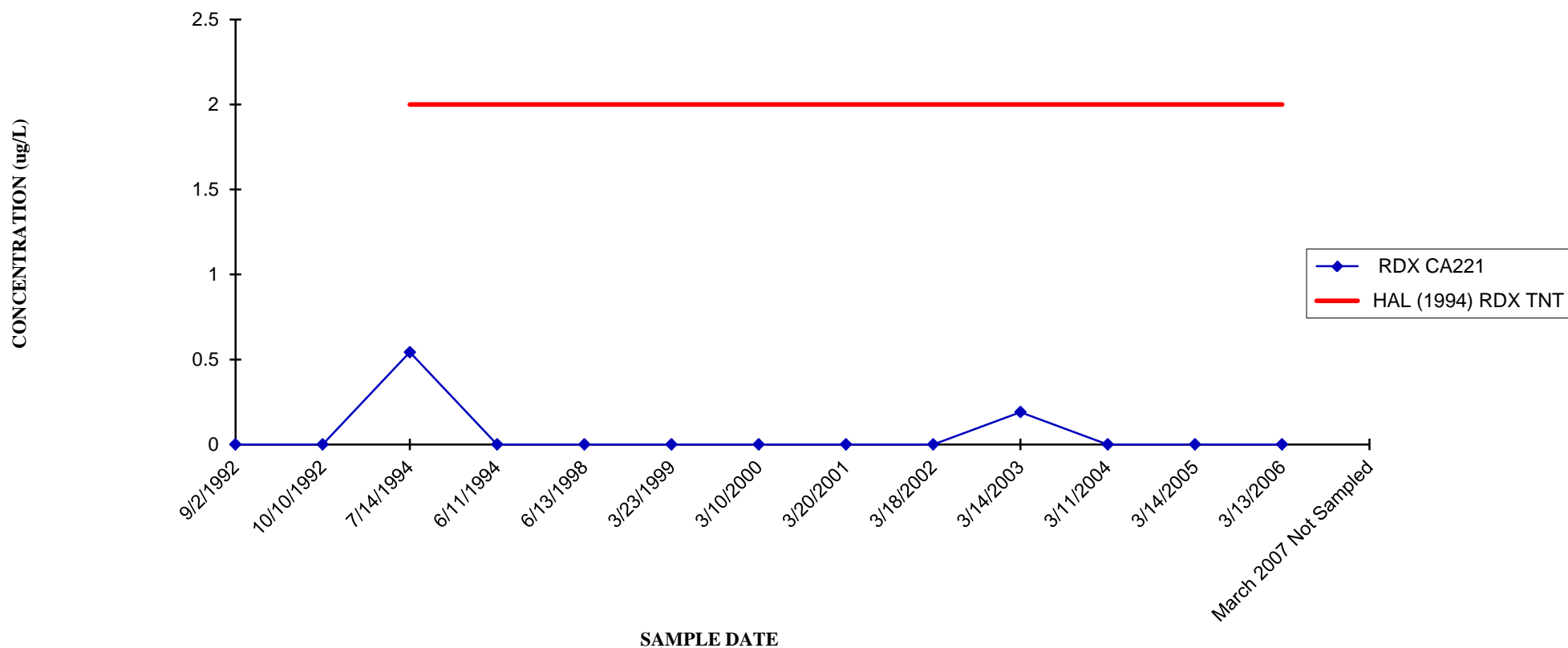


CORNHUSKER ARMY AMMUNITION PLANT

WELL CA212 - HMX AND RDX



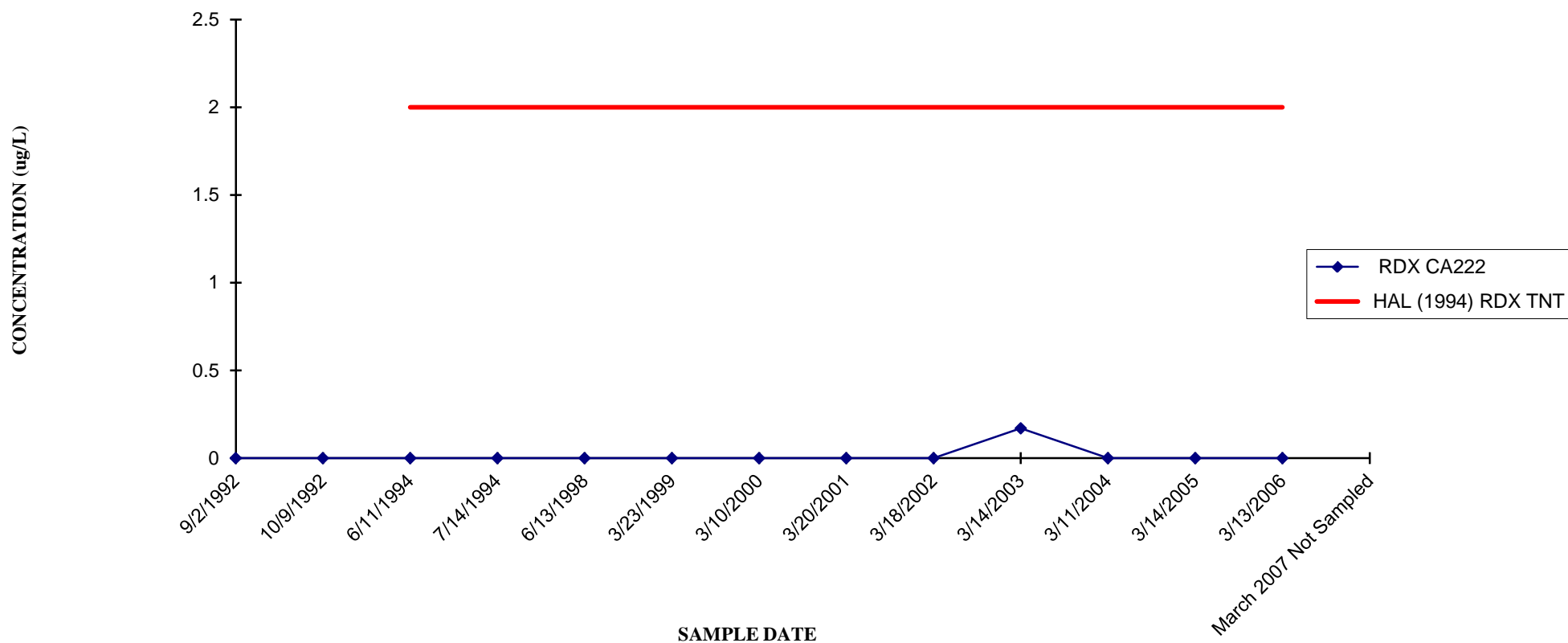
CORNHUSKER ARMY AMMUNITION PLANT WELL CA221 - RDX



NOTE: Well CA221 was abandoned in 2008.

CORNHUSKER ARMY AMMUNITION PLANT

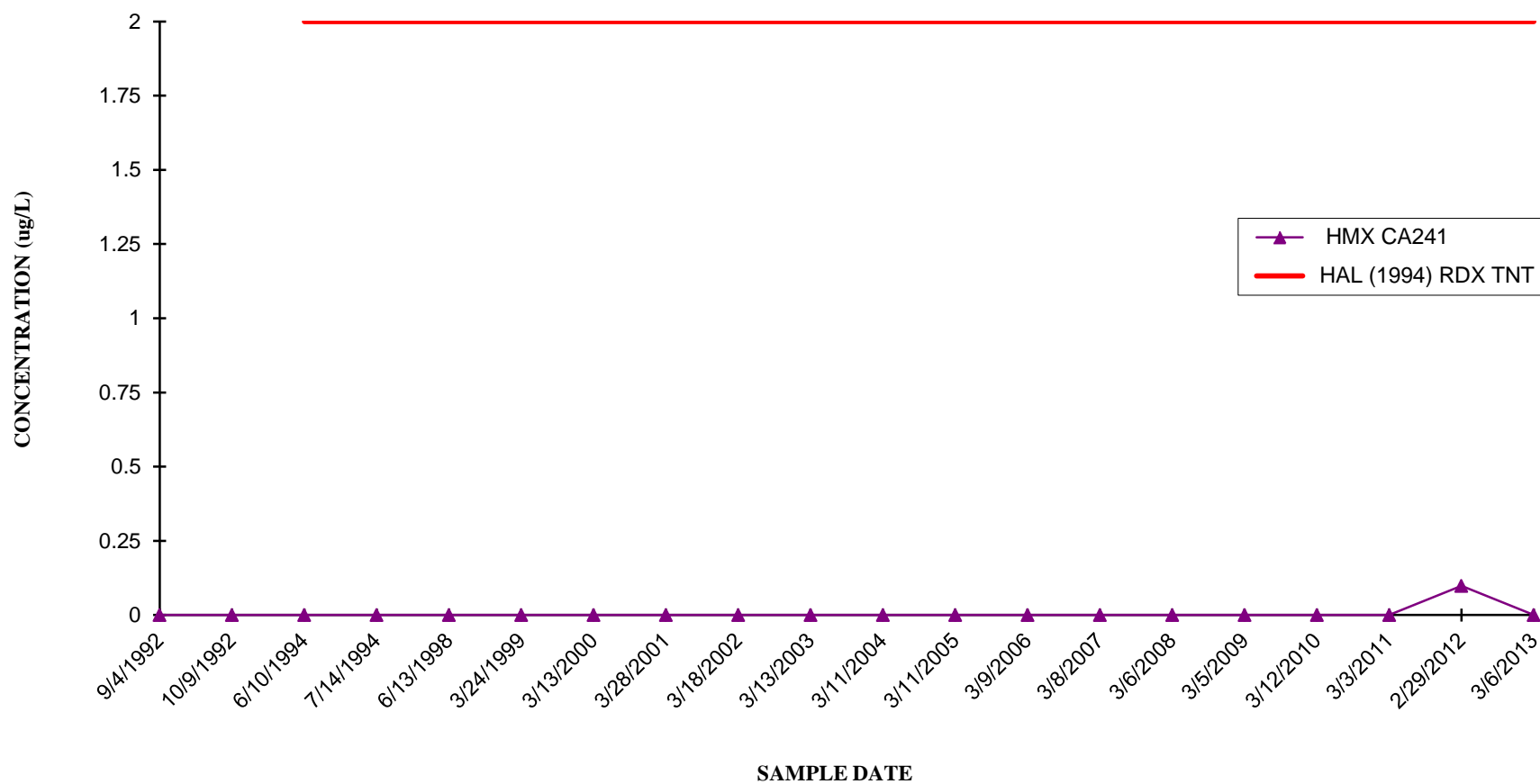
WELL CA222 - RDX



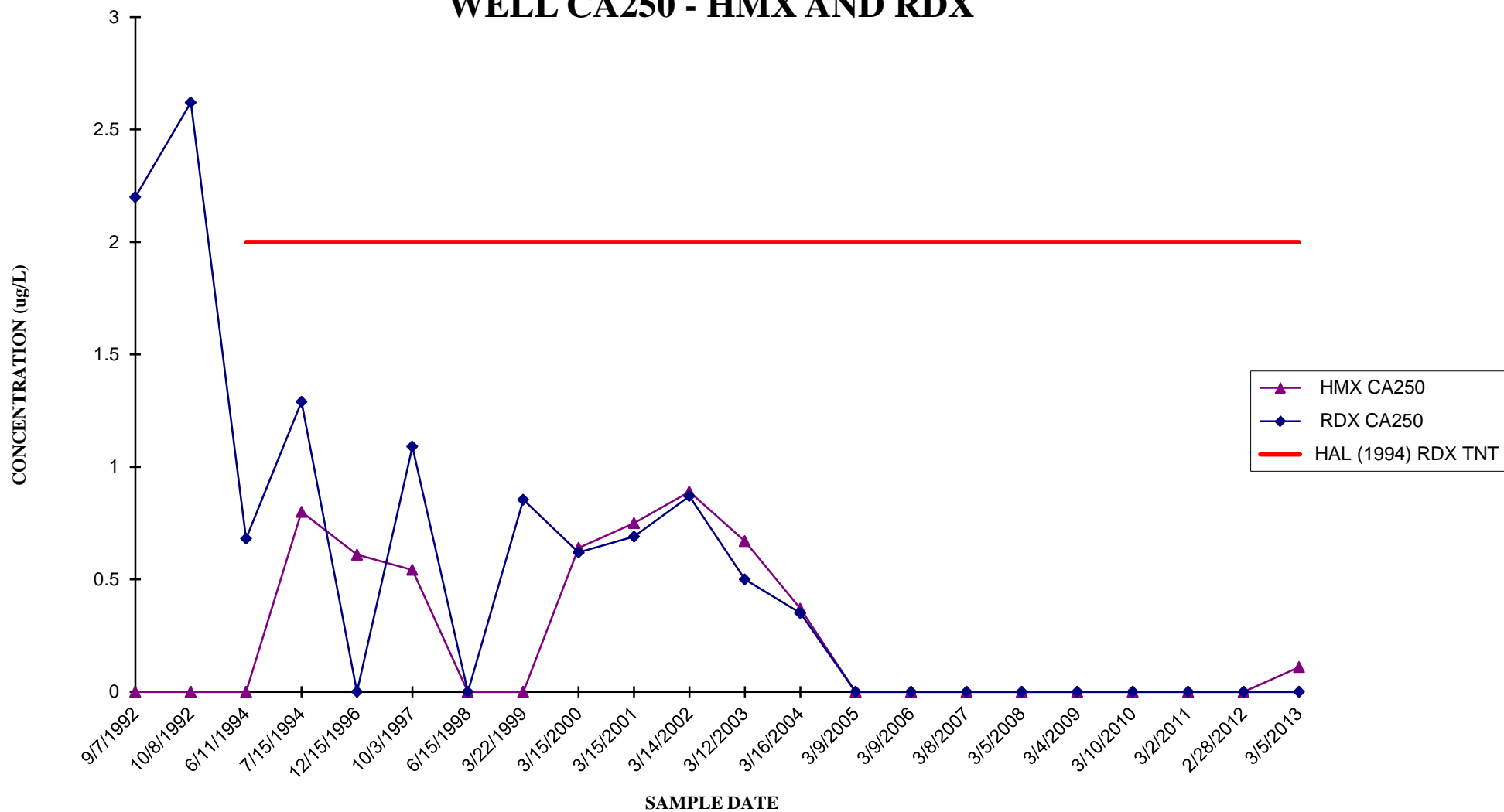
NOTE: Well CA222 was abandoned in 2008.

CORNHUSKER ARMY AMMUNITION PLANT

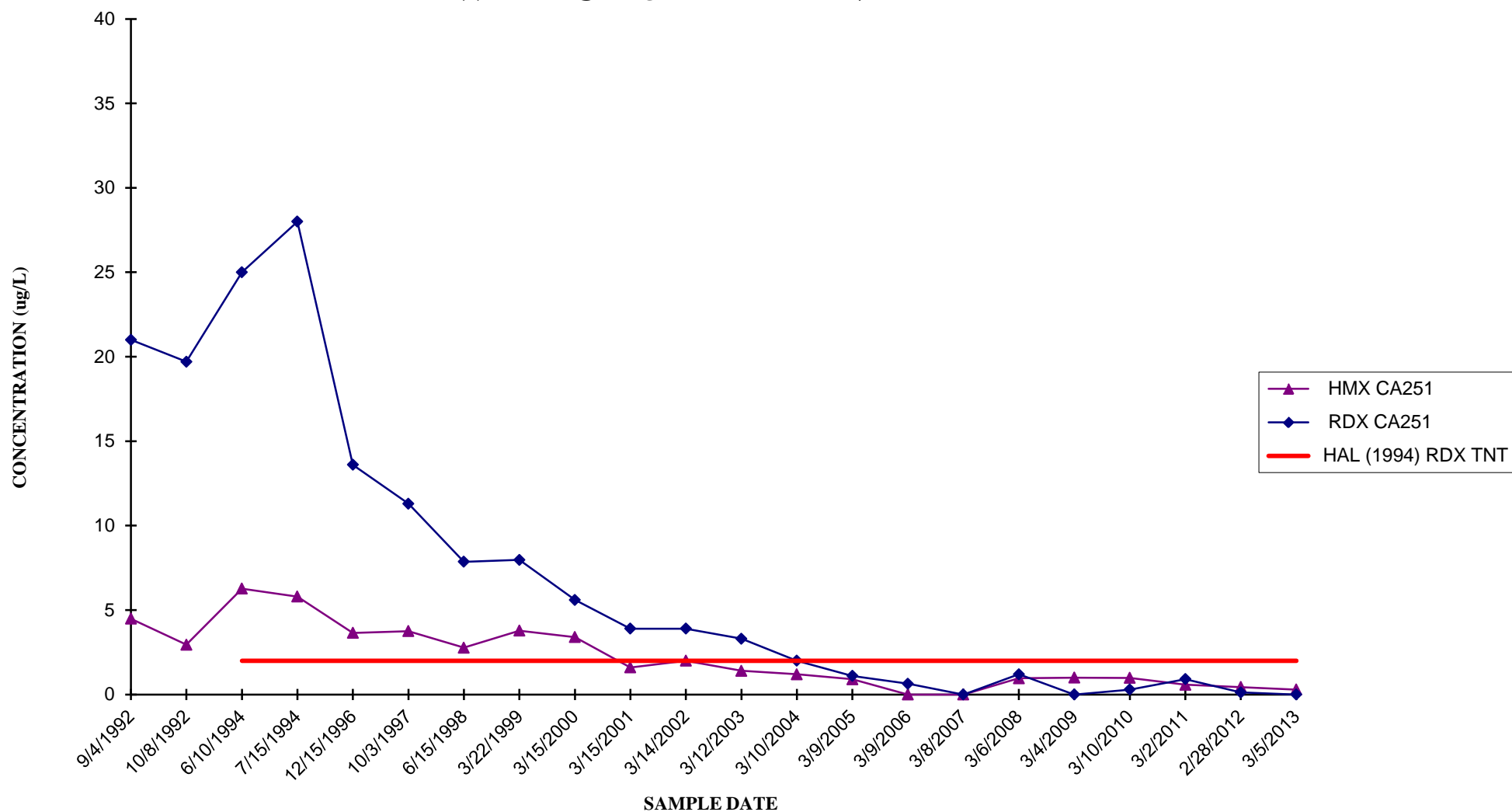
WELL CA241 - HMX



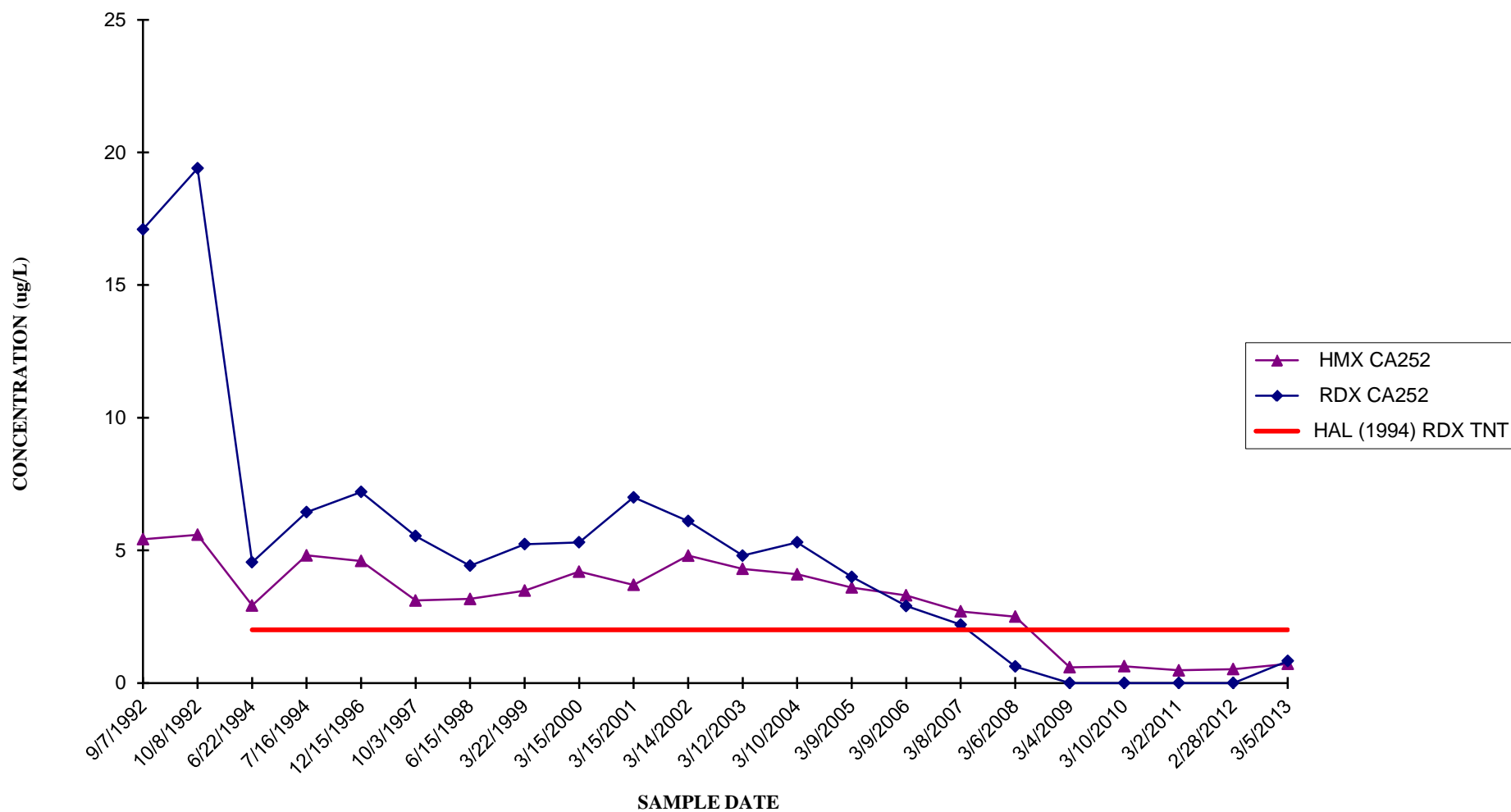
CORNHUSKER ARMY AMMUNITION PLANT WELL CA250 - HMX AND RDX



CORNHUSKER ARMY AMMUNITION PLANT WELL CA251 - HMX AND RDX

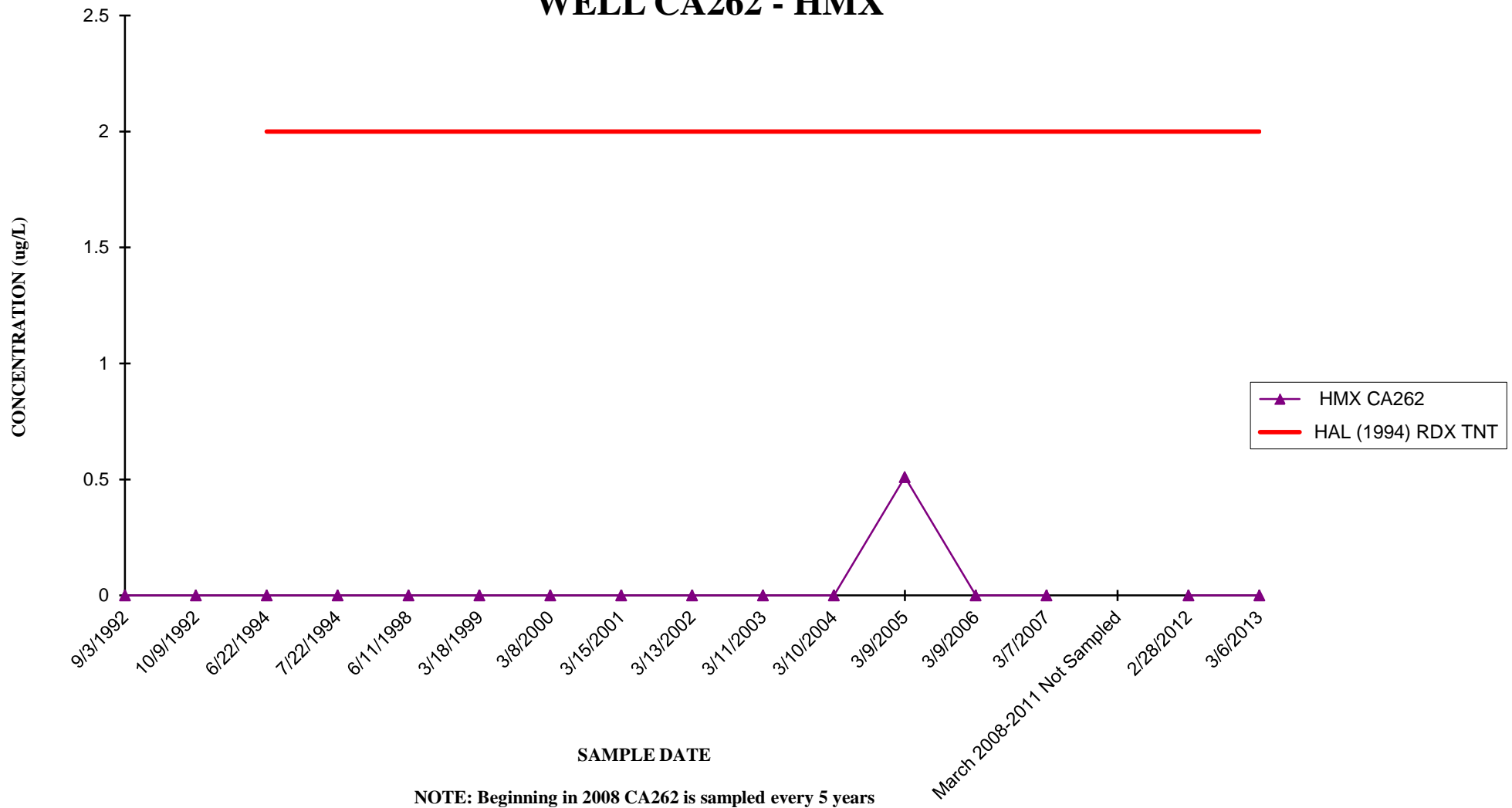


CORNHUSKER ARMY AMMUNITION PLANT WELL CA252 - HMX AND RDX



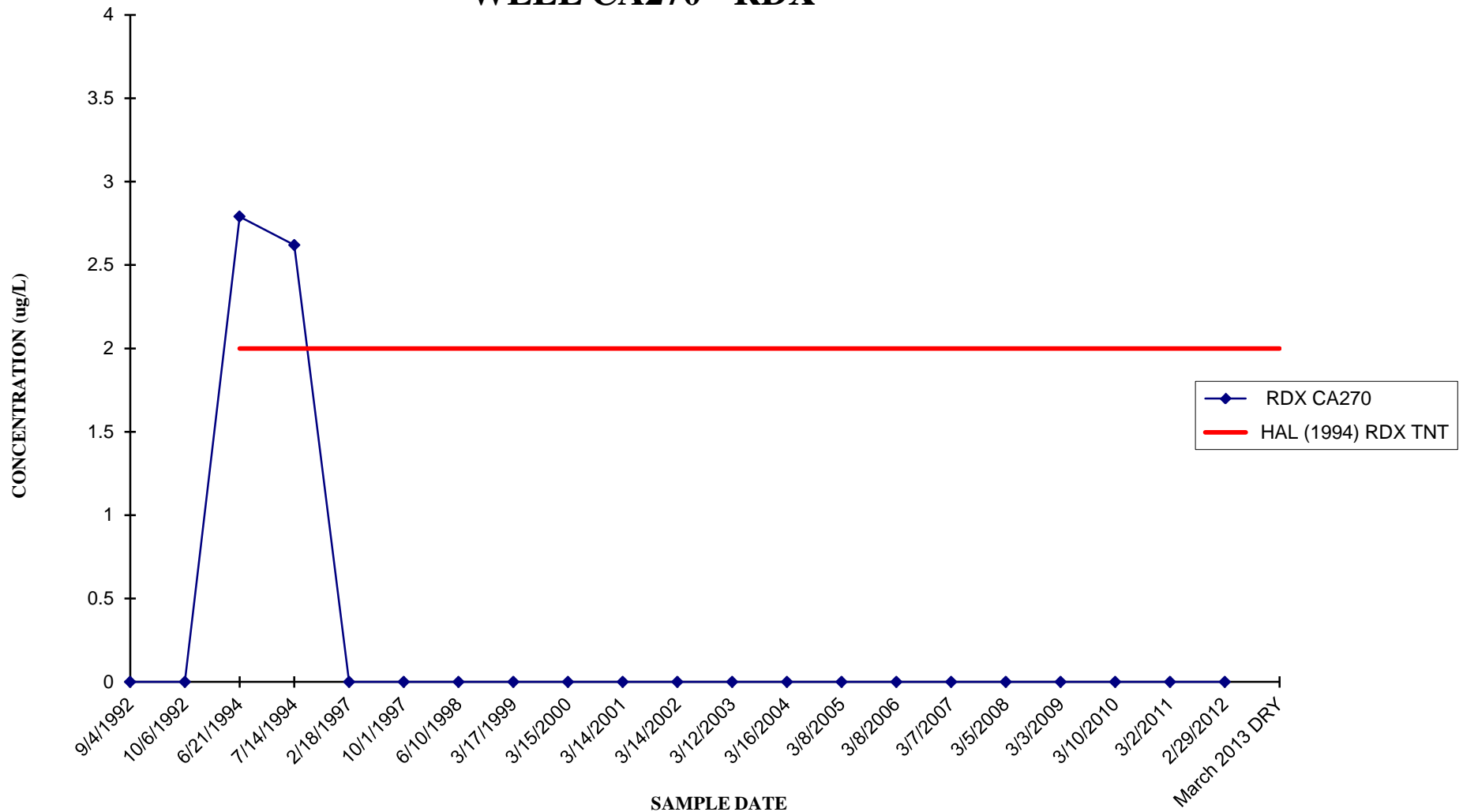
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA262 - HMX



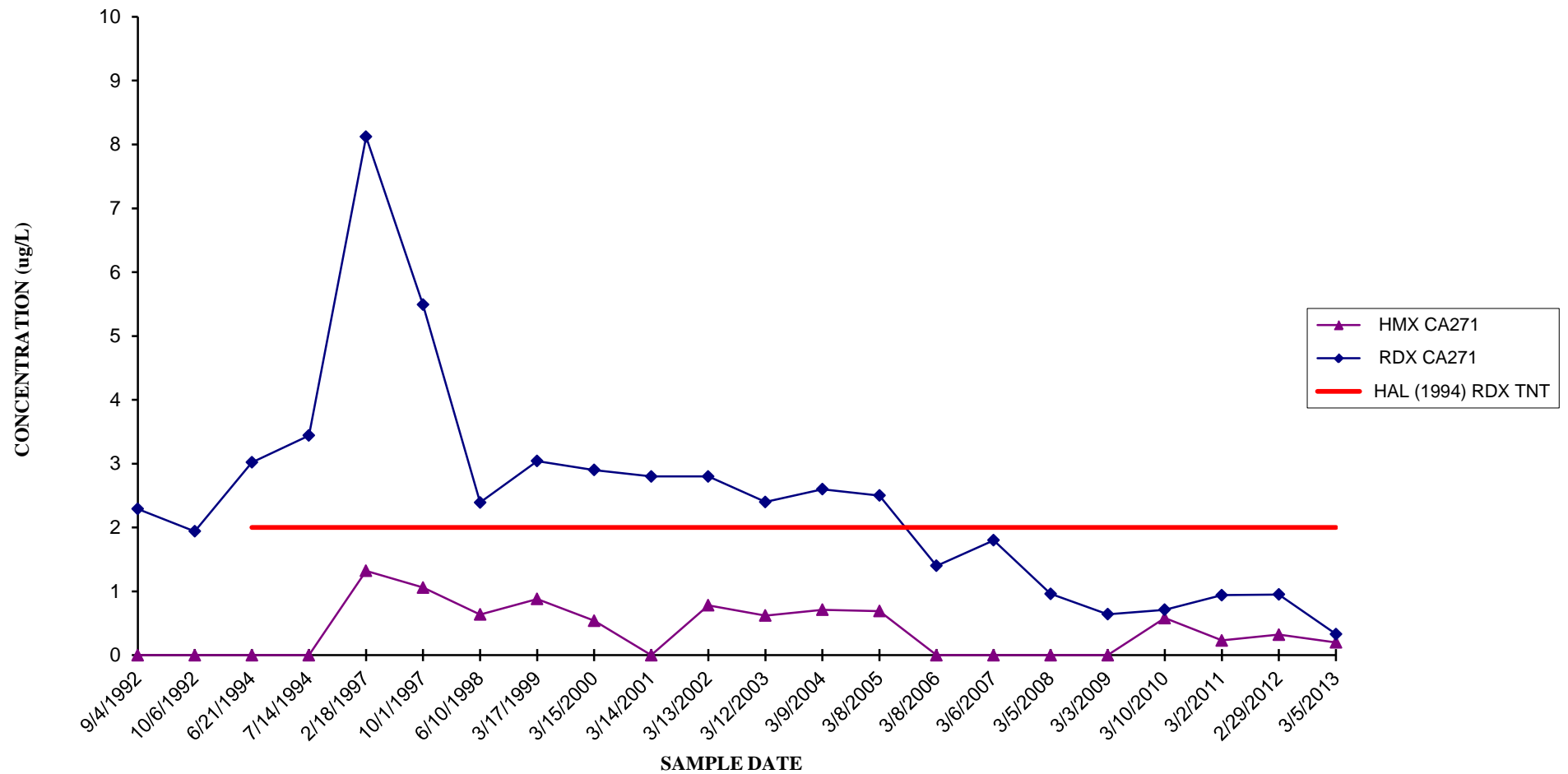
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA270 - RDX



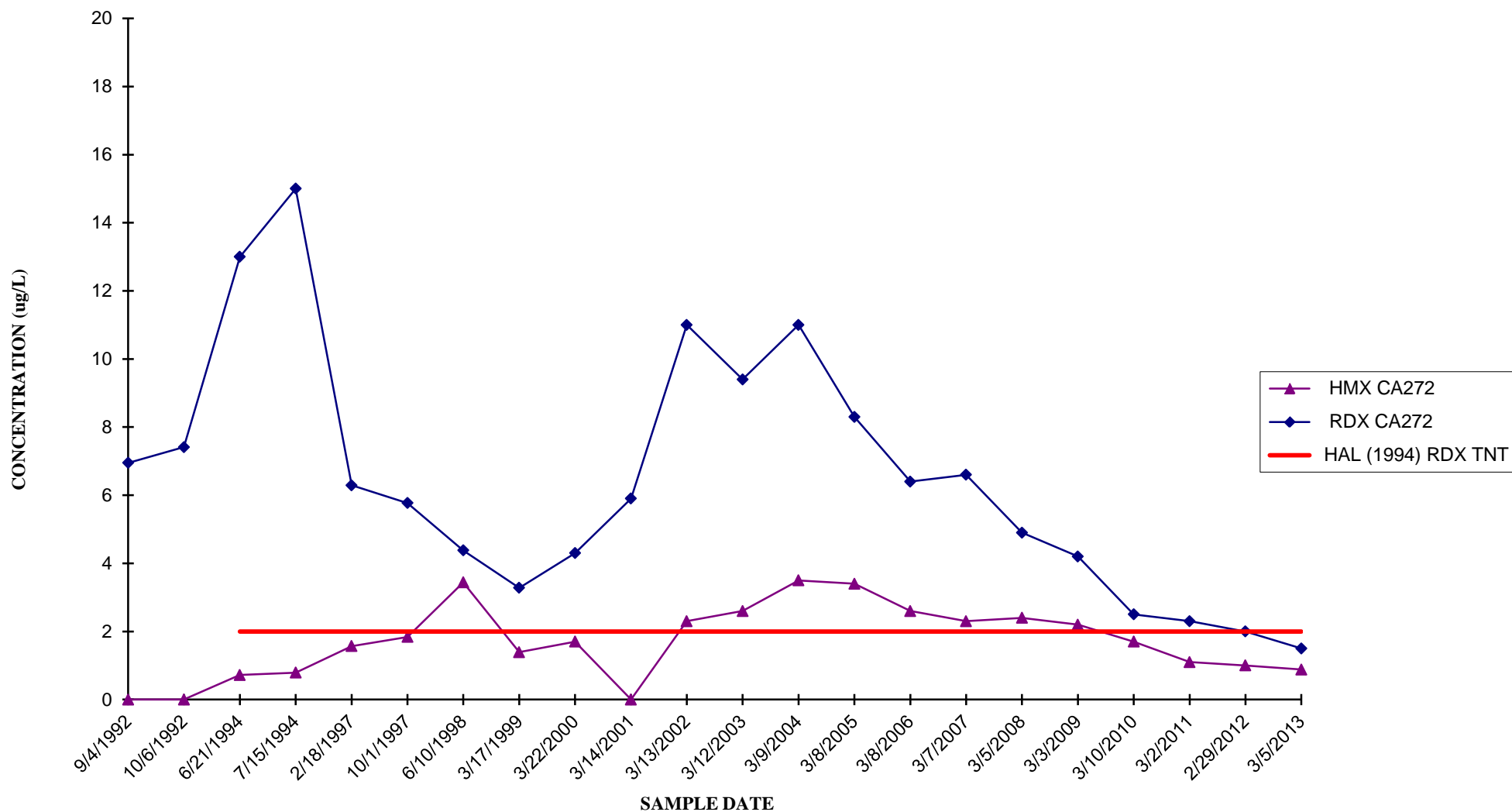
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA271 - HMX AND RDX



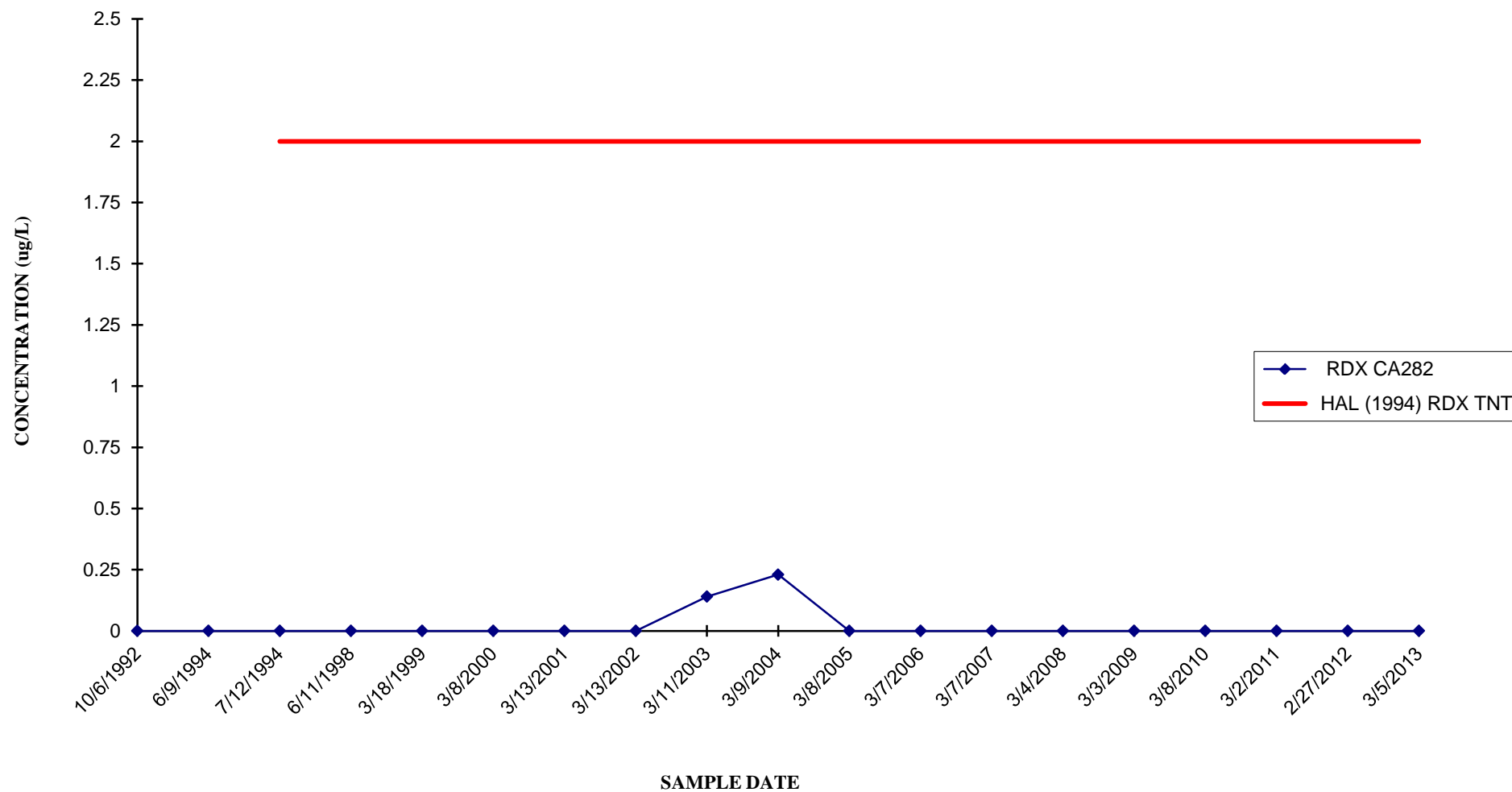
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA272 - HMX AND RDX



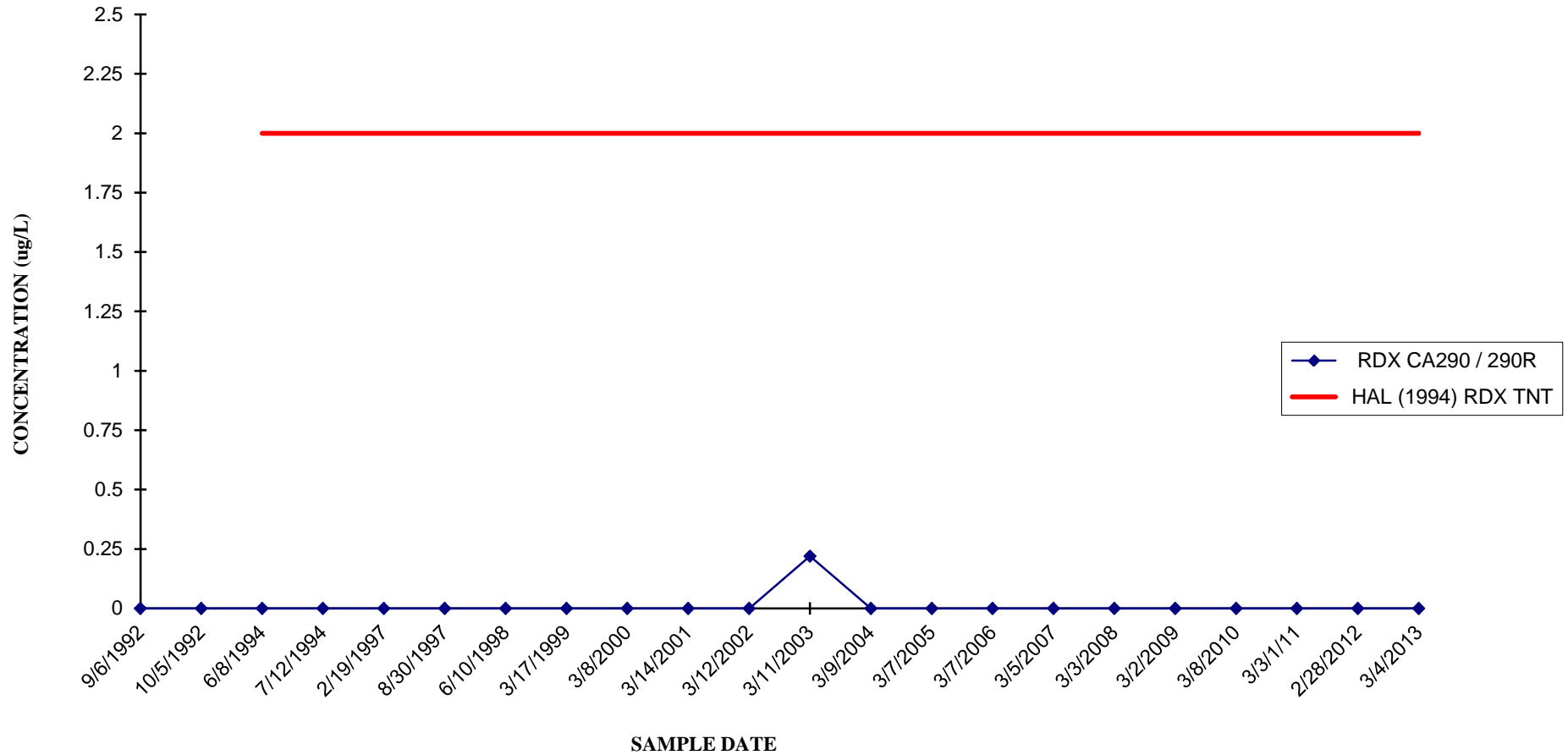
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA282 - RDX



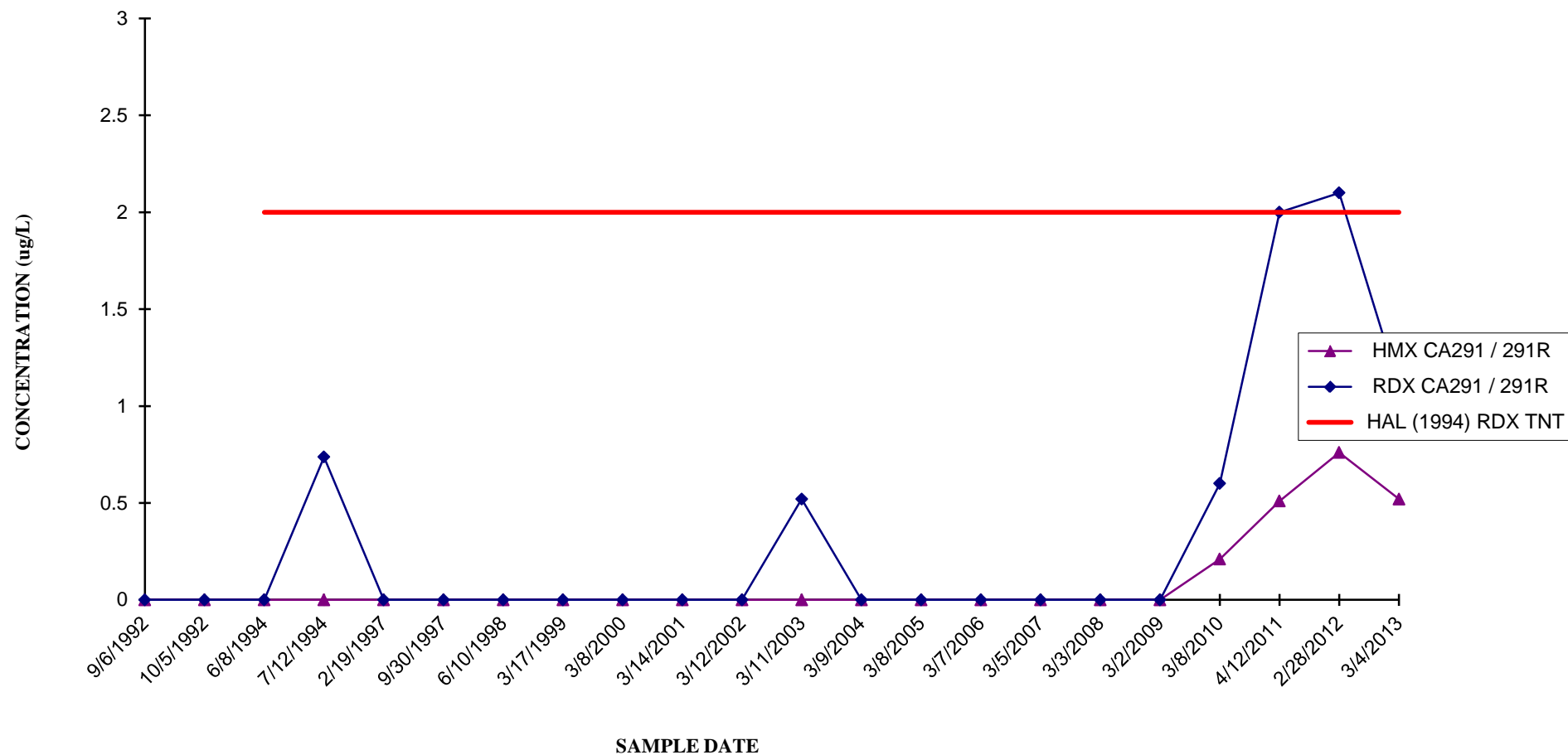
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA290/CA290R* - RDX



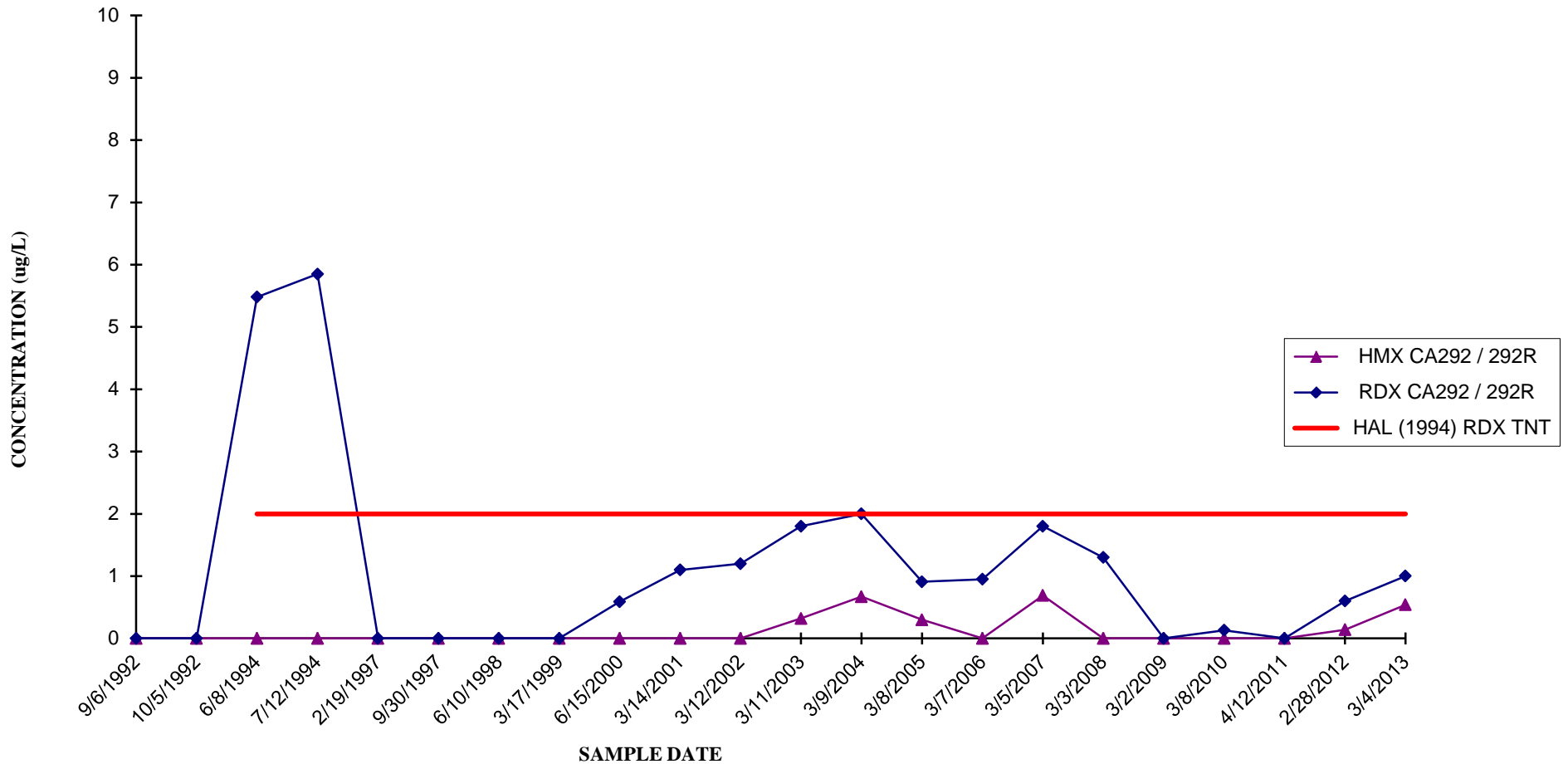
* Well CA290 was abandoned and replaced by well CA290R in February 2004.

CORNHUSKER ARMY AMMUNITION PLANT WELL CA291/CA291R* - HMX AND RDX



* Well CA291 was abandoned and replaced by well CA291R in February 2004.

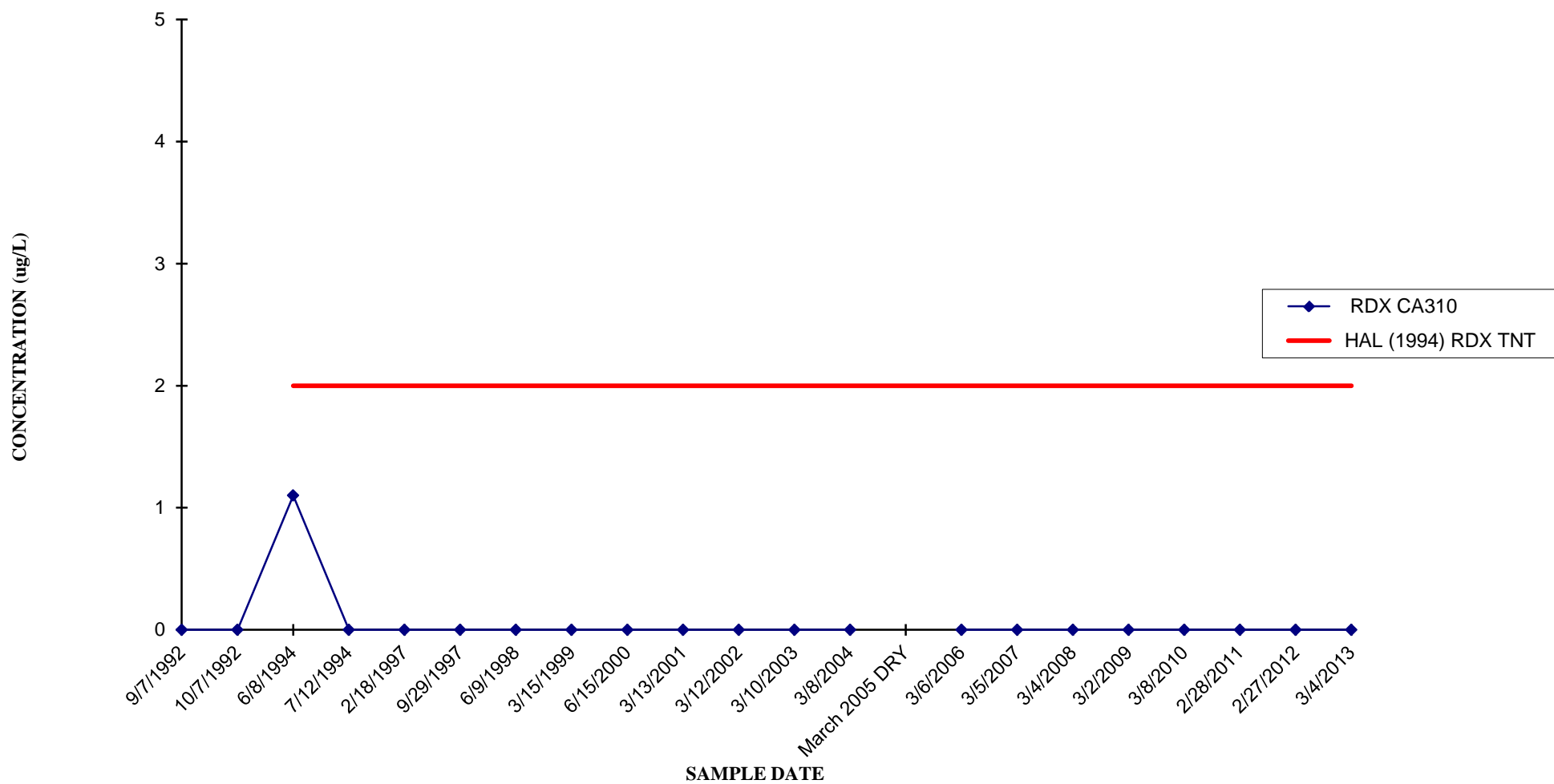
CORNHUSKER ARMY AMMUNITION PLANT WELL CA292/CA292R* - HMX AND RDX



* Well CA292 was abandoned and replaced by well CA292R in February 2004.

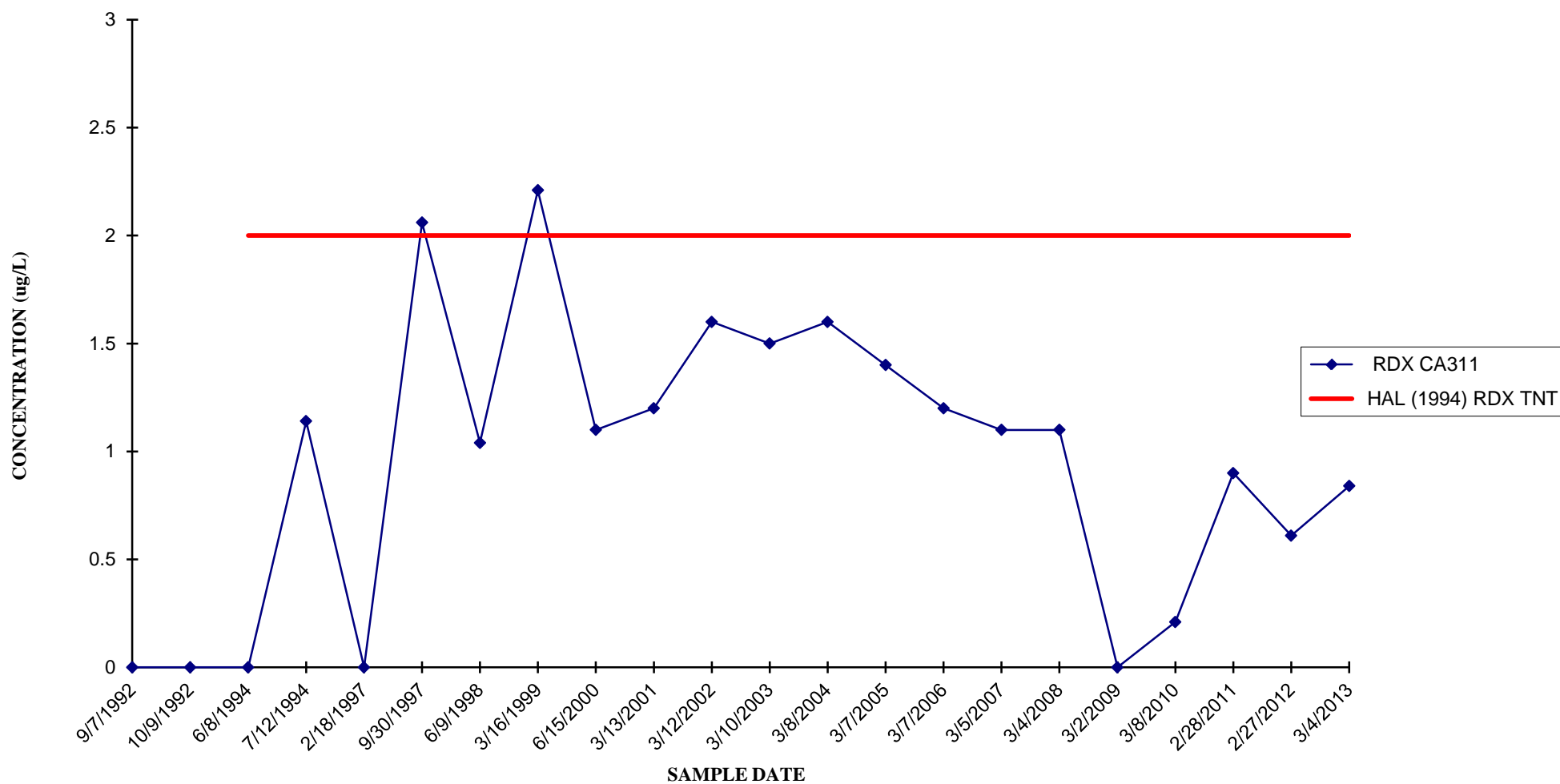
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA310 - RDX

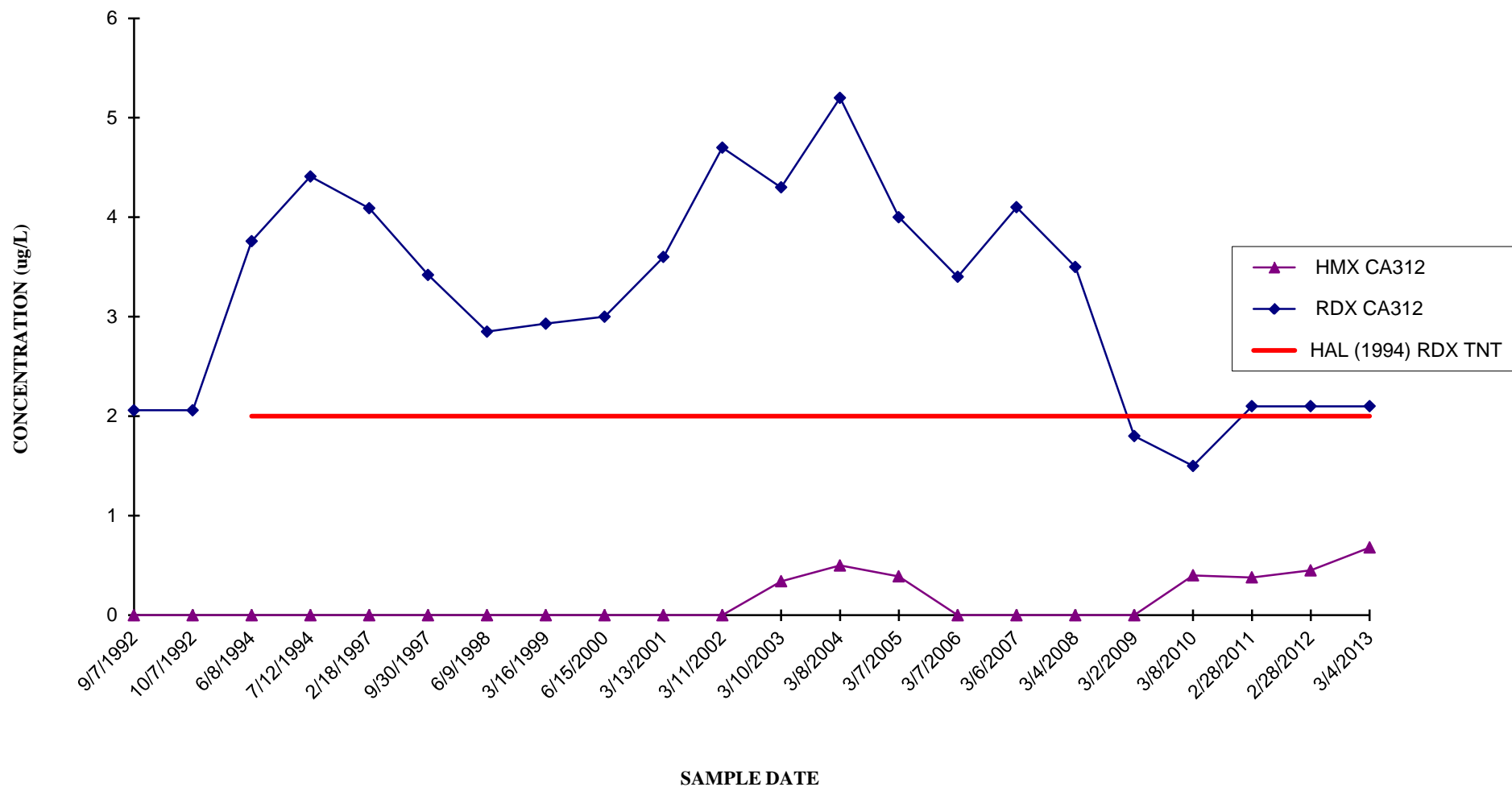


CORNHUSKER ARMY AMMUNITION PLANT

WELL CA311 - RDX

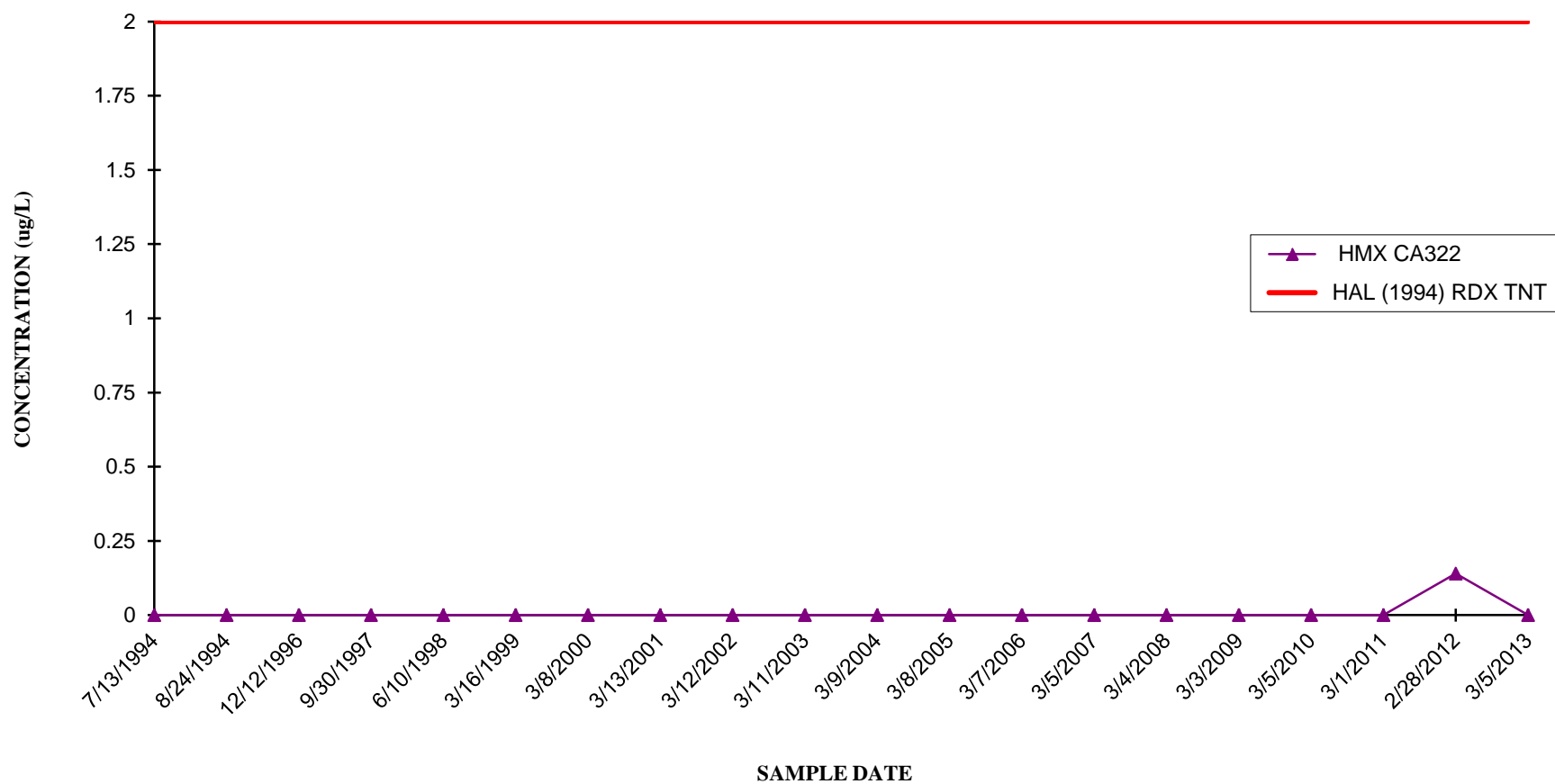


CORNHUSKER ARMY AMMUNITION PLANT WELL CA312 - HMX AND RDX



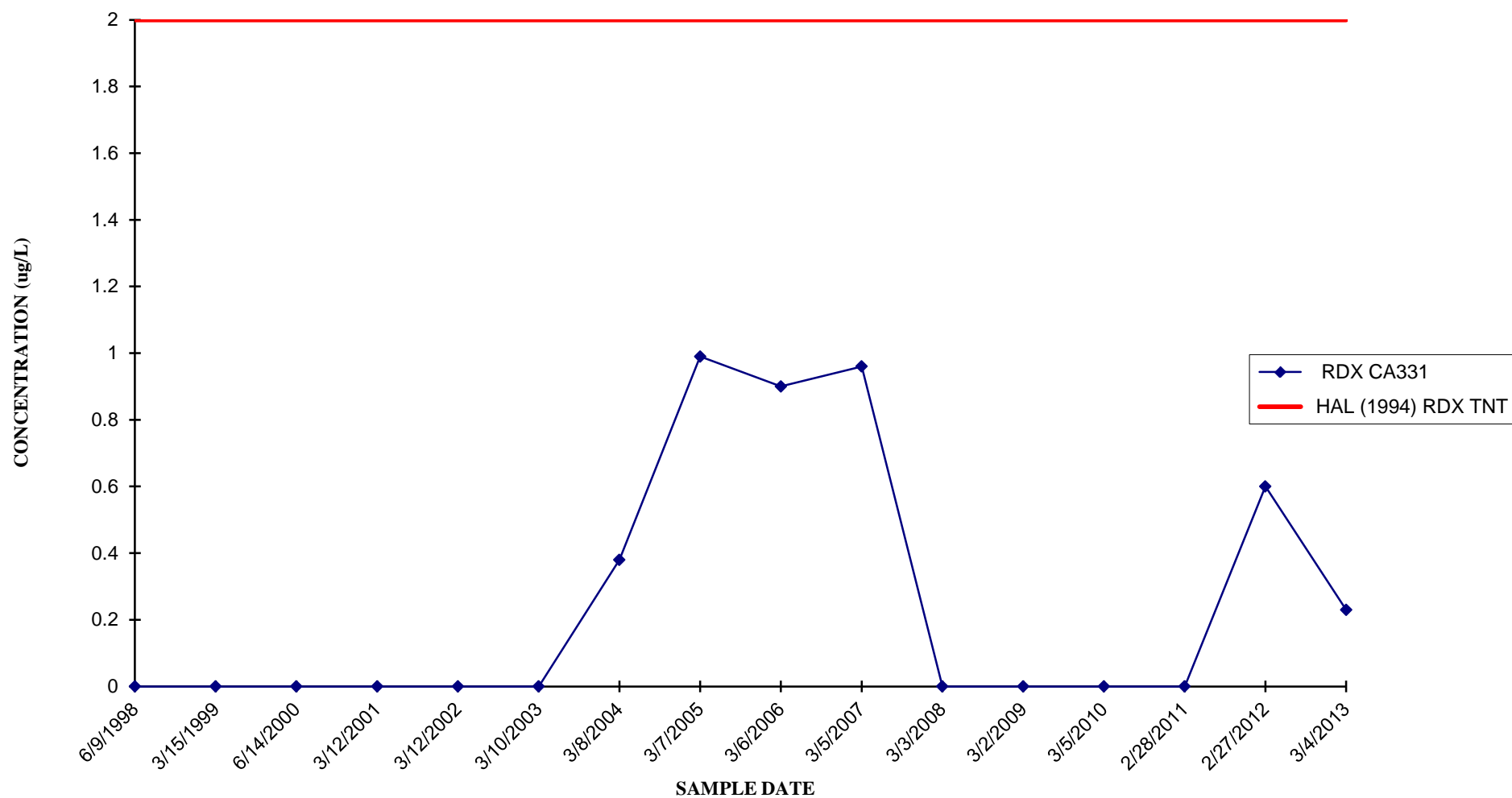
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA322 - HMX

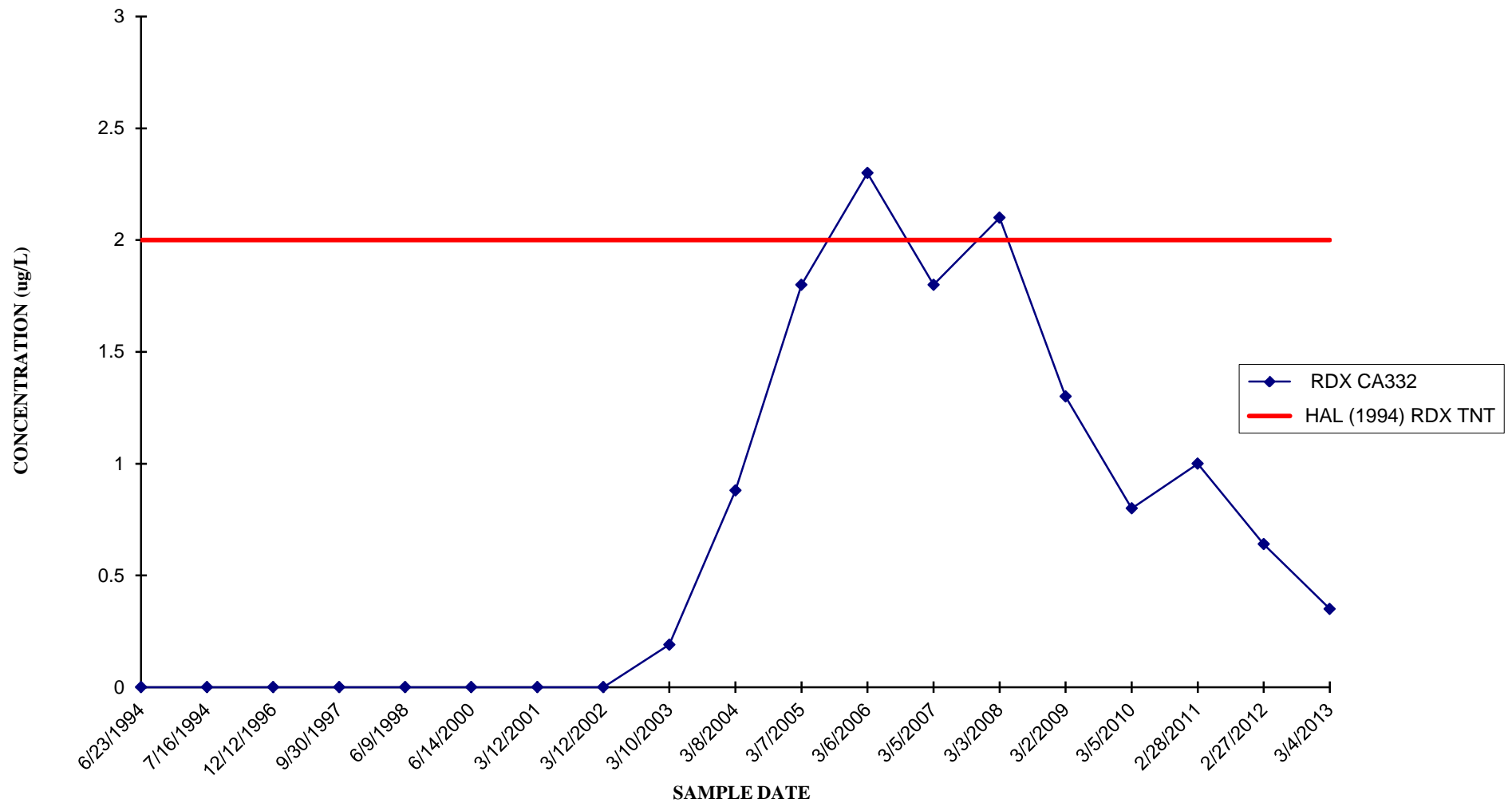


CORNHUSKER ARMY AMMUNITION PLANT

WELL CA331 - RDX

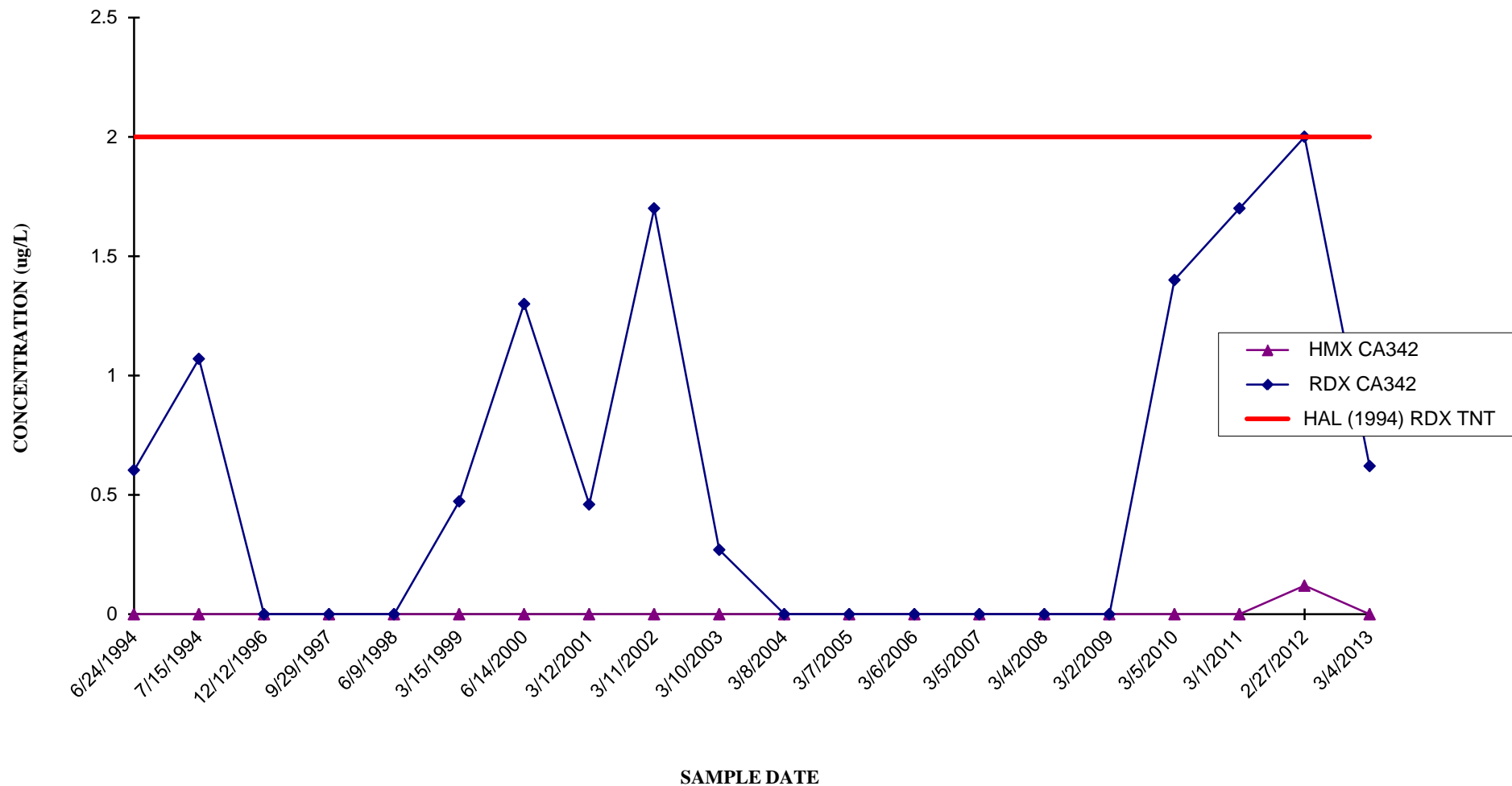


CORNHUSKER ARMY AMMUNITION PLANT WELL CA332 - RDX

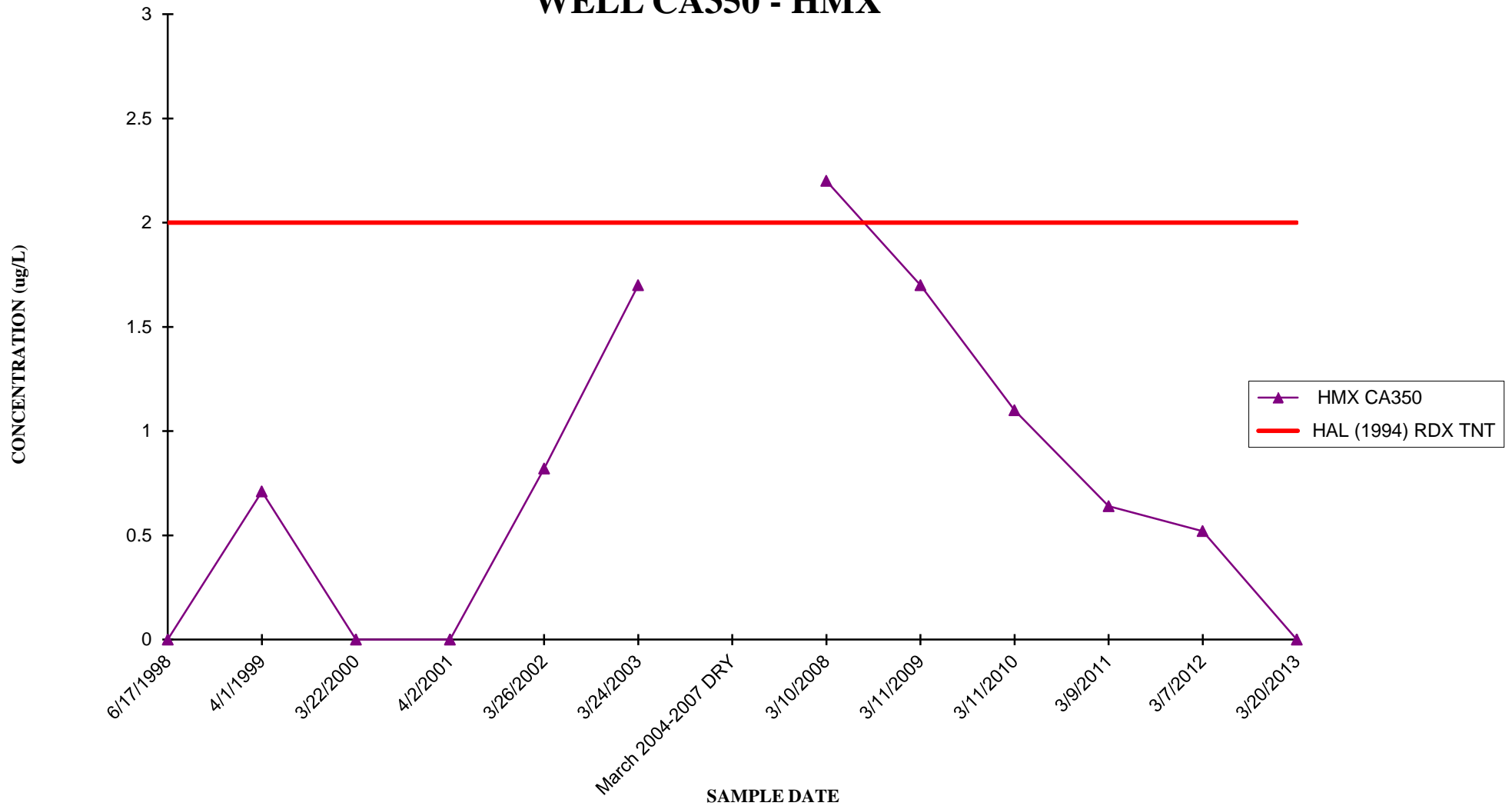


CORNHUSKER ARMY AMMUNITION PLANT

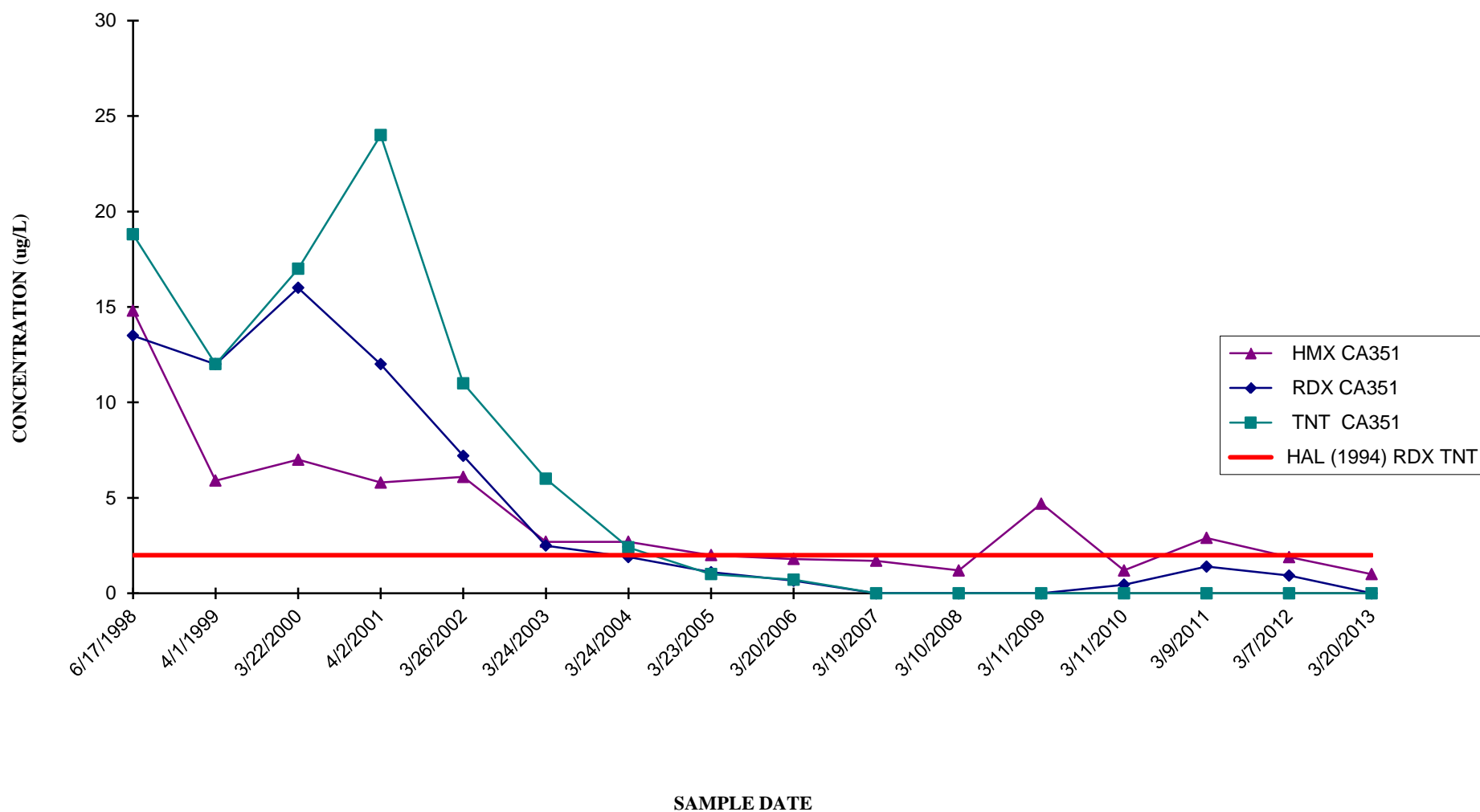
WELL CA342 - HMX AND RDX



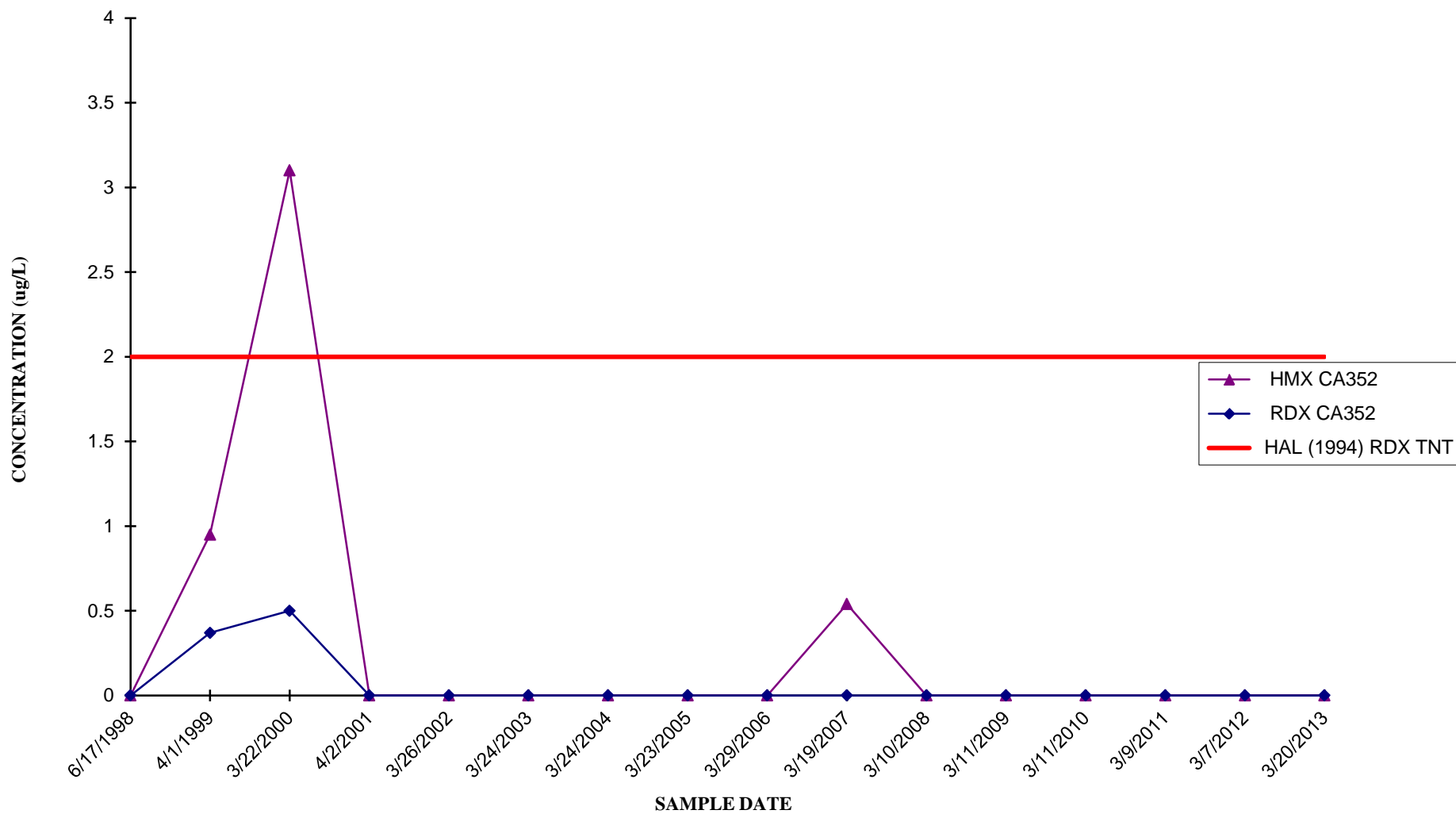
CORNHUSKER ARMY AMMUNITION PLANT WELL CA350 - HMX



CORNHUSKER ARMY AMMUNITION PLANT WELL CA351 - HMX, RDX, AND TNT

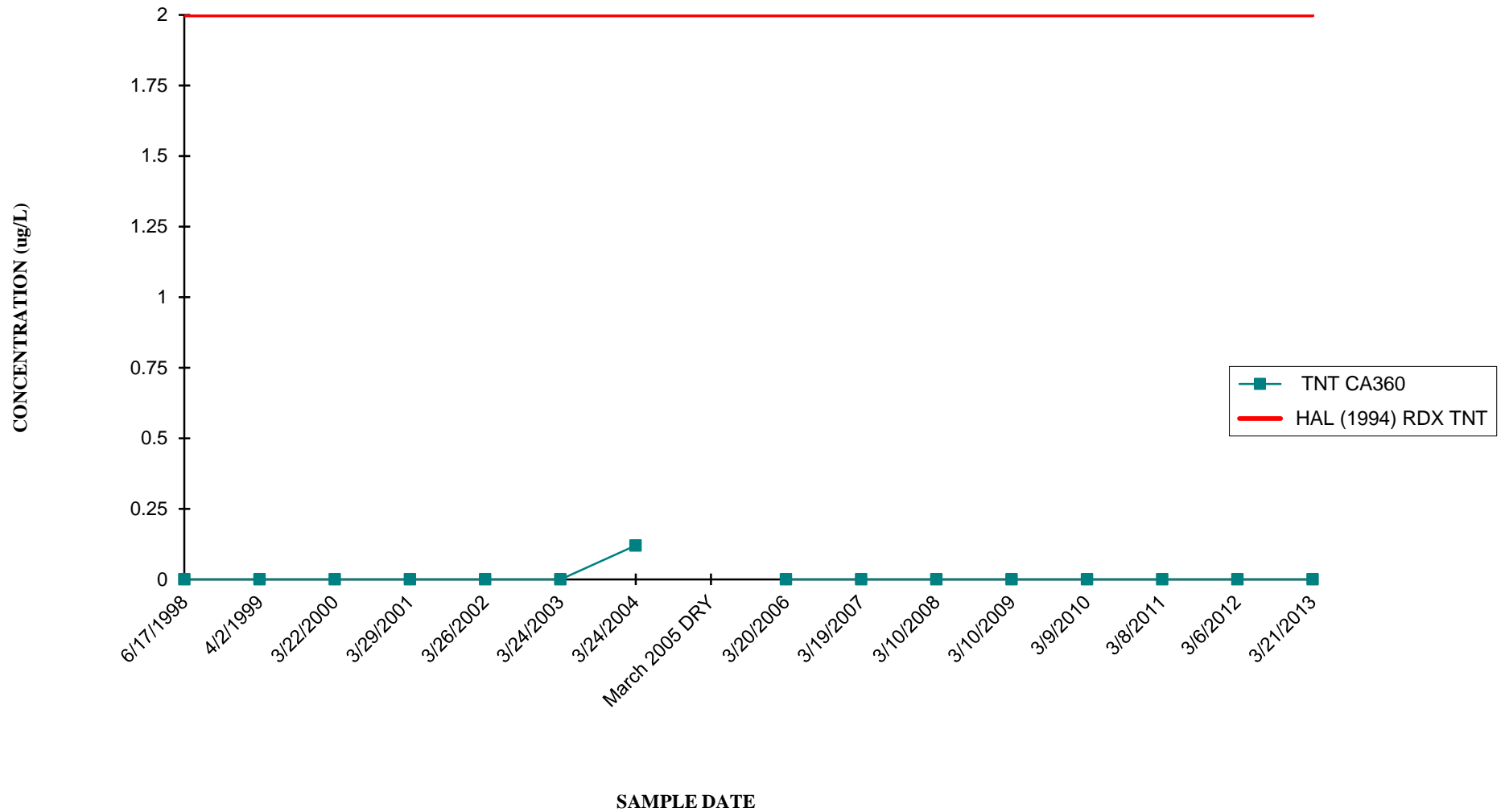


CORNHUSKER ARMY AMMUNITION PLANT WELL CA352 - HMX AND RDX



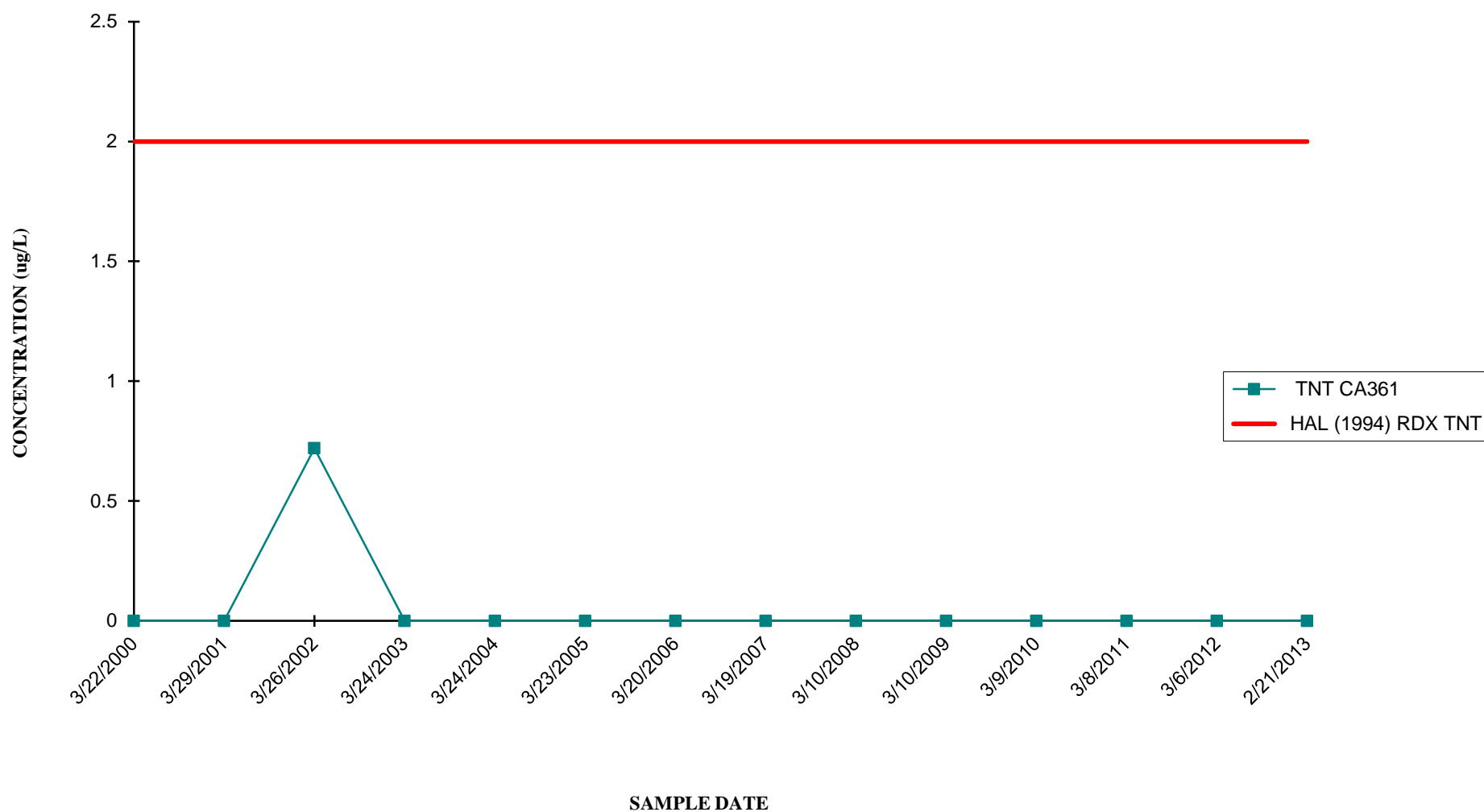
CORNHUSKER ARMY AMMUNITION PLANT

WELL CA360 - TNT

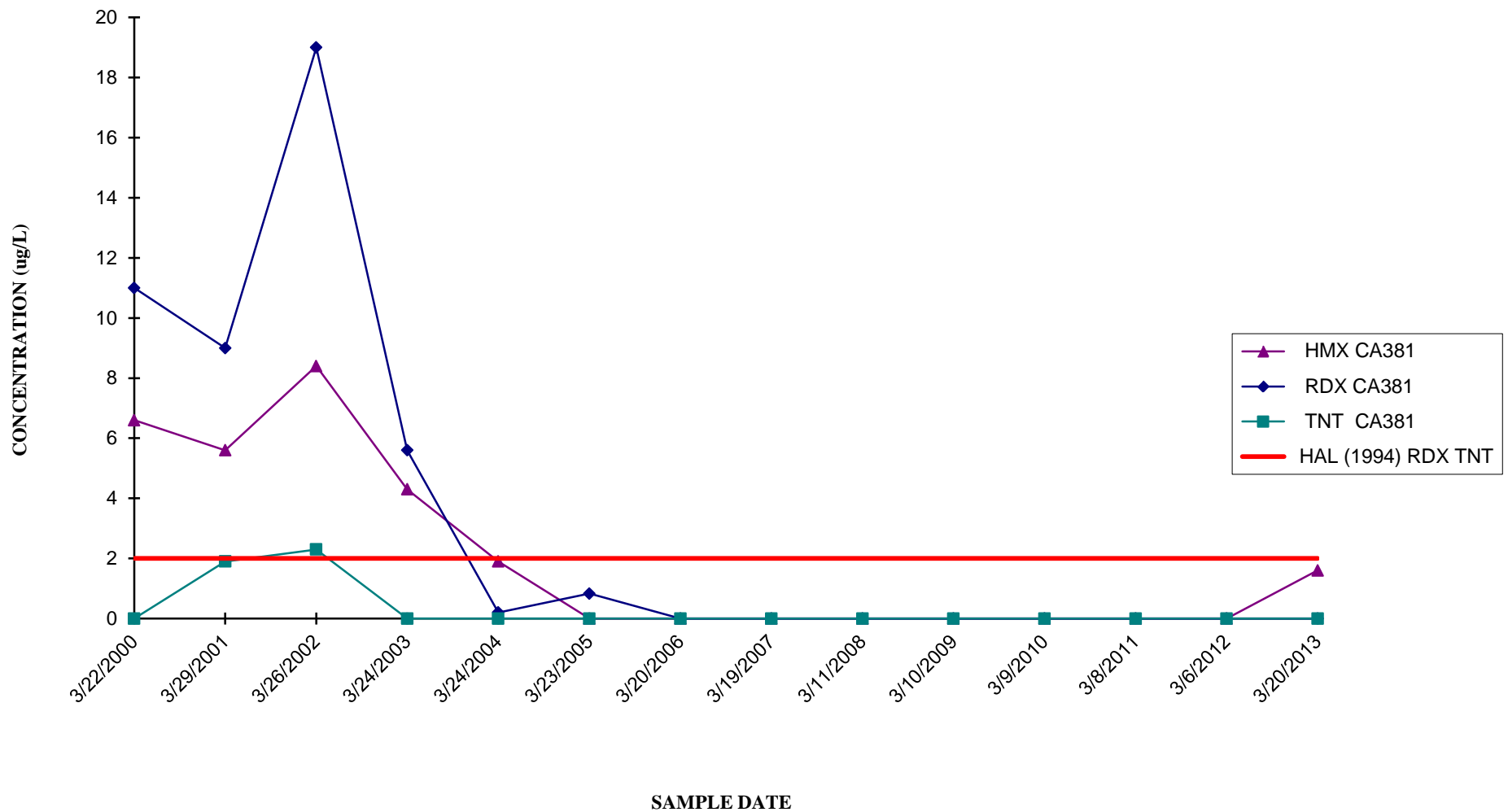


CORNHUSKER ARMY AMMUNITION PLANT

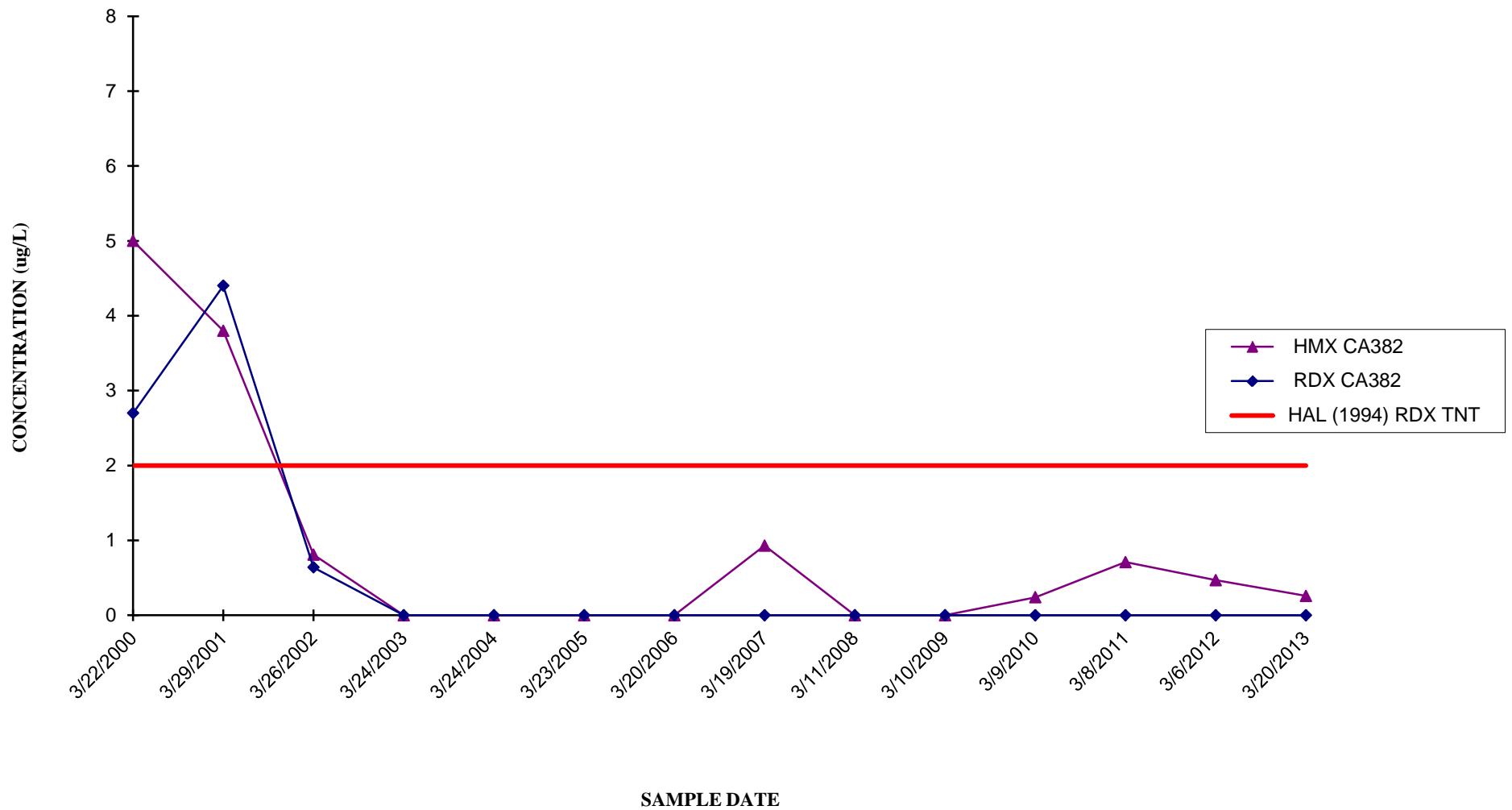
WELL CA361 - TNT



CORNHUSKER ARMY AMMUNITION PLANT WELL CA381 - HMX, RDX, AND TNT

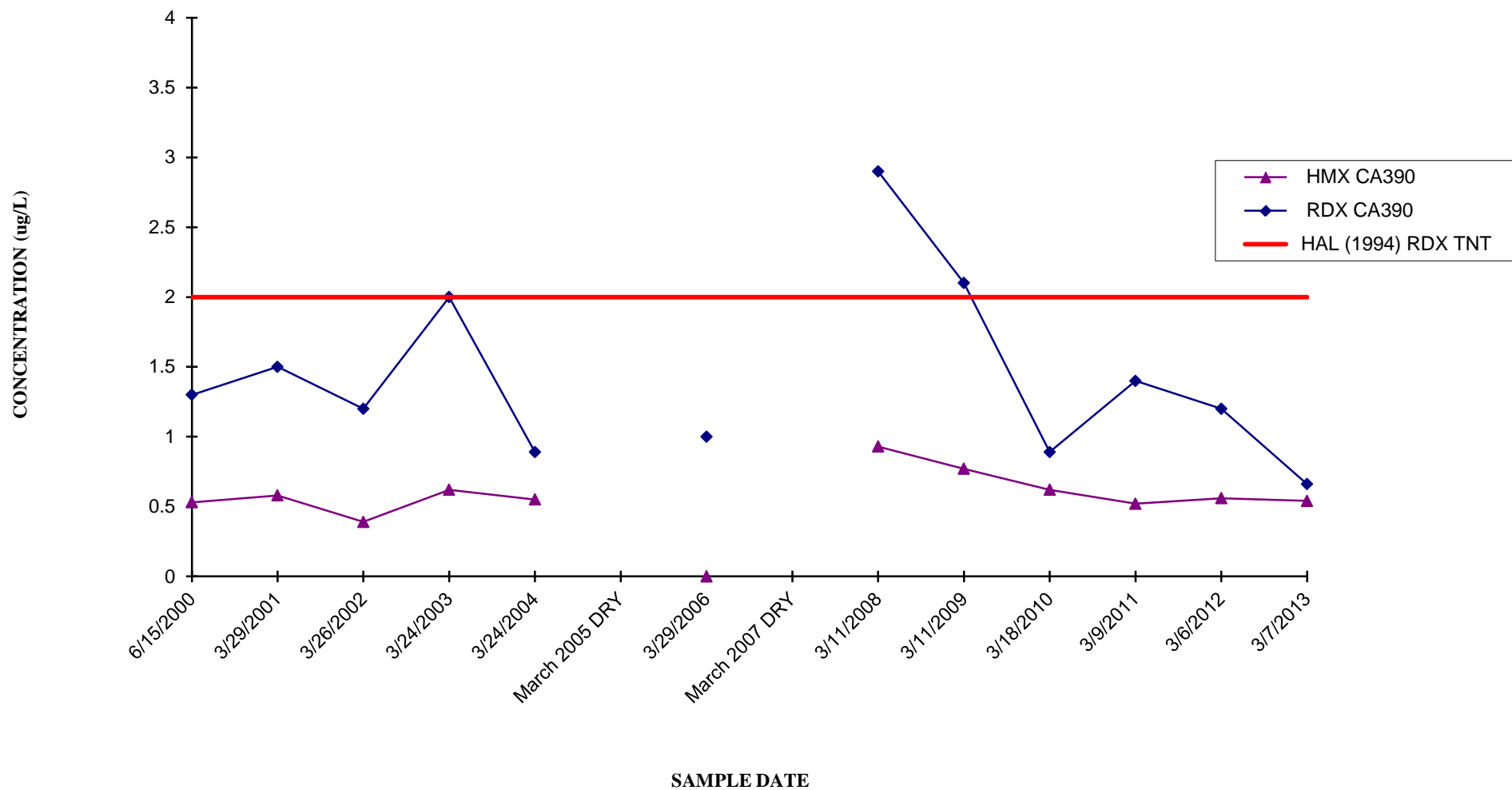


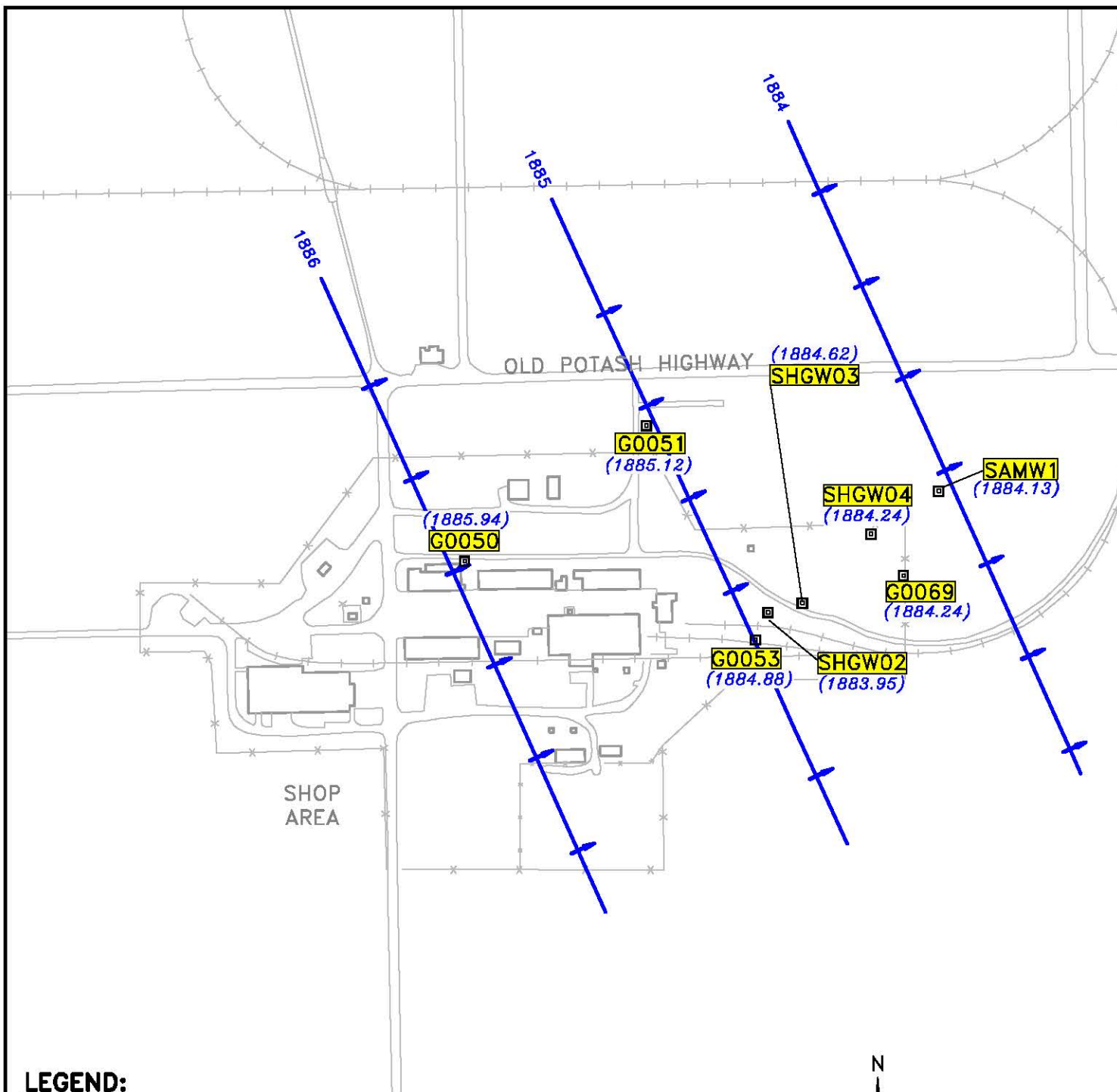
CORNHUSKER ARMY AMMUNITION PLANT WELL CA382 - HMX AND RDX



CORNHUSKER ARMY AMMUNITION PLANT

WELL CA390 - HMX AND RDX





LEGEND:

G0069 ON-POST MONITORING WELL LOCATION WITH
GROUNDWATER ELEVATION – MARCH 2013
(1883.74) TOP GRAND ISLAND FORMATION (FEET.
ABOVE MEAN SEA LEVEL)

— WATER TABLE ELEVATION CONTOURS
(FEET. ABOVE MEAN SEA LEVEL)

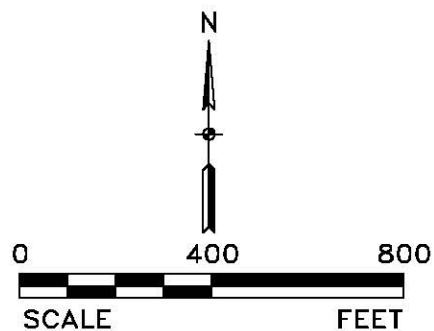
➔ INTERPRETED GROUNDWATER FLOW
DIRECTION

— ROADS

— FENCES

□ BUILDINGS

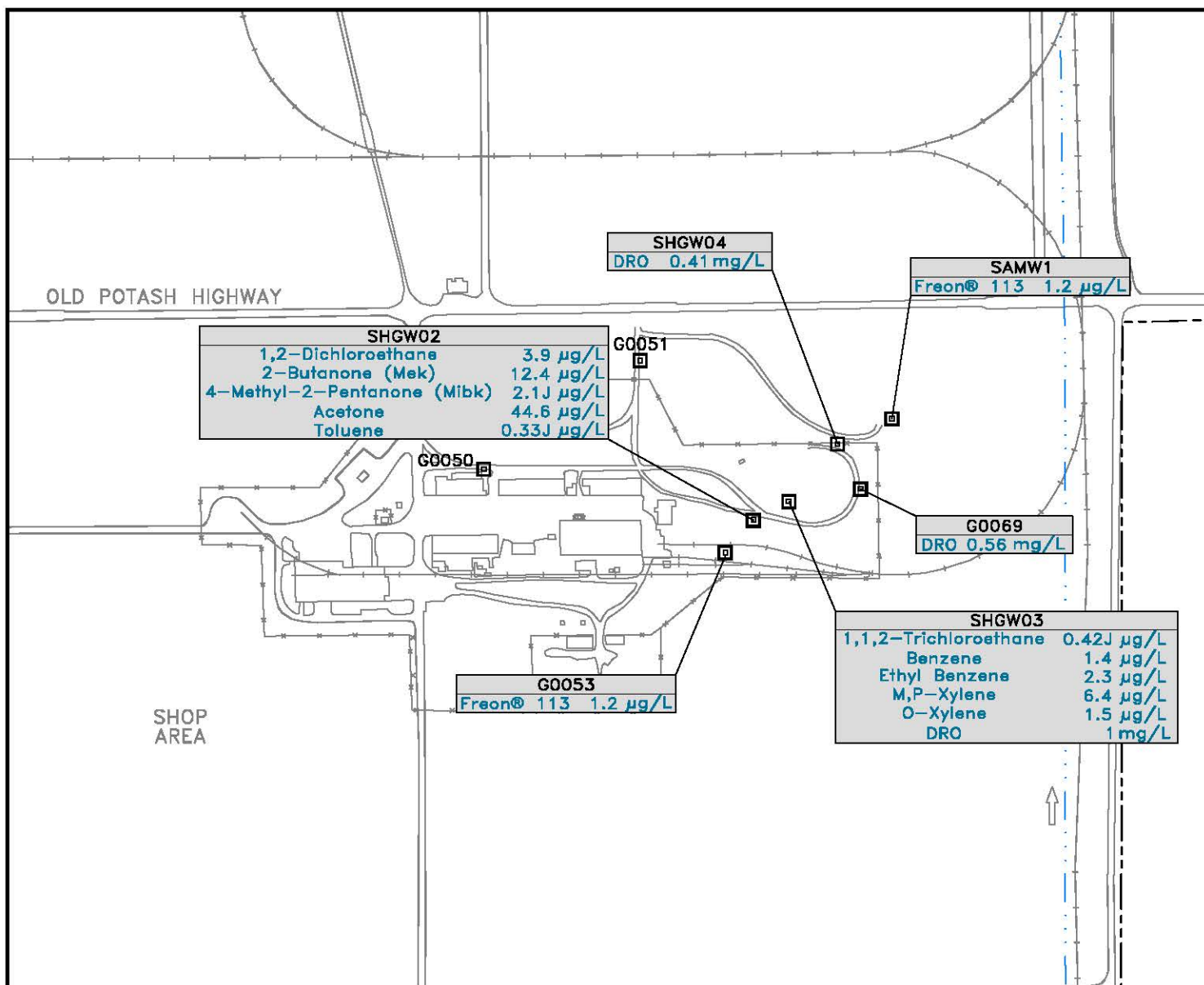
OU OPERABLE UNIT



WATER TABLE ELEVATION MAP – MARCH 2013
SHOP AREA (OU3)
CORNHUSKER ARMY AMMUNITION PLANT

September 12, 2013 3:28:16 p.m.
Drawing: T:\CHAAP\16170747\4\3-3.dwg

DRN. BY: DPG	DATE: 07/08/13	PROJECT NO.	FIG. NO.
CHK'D. BY: RPC	DATE: 07/08/13	16170747	3-3



0 500 1000
SCALE FEET



VOC PLUME
SHOP AREA (OU3) MARCH 2013
CORNHUSKER ARMY AMMUNITION PLANT

DRN. BY: DPG	DATE: 05/20/13	PROJECT NO.	FIG. NO.
CHK'D. BY: RPC	DATE: 05/20/13	16170747	5-25

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment C

Data Tables

Not included due to size. See enclosed CD.

Table C5-A
EW-7 Explosives Concentration Vs. Time
(March 2000-April 2014)

EW-7	Explosives ^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
3/22/2000	13.5	16.8	ND(0.3)	55.4	85.7
4/5/2000	9.28	23.4	ND(0.3)	137	169.68
5/3/2000	ND(0.9)	25.3	ND(0.3)	32.6	57.9
6/7/2000	1.21	19.6	ND(0.3)	29.6	50.41
7/6/2000	3.77	12.7	ND(0.3)	27.9	44.37
8/1/2000	ND(0.9)	58.27	ND(0.3)	105.2	163.47
9/6/2000	3.77	22.67	ND(0.3)	72.2	98.64
10/4/2000	ND(0.9)	47.46	ND(0.3)	146.6	194.06
11/1/2000	ND(0.9)	29.8	ND(0.3)	73.94	103.74
12/6/2000	3.63	41.47	ND(0.3)	114.5	159.6
1/3/2001	5.88	34.82	ND(1.5)	109.53	150.23
2/7/2001	6.5	37.36	1.2	125.6	170.66
3/7/2001	5.1	29	ND(1)	120	154.1
4/4/2001	4.9	39	ND(1)	130	173.9
6/25/2001	4.6	53	ND(1)	156	213.6
7/18/2001	3	36	ND(1)	150	189
8/29/2001	ND(1)	32	ND(1)	120	152
9/26/2001	4.6	37	ND(1)	120	161.6
10/25/2001	5	36	ND(1)	110	151
11/28/2001	5	39	ND(1)	110	154
12/19/2001	5.2	36	ND(1)	110	151.2
1/30/2002	13.5	16.8	ND(0.3)	55.4	85.7
2/27/2002	7.5	38	ND(0.61)	88	133.5
3/27/2002	7.1	38	ND(0.31)	54	99.1
4/24/2002	7.1	36	ND(0.46)	79	122.1
5/29/2002	6.2	33	ND(.32)	73	112.2
6/26/2002	6	31	ND(0.35)	82	119
7/31/2002	4.9	23	ND(0.31)	84	111.9
8/28/2002	4.5	22	ND(0.41)	84	110.5
9/25/2002	3.2	16	ND(0.33)	100	119.2
10/30/2002	5.4	28	ND(0.36)	78	111.4
11/26/2002	5.1	27	ND(0.31)	77	109.1
3/26/2003	4.8	26	ND(0.39)	84	114.8
4/30/2003	5.4	30	ND(0.38)	79	114.4
5/28/2003	5.7	32	ND(0.34)	80	117.7
6/25/2003	5.7	30	ND(0.31)	71	106.7
7/30/2003	4.1	22	ND(0.31)	74	100.1
8/27/2003	3.9	18	ND(0.31)	84	105.9
9/24/2003	4.2	18	ND(0.31)	68	90.2
10/30/2003	4.8	21	ND(0.31)	81	106.8
11/25/2003	4.9	26	ND(0.44)	77	107.9
12/30/2003	5.1	25	ND(0.31)	67	97.1
1/28/2004	5.1	24	ND(0.51)	62	91.1
2/25/2004	4.8	22	ND(0.38)	58	84.8
3/31/2004	5	22	ND(0.55)	62	89
4/28/2004	4.8	21	ND(0.37)	66	91.8
5/26/2004	5	23	ND(0.527)	75	103
6/30/2004	4.2	19	ND(0.31)	86	109.2
7/28/2004	4	17	ND(0.41)	60	81
8/25/2004	3.4	21	ND(0.41)	91	115.4
9/29/2004	3.8	23	ND(0.33)	68	94.8
10/27/2004	3.5	23	ND(0.43)	76	102.5
11/23/2004	3.6	23	ND(0.31)	90	116.6
12/29/2004	4.9	43	ND(0.46)	140	187.9
1/26/2005	4.4	19	ND(0.39)	65	88.4
2/23/2005	4.4	34	ND(0.58)	82	120.4

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Table C5-A
EW-7 Explosives Concentration Vs. Time
(March 2000-April 2014)

EW-7	Explosives ^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
3/30/2005	4.8	20	ND(0.75)	67	91.8
4/27/2005	4.4	21	ND(0.76)	59	84.4
5/25/2005	4.3	24	ND(0.42)	83	111.3
6/29/2005	4.2	18	ND(0.52)	64	86.2
7/27/2005	3.2	29	ND(0.49)	130	162.2
8/31/2005	3.3	12	ND(0.58)	53	68.3
9/28/2005	3.3	11	ND(0.39)	50	64.3
10/26/2005	3.6	18	ND(0.4)	69	90.6
11/30/2005	3.6	15	ND(0.4)	52	70.6
12/28/2005	3.5	16	ND(0.46)	51	70.5
1/25/2006	3.3	13	ND(0.81)	63	79.3
2/22/2006	3.8	14	ND(0.39)	48	65.8
3/29/2006	3.7	17	ND(0.66)	58	78.7
4/26/2006	3.6	13	ND(0.42)	45	61.6
5/31/2006	3.3	12	ND(0.39)	42	57.3
6/28/2006	3.2	13	ND(0.42)	47	63.2
7/26/2006	2.9	11	ND(0.44)	49	62.9
8/30/2006	2.7	12	ND(0.46)	54	68.7
9/27/2006	2.9	10	ND(0.39)	44	56.9
10/25/2006	3.1	12	ND(0.6)	53	68.1
11/29/2006	2.9	15	ND(0.39)	57	74.9
12/27/2006	3.1	11	ND(0.46)	40	54.1
1/31/2007	3	11	ND(0.62)	56	70
2/28/2007	2.8	9.6	ND(0.39)	38	50.4
3/28/2007	2.8	9.7	ND(0.39)	36	48.5
4/25/2007	2.7	10	ND(0.39)	41	53.7
5/30/2007	2.9	11	ND(0.57)	35	48.9
6/26/2007	2.8	9.8	ND(0.39)	33	45.6
7/25/2007	2.7	10	ND(0.60)	36	48.7
8/29/2007	2.7	9	ND(0.39)	37	48.7
9/26/2007	2.8	9.8	ND(0.60)	34	46.6
10/31/2007	2.9	9.7	ND(0.48)	35	47.6
11/28/2007	2.7	9.4	ND(0.62)	33	45.1
12/26/2007	2.7	7.2	ND(0.39)	34	43.9
1/30/2008	2.9	11	ND(0.39)	43	56.9
2/27/2008	2.7	8.9	ND(0.70)	30	41.6
3/26/2008	2.7	11	ND(0.39)	39	52.7
4/30/2008	2.6	9.3	ND(0.83)	31	42.9
5/28/2008	2.6	8.7	ND(0.40)	31	42.3
6/25/2008	2.4	10	ND(0.39)	43	55.4
7/30/2008	2.1	6.8	ND(0.43)	41	49.9
8/27/2008	1.9	4.5	ND(0.39)	30	36.4
9/24/2008	2.1	5.1	ND(0.39)	31	38.2
10/29/2008	1.8	4.7	ND(0.39)	24	30.5
11/24/2008	2.2	5.7	ND(0.39)	30	37.9
12/29/2008	2.6	6.6	ND(0.45)	33	42.2
1/28/2009	2.5	6.2	ND(0.39)	31	39.7
2/25/2009	2.3	5.9	ND(0.39)	30	38.2
3/25/2009	2.3	5.6	ND(0.39)	29	36.9
4/29/2009	2.7	7.0	ND(1.5)	34	43.7
5/27/2009	2.2	5.6	ND(0.39)	26	33.8
6/24/2009	2.3	5.9	ND(0.39)	29	37.2
7/29/2009	2.1	5.0	ND(0.40)	25	32.1
8/26/2009	2.5	5.6	ND(0.53)	24	32.1
9/30/2009	2.2	5.4	ND(0.84)	25	32.6
10/28/2009	2.3	6.0	ND(0.65)	26	34.3

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Table C5-A
EW-7 Explosives Concentration Vs. Time
(March 2000-April 2014)

EW-7	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
11/23/2009	2.3	5.5	ND(0.45)	27	34.8
12/30/2009	2.1	5.1	ND(0.46)	25	32.2
1/27/2010	2.2	5.0	ND(0.59)	23	30.2
2/25/2010	2.0	4.3	ND(0.39)	24	30.3
3/31/2010	2.1	4.5	ND(0.45)	24	30.6
4/28/2010	1.9	4.1	ND(0.56)	23	29
5/26/2010	1.8	3.9	ND(0.66)	21	26.7
6/30/2010	2.1	3.9	ND(0.50)	22	28
7/28/2010	1.9	3.6	ND(0.73)	24	29.5
8/25/2010	1.8	3.4	ND(0.79)	21	26.2
9/29/2010	1.9	3.5	ND(0.62)	21	26.4
10/27/2010	1.5	3.0	ND(0.51)	20	24.5
11/29/2010	1.5	2.8	ND(0.65)	22	26.3
12/29/2010	1.5	2.6	ND(0.59)	21	25.1
1/26/2011	1.3	2.5	ND(0.39)	18	21.8
2/23/2011	1.5	2.8	ND(0.53)	21	25.3
3/30/2011	1.6	2.8	ND(0.57)	20	24.4
4/27/2011	1.5	2.6	ND(0.47)	20	24.1
5/25/2011	1.5	2.5	ND(0.72)	21	25
6/29/2011	1.4	2.5	ND(0.72)	19	22.9
7/27/2011	1.2	2.4	ND(0.79)	17	20.6
8/31/2011	1.1	1.8	ND(0.85)	18	20.9
9/28/2011	1.4	2.3	ND(0.52)	20	23.7
10/26/2011	1.4	2.3	ND(0.73)	22	25.7
11/30/2011	1.1	2.1	ND(0.74)	18	21.2
12/28/2011	1.1	2.0	ND(0.56)	18	21.1
1/25/2012	1.1	2.2	ND(0.22)	13.1	16.4
2/29/2012	1.3	2.4	ND(0.22)	16.2	19.9
3/28/2012	1.3	1.7	ND(0.22)	16.7	19.7
4/25/2012	1.2	1.4	ND(0.2)	15.7	18.3
5/30/2012	1.1	1.8	ND(0.2)	14.9	17.8
6/27/2012	0.83	1.8	ND(0.2)	13.6	16.23
7/25/2012	0.92	2	ND(0.29)	9.8	12.72
8/29/2012	0.94	2	ND(0.29)	14.8	17.74
9/26/2012	1	2.3	ND(0.29)	15.2	18.5
10/31/2012	1.1	1.7	ND(0.29)	15.6	18.4
11/28/2012	1.1	2	ND(0.29)	16.1	19.2
12/26/2012	0.83	1.2	ND(0.29)	11.2	13.23
1/30/2013	1.1	2	ND(0.8)	15.3	18.4
2/27/2013	1.2	2	ND(0.8)	14	17.2
3/27/2013	1.1	1.8	ND(0.8)	15.4	18.3
4/24/2013	1.1	1.7	ND(0.8)	13.8	16.6
5/29/2013	1	1.5	ND(0.8)	14	16.5
6/26/2013	0.95	1.3	ND(1.0)	11.9	14.15
7/31/2013	0.89	1.2	ND(1.0)	11.9	13.99
8/28/2013	1.1	1.7	ND(1.0)	14.1	16.9
9/25/2013	0.92	1.4	ND(1.0)	12.2	14.52
10/30/2013	0.8	1.2	ND(1.0)	10.6	12.6
11/26/2013	0.83	1.4	ND(1.0)	9	11.23
12/26/2013	ND(0.2)	1.3	ND(1.0)	ND(0.2)	1.3
1/29/2014	J 0.58	1.3	ND(0.16)	12	13.88
2/26/2014	J 0.52	1.2	ND(0.16)	12	13.72
4/30/2014	J 0.49	1.1	ND(0.15)	11	12.59

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Figure C5-A
EW-7 Explosives Concentration Vs. Time
(March 2000 - April 2014)

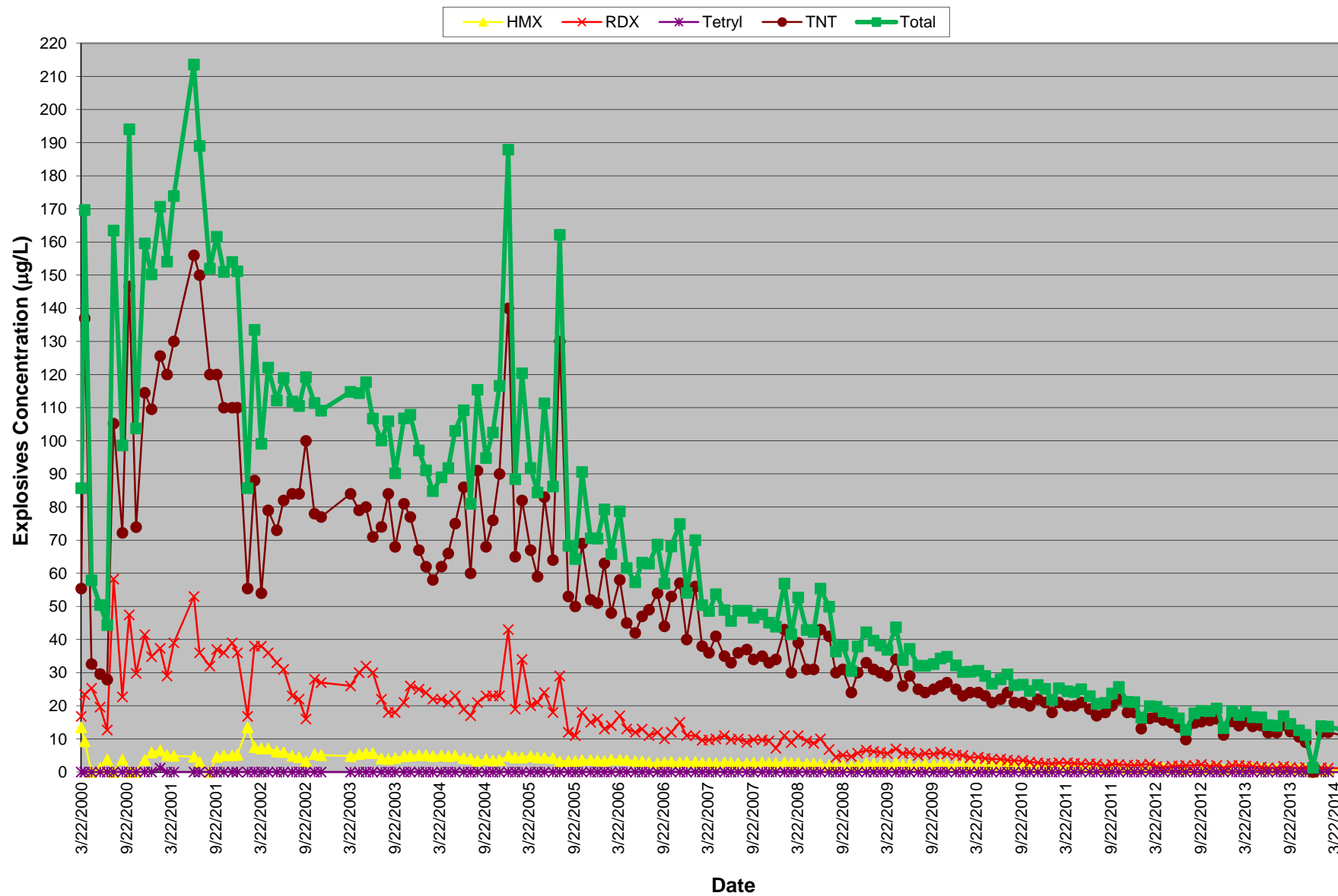


Table C5-B
GWTP Explosives Concentration Vs. Time
(January 2002 - April 2014)

GWTP	Explosives ^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
1/2/2002	3.8	19	ND(0.37)	53	75.8
1/9/2002	3.9	19	ND(0.37)	56	78.9
1/16/2002	4.1	24	ND(0.37)	55	83.1
1/23/2002	4	25	ND(0.37)	54	83
1/30/2002	3.8	21	ND(0.37)	52	76.8
2/6/2002	4	23	ND(0.37)	51	78
2/13/2002	4	22	ND(0.3)	48	74
2/20/2002	3.6	20	ND(0.67)	50	73.6
2/27/2002	4.3	23	ND(0.59)	57	84.3
3/6/2002	3.7	21	ND(0.57)	50	74.7
3/13/2002	3.7	21	ND(0.44)	54	78.7
3/20/2002	3.7	19	ND(0.31)	50	72.7
3/27/2002	3.6	19	ND(0.59)	47	69.6
4/3/2002	3.5	19	ND(0.31)	46	68.5
4/10/2002	4.4	23	ND(0.31)	60	87.4
4/17/2002	3.5	20	ND(0.36)	48	71.5
4/24/2002	3.6	20	ND(0.59)	48	71.6
5/1/2002	3.8	20	ND(0.46)	48	71.8
5/8/2002	3.8	19	ND(0.31)	46	68.8
5/15/2002	3.4	18	ND(0.31)	45	66.4
5/22/2002	3.5	18	ND(0.31)	47	68.5
5/29/2002	3.3	17	ND(0.31)	40	60.3
6/5/2002	3.5	17	ND(0.31)	45	65.5
6/12/2002	3.3	17	ND(0.83)	38	58.3
6/19/2002	3.4	17	ND(0.4)	42	62.4
6/26/2002	3.3	18	ND(0.31)	48	69.3
7/2/2002	2.9	15	ND(0.31)	45	62.9
7/10/2002	1.6	8.6	ND(0.31)	19	29.2
7/17/2002	2.8	15	ND(0.56)	47	64.8
7/24/2002	2.8	15	ND(0.48)	46	63.8
7/31/2002	3	16	ND(0.4)	52	71
8/7/2002	2.7	15	ND(0.63)	49	66.7
8/14/2002	2.9	14	ND(0.31)	49	65.9
8/21/2002	2.7	13	ND(0.43)	49	64.7
8/28/2002	2.6	13	ND(0.39)	46	61.6
9/4/2002	2.9	16	ND(0.37)	53	71.9
9/11/2002	2.7	16	ND(0.31)	52	70.7
9/18/2002	3	16	ND(0.44)	51	70
9/25/2002	1.6	8.4	ND(0.36)	25	35
10/2/2002	2.7	14	ND(0.33)	45	61.7
10/9/2002	3	15	ND(0.31)	49	67
10/16/2002	3.1	16	ND(0.31)	48	67.1
10/23/2002	3.1	16	ND(0.31)	48	67.1
10/30/2002	3.2	15	ND(0.31)	45	63.2
11/6/2002	2.9	19	ND(0.34)	47	68.9
11/13/2002	3	15	ND(0.34)	48	66
11/20/2002	2.9	16	ND(0.38)	48	66.9
11/26/2002	2.7	14	ND(0.31)	43	59.7
12/4/2002	2.9	16	ND(0.31)	46	64.9
12/11/2002	3	15	ND(0.31)	45	63
12/18/2002	3	16	ND(0.31)	48	67
3/5/2003	2.2	11	ND(0.36)	43	56.2
3/12/2003	2.1	11	ND(0.31)	31	44.1
3/19/2003	2.3	11	ND(0.33)	42	55.3
3/26/2003	2.6	13	ND(0.39)	45	60.6
4/2/2003	2.3	11	ND(0.31)	41	54.3
4/9/2003	2.3	14	ND(0.58)	41	57.3

Notes:

J = Estimated Value

NA = Not Available

ND = Not Detected (method detection limit of laboratory)

Table C5-B
GWTP Explosives Concentration Vs. Time
(January 2002 - April 2014)

GWTP	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
4/16/2003	2.6	14	ND(0.41)	42	58.6
4/23/2003	2.4	13	ND(0.48)	39	54.4
4/30/2003	2.6	14	ND(0.4)	43	59.6
5/7/2003	2.5	14	ND(0.35)	42	58.5
5/14/2003	2.5	13	ND(0.45)	42	57.5
5/21/2003	2.7	14	ND(0.35)	41	57.7
5/28/2003	2.7	14	ND(0.57)	43	59.7
6/4/2003	2.6	14	ND(0.36)	39	55.6
6/11/2003	2.7	15	ND(0.33)	40	57.7
6/18/2003	2.9	16	ND(0.43)	41	59.9
6/25/2003	2.9	15	ND(0.41)	40	57.9
7/2/2003	2.8	16	ND(0.31)	42	60.8
7/9/2003	1.3	11	ND(0.31)	35	47.3
7/16/2003	2.6	13	ND(0.31)	45	60.6
7/23/2003	2.3	12	ND(0.46)	37	51.3
7/30/2003	2.4	12	ND(0.31)	45	59.4
8/6/2003	2.1	11	ND(0.35)	37	50.1
8/13/2003	2.3	12	ND(0.34)	40	54.3
8/21/2003	2.1	11	ND(0.37)	43	56.1
8/27/2003	1.9	9.7	ND(0.31)	41	52.6
9/3/2003	2.3	11	ND(0.34)	43	56.3
9/10/2003	2.5	12	ND(0.46)	46	60.5
9/17/2003	2.4	11	ND(0.31)	41	54.4
9/24/2003	2.4	12	ND(0.44)	42	56.4
10/1/2003	2.5	13	ND(0.49)	42	57.5
10/8/2003	2.5	12	ND(0.31)	45	59.5
10/15/2003	2.3	13	ND(0.49)	45	60.3
10/22/2003	2.7	13	ND(0.43)	42	57.7
10/29/2003	2.3	11	ND(0.31)	43	56.3
11/5/2003	2.6	14	ND(0.47)	44	60.6
11/11/2003	2.4	12	ND(0.38)	36	50.4
11/19/2003	2.6	12	ND(0.32)	35	49.6
11/25/2003	2.5	14	ND(0.32)	41	57.5
12/3/2003	2.5	13	ND(0.42)	38	53.5
12/10/2003	2.4	11	ND(0.31)	36	49.4
12/17/2003	2.6	13	ND(0.33)	38	53.6
12/22/2003	2.4	13	ND(0.31)	37	52.4
12/30/2003	2.6	13	ND(0.34)	38	53.6
1/7/2004	2.6	13	ND(0.31)	37	52.6
1/14/2004	2.7	14	ND(0.54)	37	53.7
1/21/2004	2.6	12	ND(0.31)	37	51.6
1/28/2004	2.6	12	ND(0.32)	37	51.6
2/4/2004	2.6	15	ND(0.31)	42	59.6
2/11/2004	2.4	12	ND(0.31)	33	47.4
2/18/2004	2.7	16	ND(0.31)	44	62.7
2/25/2004	2.3	12	ND(0.31)	42	56.3
3/3/2004	2.5	16	ND(0.49)	46	64.5
3/10/2004	2.7	14	ND(0.61)	36	52.7
3/17/2004	2.2	9.7	ND(0.31)	33	44.9
3/24/2004	2.5	11	ND(0.31)	34	47.5
3/31/2004	2.7	13	ND(0.55)	34	49.7
4/7/2004	2.6	13	ND(0.41)	38	53.6
4/14/2004	2.1	11	ND(0.41)	35	48.1
4/21/2004	2.5	12	ND(0.39)	42	56.5
4/28/2004	2.4	12	ND(0.51)	39	53.4
5/5/2004	2.4	11	ND(0.41)	41	54.4
5/12/2004	2.4	11	ND(0.34)	39	52.4

Notes:

J = Estimated Value

NA = Not Available

ND = Not Detected (method detection limit of laboratory)

Table C5-B
GWTP Explosives Concentration Vs. Time
(January 2002 - April 2014)

GWTP	Explosives ^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
5/19/2004	2.6	13	ND(0.44)	44	59.6
5/26/2004	3	13	ND(0.45)	45	61
6/2/2004	2.6	13	ND(0.54)	54	69.6
6/9/2004	2.5	11	ND(0.36)	40	53.5
6/16/2004	2.9	15	ND(0.54)	59	76.9
6/23/2004	2.5	14	ND(0.45)	50	66.5
6/30/2004	2.2	8.7	ND(0.34)	37	47.9
7/7/2004	2	12	ND(0.28)	47	61
7/14/2004	2.3	11	ND(0.45)	41	54.3
7/21/2004	2	8.1	ND(0.31)	50	60.1
7/28/2004	2.1	9.2	ND(0.34)	34	45.3
8/4/2004	2	9.6	ND(0.44)	32	43.6
8/11/2004	2.1	11	ND(0.51)	36	49.1
8/18/2004	2.1	13	ND(0.33)	50	65.1
8/25/2004	1.9	10	ND(0.49)	47	58.9
9/1/2004	2.2	14	ND(0.34)	53	69.2
9/8/2004	2.3	11	ND(0.45)	37	50.3
9/15/2004	1.9	9.3	ND(0.64)	43	54.2
9/22/2004	2.1	11	ND(0.46)	48	61.1
9/29/2004	2.1	11	ND(0.49)	49	62.1
10/6/2004	0.95	5.1	ND(0.31)	15	21.05
10/13/2004	1.1	5.8	ND(0.71)	18	24.9
10/20/2004	2.1	10	ND(0.72)	55	67.1
10/27/2004	2.1	9.8	ND(0.54)	32	43.9
11/3/2004	2	10	ND(0.46)	40	52
11/10/2004	1.8	8.7	ND(0.42)	29	39.5
11/17/2004	2.1	10	ND(0.74)	37	49.1
11/23/2004	1.9	11	ND(0.31)	43	55.9
12/1/2004	2.2	8.2	ND(0.39)	27	37.4
12/8/2004	1.8	9.4	ND(0.64)	29	40.2
12/15/2004	2.2	12	ND(0.39)	41	55.2
12/21/2004	2.3	11	ND(0.6)	41	54.3
12/29/2004	2.4	11	ND(0.45)	40	53.4
1/5/2005	2.3	10	ND(0.62)	40	52.3
1/12/2005	2.4	10	ND(0.57)	32	44.4
1/19/2005	2	8	ND(0.39)	31	41
1/26/2005	2.4	10	ND(0.7)	33	45.4
2/2/2005	2.2	9.3	ND(0.39)	31	42.5
2/9/2005	2.3	9.8	ND(0.55)	42	54.1
2/15/2005	2.3	9.9	ND(0.68)	44	56.2
2/23/2005	2.2	13	ND(0.39)	40	55.2
3/30/2005	2.3	8.8	ND(0.39)	29	40.1
4/27/2005	2.2	8.9	ND(0.79)	27	38.1
5/11/2005	2.1	8.5	ND(0.44)	35	45.6
5/25/2005	2.1	8.8	ND(0.55)	38	48.9
6/1/2005	1.9	9.2	ND(0.39)	34	45.1
6/8/2005	2	8.6	ND(0.59)	27	37.6
6/15/2005	2.1	9.3	ND(0.62)	28	39.4
6/29/2005	1.9	7.5	ND(0.39)	23	32.4
7/27/2005	1.5	6.1	ND(0.39)	34	41.6
8/31/2005	1.7	6.6	ND(0.39)	36	44.3
9/14/2005	1.9	7.2	ND(0.32)	28	37.1
9/28/2005	1.7	6.8	ND(0.9)	29	37.5
10/5/2005	1.7	6.8	ND(0.64)	38	46.5
10/12/2005	1.7	6.7	ND(0.55)	29	37.4
10/26/2005	1.8	6.7	ND(0.48)	34	42.5
11/30/2005	1.8	6.7	ND(0.45)	33	41.5

Notes:

J = Estimated Value

NA = Not Available

ND = Not Detected (method detection limit of laboratory)

Table C5-B
GWTP Explosives Concentration Vs. Time
(January 2002 - April 2014)

GWTP	Explosives ^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
12/28/2005	1.6	6.6	ND(0.59)	31	39.2
1/25/2006	1.6	6.2	ND(0.81)	31	38.8
2/8/2006	1.7	6.6	ND(0.78)	29	37.3
2/22/2006	1.7	6.7	ND(0.64)	27	35.4
3/1/2006	1.7	6.3	ND(0.44)	29	37
3/29/2006	1.5	5.8	ND(0.39)	21	28.3
4/26/2006	1.5	6	ND(0.65)	22	29.5
5/31/2006	1.5	6.2	ND(0.63)	28	35.7
6/15/2006	1.5	5.8	ND(0.42)	28	35.3
6/28/2006	1.4	5.9	ND(0.58)	21	28.3
7/5/2006	1.3	5.4	ND(0.49)	23	29.7
7/12/2006	1.2	5.2	ND(0.39)	21	27.4
7/26/2006	1.3	5.5	ND(0.47)	32	38.8
8/30/2006	1.2	5	ND(0.6)	28	34.2
9/27/2006	1.4	5.4	ND(0.62)	23	29.8
10/11/2006	1.4	5.2	ND(0.44)	27	33.6
10/25/2006	1.4	5.4	ND(0.62)	27	33.8
11/8/2006	1.2	4.5	ND(0.39)	19	24.7
11/15/2006	1.3	4.9	ND(0.39)	18	24.2
11/29/2006	1.4	5.4	ND(0.41)	20	26.8
12/27/2006	1.4	5.2	ND(0.56)	23	29.6
1/31/2007	1.3	4.7	ND(0.46)	20	26
2/28/2007	1.3	4.7	ND(0.37)	19	25
3/14/2007	0.69	2.5	ND(0.39)	10	13.19
3/28/2007	1.4	5.1	ND(0.49)	19	25.5
4/25/2007	1	3.6	ND(0.39)	17	21.6
5/30/2007	1.3	4.8	ND(0.39)	17	23.1
6/26/2007	1.4	5.2	ND(0.39)	18	24.6
7/11/2007	1.2	4.7	ND(0.39)	22	27.9
7/25/2007	1.2	4.8	ND(0.47)	16	22
8/8/2007	0.91	3.1	ND(0.49)	15	19.01
8/15/2007	1.2	4.3	ND(0.39)	18	23.5
8/29/2007	1.4	4.6	ND(0.50)	15	21
9/26/2007	1.2	4.2	ND(0.39)	14	19.4
10/31/2007	1.2	4.2	ND(0.39)	15	20.4
11/15/2007	1.2	4.2	ND(0.39)	14	19.4
11/28/2007	1.9	6.5	ND(0.39)	20	28.4
12/5/2007	1.9	6.8	ND(0.58)	26	34.7
12/26/2007	1.2	3.4	ND(0.47)	16	20.6
1/30/2008	1.7	5.8	ND(0.39)	20	27.5
2/27/2008	1.6	5.4	ND(0.39)	17	24
3/26/2008	1.7	6.1	ND(0.47)	21	28.8
4/30/2008	1.4	4.9	ND(0.39)	13	19.3
5/28/2008	1.7	5.6	ND(0.39)	16	23.3
6/25/2008	1.7	5.6	ND(0.39)	15	22.3
7/30/2008	1.5	5.1	ND(0.39)	20	26.6
8/27/2008	1.4	4	ND(0.39)	14	19.4
9/24/2008	1.4	4	ND(0.42)	15	20.4
10/29/2008	1.5	4.3	ND(0.39)	15	20.8
11/24/2008	1.5	4.2	ND(0.39)	18	23.7
12/29/2008	1.8	4.9	ND(0.40)	19	25.7
1/28/2009	1.7	4.5	ND(0.39)	17	23.2
2/25/2009	1.7	4.6	ND(0.39)	17	23.3
3/25/2009	1.7	4.7	ND(0.39)	18	24.4
4/29/2009	1.5	3.6	ND(0.39)	16	21.1
5/27/2009	1.7	4.4	ND(0.39)	18	24.1
6/24/2009	1.7	4.6	ND(0.39)	19	25.3

Notes:

J = Estimated Value

NA = Not Available

ND = Not Detected (method detection limit of laboratory)

Table C5-B
GWTP Explosives Concentration Vs. Time
(January 2002 - April 2014)

GWTP	Explosives ^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
7/29/2009	2.2	5.3	ND(0.39)	27	34.5
8/26/2009	2.5	5.8	ND(0.59)	25	33.3
9/30/2009	2.1	5	ND(0.46)	25	32.1
10/28/2009	2.4	6.1	ND(0.71)	29	37.5
11/23/2009	2.3	5.4	ND(0.46)	27	34.7
12/30/2009	2.1	5.2	ND(0.44)	23	30.3
1/27/2010	2.2	5	ND(0.40)	22	29.2
2/25/2010	2.1	4.6	ND(0.46)	25	31.7
3/31/2010	2.1	4.5	ND(0.45)	24	30.6
4/28/2010	1.9	4.1	ND(0.56)	23	29
5/26/2010	1.8	3.9	ND(0.66)	21	26.7
6/30/2010	2.1	3.9	ND(0.50)	22	28
7/28/2010	1.9	3.6	ND(0.73)	24	29.5
8/25/2010	1.8	3.4	ND(0.79)	21	26.2
9/29/2010	1.9	3.5	ND(0.62)	21	26.4
10/27/2010	1.5	3	ND(0.51)	20	24.5
11/29/2010	1.5	2.8	ND(0.65)	22	26.3
12/29/2010	1.5	2.6	ND(0.59)	21	25.1
1/26/2011	1.3	2.5	ND(0.39)	18	21.8
2/23/2011	1.5	2.8	ND(0.53)	21	25.3
3/30/2011	1.6	2.8	ND(0.57)	20	24.4
4/27/2011	1.5	2.6	ND(0.47)	20	24.1
5/25/2011	1.5	2.5	ND(0.72)	21	25
6/29/2011	1.4	2.5	ND(0.72)	19	22.9
7/27/2011	1.2	2.4	ND(0.79)	17	20.6
8/31/2011	1.1	1.8	ND(0.85)	18	20.9
9/28/2011	1.4	2.3	ND(0.52)	20	23.7
10/26/2011	1.4	2.3	ND(0.73)	22	25.7
11/30/2011	1.1	2.1	ND(0.74)	18	21.2
12/28/2011	1.1	2	ND(0.56)	18	21.1
1/25/2012	1.1	2.2	ND(0.22)	13.1	16.4
2/29/2012	1.3	2.4	ND(0.22)	16.2	19.9
3/28/2012	1.3	1.7	ND(0.22)	16.7	19.7
4/25/2012	1.2	1.4	ND(0.2)	15.7	18.3
5/30/2012	1.1	1.8	ND(0.2)	14.9	17.8
6/27/2012	0.83	1.8	ND(0.2)	13.6	16.23
7/25/2012	0.92	2	ND(0.29)	9.8	12.72
8/29/2012	0.94	2	ND(0.29)	14.8	17.74
9/26/2012	1	2.3	ND(0.29)	15.2	18.5
10/31/2012	1.1	1.7	ND(0.29)	15.6	18.4
11/28/2012	1.1	2	ND(0.29)	16.1	19.2
12/26/2012	0.83	1.2	ND(0.29)	11.2	13.23
1/30/2013	1.1	2	ND(0.8)	15.3	18.4
2/27/2013	1.2	2	ND(0.8)	14	17.2
3/27/2013	1.1	1.8	ND(0.8)	15.4	18.3
4/24/2013	1.1	1.7	ND(0.8)	13.8	16.6
5/29/2013	1	1.5	ND(0.8)	14	16.5
6/26/2013	0.95	1.3	ND(1.0)	11.9	14.15
7/31/2013	0.89	1.2	ND(1.0)	11.9	13.99
8/28/2013	1.1	1.7	ND(1.0)	14.1	16.9
9/25/2013	0.92	1.4	ND(1.0)	12.2	14.52
10/30/2013	0.8	1.2	ND(1.0)	10.6	12.6
11/26/2013	0.83	1.4	ND(1.0)	9	11.23
12/26/2013	ND(0.2)	1.3	ND(1.0)	ND(0.2)	1.3
1/29/2014	0.58	1.3	ND(0.16)	12	13.88
2/26/2014	0.52	1.2	ND(0.16)	12	13.72
4/30/2014	0.49	1.1	ND(0.15)	11	12.59

Notes:

J = Estimated Value

NA = Not Available

ND = Not Detected (method detection limit of laboratory)

Figure C5-B
GWTP Influent Concentration Vs. Time
(January 2002 - April 2014)

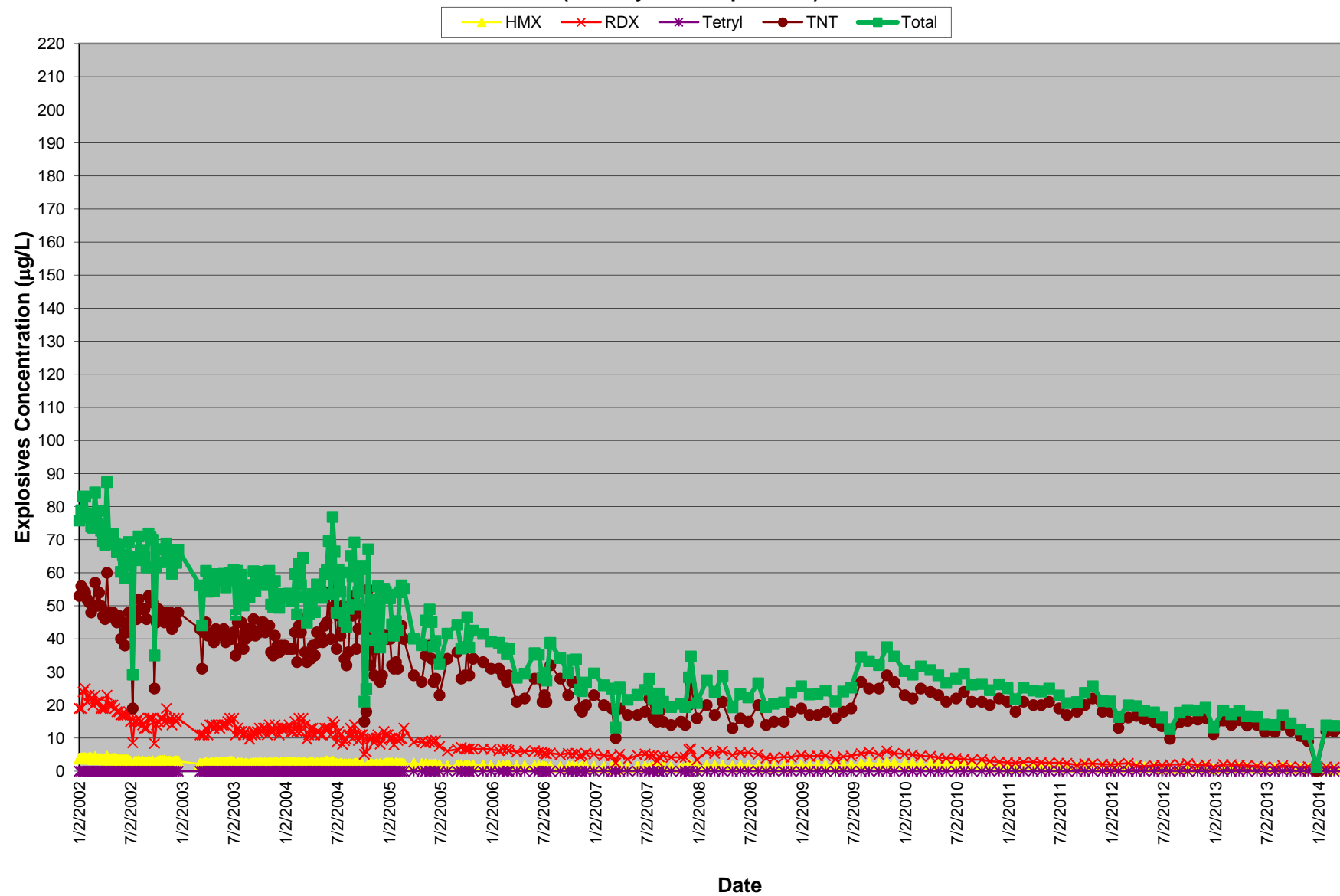


Table C5-C
EW-4 Explosives Concentration Vs. Time
(January 1999-December 2007)

EW-4	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
1/18/1999	ND(3)	1.6	ND(1)	29	30.6
2/16/1999	ND(3)UJ	ND(1.5)	ND(1)	21	21
3/15/1999	ND(3)	ND(1.5)	1.3	12	13.3
4/7/1999	ND(3)UJ	ND(1.5)	ND(1)	15.8	15.8
5/18/1999	ND(3)	ND(1.5)	ND(1)	ND(1)	0
6/8/1999	ND(3)	ND(1.5)	ND(1)	19	19
7/27/1999	ND(3)	ND(1.5)	ND(1)	15	15
8/24/1999	ND(3)	ND(1.5)	ND(1)	11	11
9/21/1999	ND(0.9)	ND(0.5)	ND(0.3)	6.5	6.5
10/27/1999	ND(0.9)	ND(0.5)	ND(0.3)	7.9	7.9
11/23/1999	ND(0.9)	0.87	ND(0.3)	6.84	7.71
12/29/1999	ND(0.9)	ND(0.5)	ND(0.3)	3.29	3.29
1/25/2000	ND(0.9)	ND(0.5)	ND(0.3)	12.8	12.8
3/1/2000	ND(0.9)	0.77	ND(0.3)	25.2	25.97
4/5/2000	ND(0.9)	0.38	ND(0.3)	17	17.38
5/3/2000	ND(0.9)	14.8	ND(0.3)	18.1	32.9
6/7/2000	ND(0.9)	1.43	ND(0.3)	14.5	15.93
7/6/2000	ND(0.9)	ND(0.5)	ND(0.3)	24.9	24.9
8/1/2000	ND(0.9)	0.91	ND(0.3)	22.67	23.58
9/6/2000	ND(0.9)	ND(0.5)	ND(0.3)	34.9	34.9
10/4/2000	ND(0.9)	ND(0.5)	ND(0.3)	16.86	16.86
11/1/2000	ND(0.9)	2.92	ND(0.3)	5.01	7.93
12/6/2000	ND(0.9)	0.99	ND(0.3)	15.63	16.62
1/3/2001	ND(0.15)	1.15	ND(0.15)	15.48	16.63
2/7/2001	ND(0.3)	1	0.5	13.5	15
3/7/2001	ND(1)	ND(1)	ND(1)	15	15
4/4/2001	ND(1)	0.82	ND(1)	15	15.82
6/25/2001	ND(1)	0.5	ND(1)	13	13.5
7/18/2001	ND(1)	0.72	ND(1)	14	14.72
8/29/2001	ND(1)	1.1	ND(1)	14	15.1
9/26/2001	ND(1)	ND(1)	ND(1)	14	14
10/25/2001	ND(1)	0.61	ND(1)	13	13.61
11/28/2001	ND(1)	1.1	ND(1)	14	15.1
12/19/2001	ND(1)	0.82	ND(1)	14	14.82
1/30/2002	ND(0.9)	1.1	ND(1)	12	13.1
2/27/2002	ND(0.98)	1	ND(0.78)	13	14
3/27/2002	ND(0.39)	ND(0.16)	ND(0.31)	11	11
4/24/2002	ND(0.52)	ND(0.21)	ND(0.41)	11	11
5/29/2002	ND(0.39)	ND(0.16)	ND(.31)	9.7	9.7
6/26/2002	ND(0.39)	ND(0.16)	ND(.31)	11	11
7/31/2002	ND(0.61)	0.9	ND(0.49)	11	11.9
8/28/2002	ND(0.39)	ND(0.16)	ND(0.31)	11	11
9/25/2002	ND(0.49)	0.82	ND(0.39)	10	10.82
10/30/2002	ND(0.39)	ND(0.16)	ND(0.31)	10	10
11/26/2002	ND(0.39)	0.62	ND(0.31)	8.8	9.42
3/26/2003	ND(0.61)	ND(0.25)	ND(0.49)	9.7	9.7
4/30/2003	ND(0.64)	ND(0.26)	ND(0.51)	9.4	9.4
5/28/2003	ND(0.49)	0.68	ND(0.39)	9.4	10.08
6/25/2003	ND(0.48)	ND(0.2)	ND(0.38)	8.6	8.6
7/30/2003	ND(0.49)	ND(0.2)	ND(0.39)	8.8	8.8
8/27/2003	ND(0.42)	ND(0.14)	ND(0.33)	8.7	8.7
9/24/2003	ND(0.55)	ND(0.22)	ND(0.43)	8	8
10/30/2003	ND(0.39)	ND(0.16)	ND(0.31)	7.6	7.6
11/25/2003	ND(0.39)	ND(0.16)	ND(0.31)	8.3	8.3
12/30/2003	ND(0.69)	ND(0.28)	ND(0.55)	7.4	7.4
1/28/2004	ND(0.52)	ND(0.21)	ND(0.41)	7.1	7.1

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Table C5-C
EW-4 Explosives Concentration Vs. Time
(January 1999-December 2007)

EW-4	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
2/25/2004	ND(0.85)	ND(0.35)	ND(0.67)	6.7	6.7
3/31/2004	ND(0.52)	ND(0.21)	ND(0.41)	6.9	6.9
4/28/2004	ND(0.51)	ND(0.21)	ND(0.41)	8.1	8.1
5/26/2004	ND(0.68)	ND(0.28)	ND(0.54)	5.7	5.7
6/30/2004	ND(0.65)	ND(0.27)	ND(0.52)	7.6	7.6
7/28/2004	ND(0.44)	ND(0.18)	ND(0.35)	6.3	6.3
8/25/2004	ND(0.73)	ND(0.3)	ND(0.58)	6.5	6.5
9/29/2004	ND(0.73)	ND(0.3)	ND(0.58)	5.9	5.9
10/27/2004	ND(0.52)	ND(0.21)	ND(0.41)	6	6
11/23/2004	ND(0.55)	ND(0.22)	ND(0.43)	5.8	5.8
12/29/2004	ND(0.57)	0.29	ND(0.45)	5.4	5.69
1/26/2005	ND(0.31)	ND(0.16)	ND(0.39)	4.7	4.7
2/23/2005	ND(0.36)	ND(0.19)	ND(0.46)	5.1	5.1
3/30/2005	ND(0.39)	ND(0.2)	ND(0.49)	4.7	4.7
4/27/2005	ND(0.34)	ND(0.17)	ND(0.42)	4.5	4.5
5/25/2005	ND(0.31)	ND(0.16)	ND(0.39)	4.1	4.1
6/29/2005	ND(0.31)	ND(0.16)	ND(0.39)	4	4
7/27/2005	ND(0.57)	ND(0.29)	ND(0.72)	4.5	4.5
8/31/2005	ND(0.46)	ND(0.24)	ND(0.58)	4.1	4.1
9/28/2005	ND(0.32)	ND(0.16)	ND(0.4)	4.1	4.1
10/26/2005	ND(0.33)	ND(0.17)	ND(0.41)	4.3	4.3
11/30/2005	ND(0.39)	ND(0.2)	ND(0.49)	4.2	4.2
12/28/2005	ND(0.43)	ND(0.22)	ND(0.54)	4.3	4.3
1/25/2006	ND(0.31)	ND(0.16)	ND(0.39)	4.3	4.3
2/22/2006	ND(0.44)	ND(0.23)	ND(0.55)	4	4
3/29/2006	ND(0.36)	ND(0.18)	ND(0.45)	4	4
4/26/2006	ND(0.61)	ND(0.32)	ND(0.77)	3.8	3.8
5/31/2006	ND(0.31)	ND(0.16)	ND(0.39)	3.9	3.9
6/28/2006	ND(0.44)	ND(0.23)	ND(0.55)	4	4
7/26/2006	ND(0.41)	ND(0.21)	ND(0.51)	4	4
8/30/2006	ND(0.38)	ND(0.19)	ND(0.47)	3.5	3.5
9/27/2006	ND(0.39)	ND(0.2)	ND(0.49)	3.7	3.7
10/25/2006	ND(0.31)	ND(0.16)	ND(0.39)	3.5	3.5
11/29/2006	ND(0.34)	ND(0.18)	ND(0.43)	3.1	3.1
12/27/2006	ND(0.37)	ND(0.19)	ND(0.47)	2.9	2.9
1/31/2007	ND(0.36)	ND(0.18)	ND(0.45)	3.2	3.2
2/28/2007	ND(0.37)	ND(0.19)	ND(0.46)	3	3
3/28/2007	ND(0.31)	ND(0.16)	ND(0.39)	2.9	2.9
4/25/2007	ND(0.43)	ND(0.22)	ND(0.54)	2.4	2.4
5/30/2007	ND(0.47)	ND(0.24)	ND(0.59)	2.7	2.7
6/26/2007	ND(0.40)	ND(0.21)	ND(0.51)	2.9	2.9
7/25/2007	ND(0.44)	ND(0.23)	ND(0.55)	2.9	2.9
8/29/2007	ND(0.31)	ND(0.16)	ND(0.39)	3.2	3.2
9/26/2007	ND(0.35)	ND(0.18)	ND(0.44)	2.9	2.9
10/31/2007	ND(0.31)	ND(0.16)	ND(0.39)	2.7	2.7
11/28/2007	ND(0.35)	ND(0.18)	ND(0.44)	0.45	0.45
12/26/2007	ND(0.40)	ND(0.21)	ND(0.51)	2.6	2.6

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Figure C5-C
EW-4 Explosives Concentration Vs. Time
(January 1999 - December 2007)

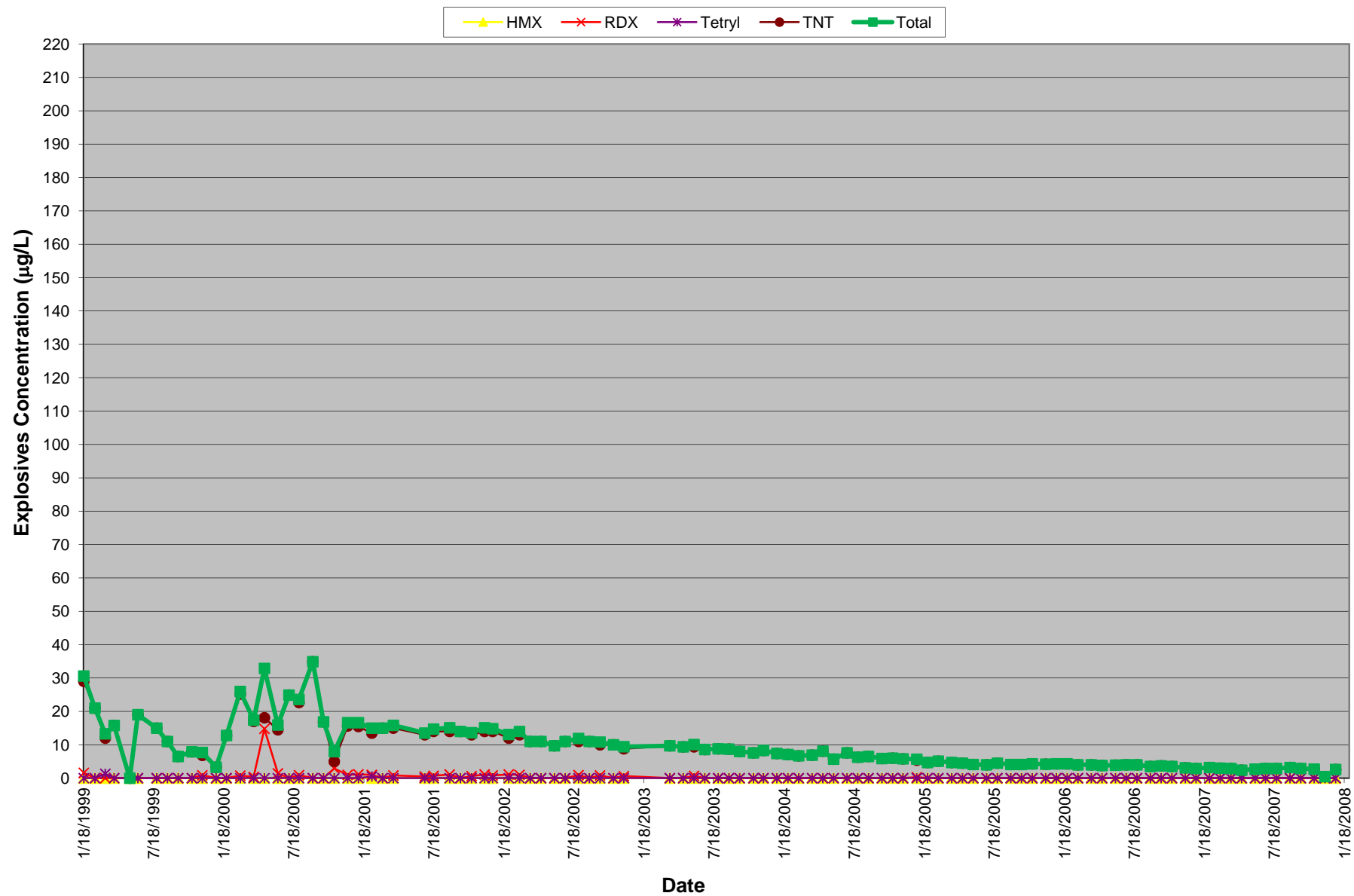


Table C5-D
EW-5 Explosives Concentration Vs. Time
(December 1998-December 2007)

EW-5	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
12/2/1998	ND(3)	ND(1.5)	ND(1)	ND(1)	0
1/18/1999	ND(3)	2.9	ND(1)	3.5	6.4
2/16/1999	ND(3)UJ	6	ND(1)	9.6	15.6
3/15/1999	ND(3)	4	5.7	8.4	18.1
4/7/1999	ND(3)UJ	3.9	ND(1)	20.3	24.2
5/18/1999	ND(3)U	1.2	ND(1)	35	36.2
6/8/1999	ND(3)U	4.6	ND(1)	33	37.6
7/27/1999	ND(3)U	5.1	ND(1)	35	40.1
8/24/1999	ND(3)U	0.89	ND(1)	34	34.89
9/21/1999	ND(0.9)	1.9	ND(0.3)	27	28.9
10/27/1999	1.89	17.5	ND(0.3)	8.05	27.44
11/23/1999	1.17	2.42	ND(0.3)	21.4	24.99
12/29/1999	0.69	1.85	ND(0.3)	16	18.54
1/25/2000	ND(0.9)	6.63	ND(0.3)	17.5	24.13
3/1/2000	1.21	3.67	ND(0.3)	48	52.88
4/5/2000	0.77	4.92	ND(0.3)	66.7	72.39
5/3/2000	ND(0.9)	8.44	ND(0.3)	28.4	36.84
6/7/2000	ND(0.9)	4.72	ND(0.3)	26	30.72
7/6/2000	ND(0.9)	5.28	ND(0.3)	29.8	35.08
8/1/2000	ND(0.9)	4.51	ND(0.3)	79.1	83.61
9/6/2000	ND(0.9)	5.28	ND(0.3)	29.78	35.06
10/4/2000	ND(0.9)	6.6	ND(0.3)	96.51	103.11
11/1/2000	ND(0.9)	2.45	ND(0.3)	57.8	60.25
12/6/2000	1.12	5.15	ND(0.3)	89.68	95.95
1/3/2001	0.85	4.97	ND(0.15)	73.94	79.76
2/7/2001	0.9	5.29	ND(0.3)	71.3	77.49
3/7/2001	ND(1)	5.3	ND(1)	80	85.3
4/4/2001	0.89	7.3	ND(1)	75	83.19
6/25/2001	0.7	4	ND(1)	38	42.7
7/18/2001	ND(1)	3.2	ND(1)	28	31.2
8/29/2001	ND(1)	5.4	ND(1)	66	71.4
9/26/2001	ND(1)	6	ND(1)	68	74
10/25/2001	0.87	4.9	ND(1)	65	70.77
11/28/2001	1.1	5.7	ND(1)	71	77.8
12/19/2001	0.7	5.1	ND(1)	69	74.8
1/30/2002	0.88	6.5	ND(1)	61	68.38
2/27/2002	1.2	6.5	ND(0.62)	61	68.7
3/27/2002	1.2	6.5	ND(0.31)	45	52.7
4/24/2002	1.2	6	ND(0.48)	50	57.2
5/29/2002	1.1	5.7	ND(.31)	41	47.8
6/26/2002	1	5.6	ND(0.49)	44	50.6
7/31/2002	1.2	5.9	ND(0.31)	49	56.1
8/28/2002	1.1	5.9	ND(0.39)	49	56
9/25/2002	1.1	5.1	ND(0.42)	45	51.2
10/30/2002	1.2	6	ND(0.31)	53	60.2
11/26/2002	0.95	4.5	ND(0.31)	47	52.45
3/26/2003	1.1	5.2	ND(0.54)	43	49.3
4/30/2003	0.92	4.6	ND(0.49)	45	50.52
5/28/2003	0.88	4.6	ND(0.44)	45	50.48
6/25/2003	0.9	4.3	ND(0.31)	41	46.2
7/30/2003	0.86	4.2	ND(0.49)	44	49.06
8/27/2003	0.87	4.1	ND(0.41)	40	44.97
9/24/2003	0.86	3.9	ND(0.31)	39	43.76
10/30/2003	0.86	4.2	ND(0.36)	41	46.06
11/25/2003	0.88	4.8	ND(0.43)	38	43.68
12/30/2003	0.9	4.7	ND(0.39)	31	36.6

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Table C5-D
EW-5 Explosives Concentration Vs. Time
(December 1998-December 2007)

EW-5	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
1/28/2004	0.91	4.5	ND(0.46)	31	36.41
2/25/2004	0.85	4.2	ND(0.6)	26	31.05
3/31/2004	0.89	4	ND(0.39)	27	31.89
4/28/2004	0.82	4	ND(0.49)	33	37.82
5/26/2004	0.76	3.6	ND(0.469)	35	39.36
6/30/2004	0.79	3.6	ND(0.41)	29	33.39
7/28/2004	0.74	3.2	ND(0.39)	36	39.94
8/25/2004	0.67	3.3	ND(0.46)	27	30.97
9/29/2004	0.72	3.5	ND(0.38)	28	32.22
10/27/2004	0.81	3.4	ND(0.31)	22	26.21
11/23/2004	1	3.1	ND(0.71)	27	31.1
12/29/2004	0.47	2.4	ND(0.4)	23	25.87
1/26/2005	0.77	2.9	ND(0.66)	29	32.67
2/23/2005	0.69	2.7	ND(0.64)	26	29.39
3/30/2005	0.69	2.6	ND(0.55)	23	26.29
4/27/2005	0.63	3.1	ND(0.63)	15	18.73
5/25/2005	0.67	2.4	ND(0.39)	20	23.07
6/29/2005	0.6	2.2	ND(0.39)	17	19.8
7/27/2005	0.6	1.9	ND(0.53)	21	23.5
8/31/2005	0.56	1.8	ND(0.56)	17	19.36
9/28/2005	0.45	1.5	ND(0.39)	15	16.95
10/26/2005	0.57	1.7	ND(0.65)	16	18.27
11/30/2005	0.51	1.5	ND(0.7)	18	20.01
12/28/2005	0.45	1.3	ND(0.39)	15	16.75
1/25/2006	0.48	1.3	ND(0.46)	18	19.78
2/22/2006	0.52	1.3	ND(0.58)	19	20.82
3/29/2006	0.45	1.4	ND(0.65)	13	14.85
4/26/2006	0.42	1.2	ND(0.69)	13	14.62
5/31/2006	0.39	1.1	ND(0.39)	18	19.49
6/28/2006	0.43	1.2	ND(0.61)	14	15.63
7/26/2006	ND(0.4)	1.1	ND(0.51)	16	17.1
8/30/2006	0.33	0.93	ND(0.71)	13	14.26
9/27/2006	0.32	0.9	ND(0.39)	13	14.22
10/25/2006	0.34	0.94	ND(0.42)	16	17.28
11/29/2006	0.31	0.89	ND(0.39)	10	11.2
12/27/2006	0.3	0.87	ND(0.46)	11	12.17
1/31/2007	0.32	0.79	ND(0.4)	9.8	10.91
2/28/2007	0.29	0.74	ND(0.41)	9.1	10.13
3/28/2007	0.31	0.74	ND(0.39)	9.5	10.55
4/25/2007	0.25	0.63	ND(0.39)	9.8	10.68
5/30/2007	0.27	0.73	ND(0.39)	9.1	10.1
6/26/2007	0.29	0.75	ND(0.39)	9.7	10.74
7/25/2007	0.27	0.78	ND(0.39)	9.2	10.25
8/29/2007	ND(0.31)	0.7	ND(0.39)	11	11.67
9/26/2007	0.28	0.8	ND(0.39)	9.9	10.99
10/31/2007	0.29	0.8	ND(0.44)	10	11.07
11/28/2007	ND(0.51)	ND(0.26)	ND(0.64)	0.5	0.5
12/26/2007	ND(0.48)	0.6	ND(0.60)	8.9	9.46

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Figure C5-D
EW-5 Explosives Concentration Vs. Time
(December 1998 - December 2007)

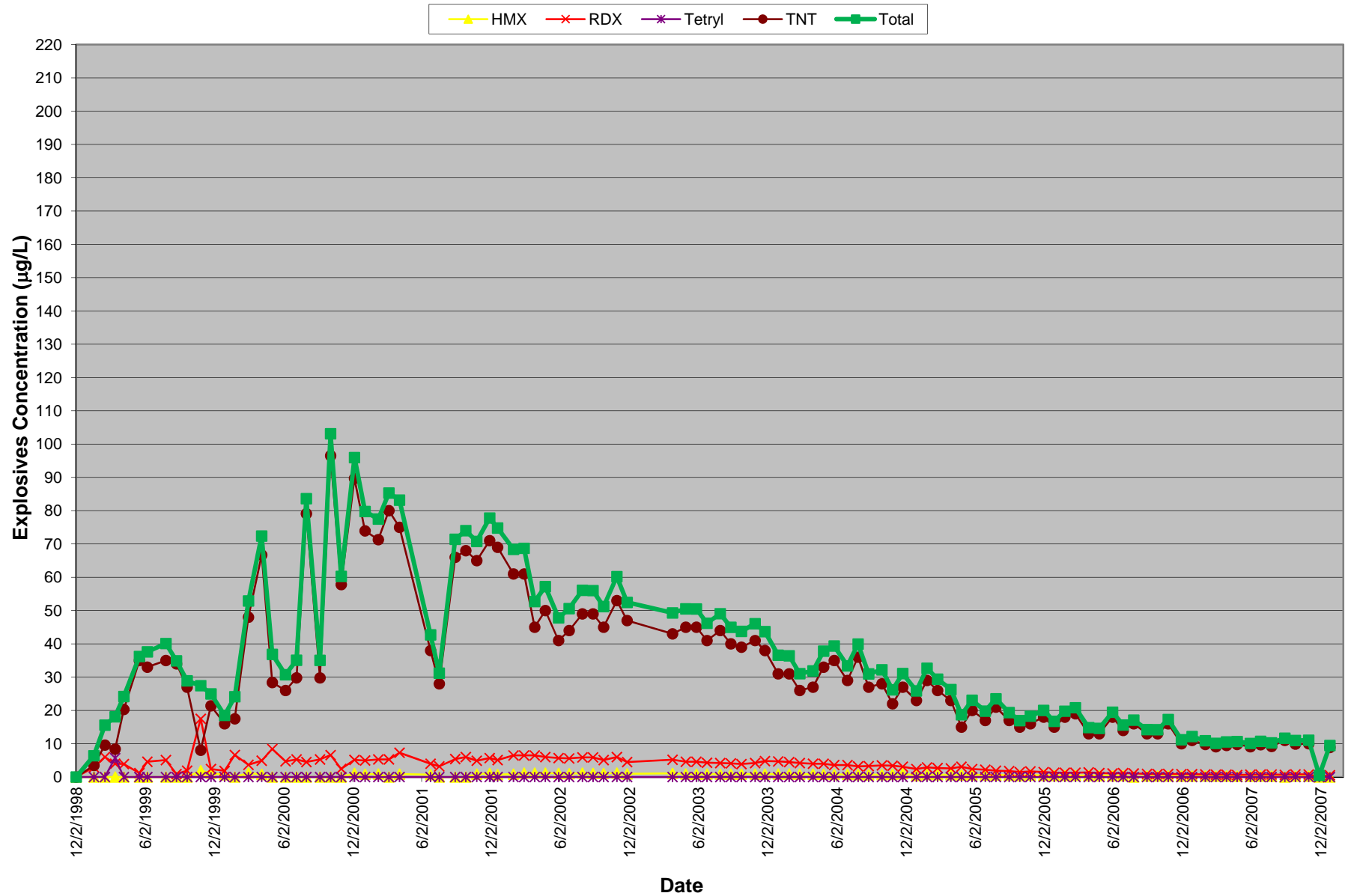


Table C5-E
EW-6 Explosives Concentration Vs. Time
(December 1998-June 2009)

EW-6	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
12/2/1998	15.3	ND(1.5)	ND(1)	23.5	38.8
1/18/1999	ND(3)	18	ND(1)	15	33
2/16/1999	ND(3)UJ	23	ND(1)	12	35
3/15/1999	3	53	ND(1)	6	62
4/7/1999	4.4	51.4	ND(1)	8.8	64.6
5/18/1999	1.8	13	ND(1)	12	26.8
5/18/1999	1.9	11	ND(1)	11	23.9
6/8/1999	6.9	44	ND(1)	10	60.9
7/27/1999	8.2	41	ND(1)	9.4	58.6
7/27/1999	10.7	42	ND(1)	8.4	61.1
8/24/1999	0.72	6.1	ND(1)	9.1	15.92
8/24/1999	0.71	6.2	ND(1)	8.4	15.31
9/21/1999	1.8	6.7	ND(0.3)	6.5	15
10/27/1999	ND(0.9)	7.32	ND(1.5)	26	33.32
11/23/1999	3.43	10.5	ND(0.3)	13.5	27.43
12/29/1999	1.71	15.1	ND(0.3)	14.2	31.01
1/25/2000	ND(0.9)	17.4	ND(0.3)	12.2	29.6
3/1/2000	2.95	18.6	ND(0.3)	48.9	70.45
4/5/2000	3.52	37.3	ND(0.3)	20.8	61.62
5/3/2000	ND(0.9)	27.6	ND(0.3)	19.8	47.4
6/7/2000	4.15	20.8	ND(0.3)	18.4	43.35
7/6/2000	4.98	33	ND(0.3)	25.9	63.88
8/1/2000	1.56	5.99	ND(0.3)	22.41	29.96
9/6/2000	ND(0.9)	33.02	ND(0.3)	55.89	88.91
10/4/2000	ND(0.9)	35.31	ND(0.3)	19.64	54.95
11/1/2000	ND(0.9)	23.79	ND(0.3)	15.25	39.04
12/6/2000	3.93	29.24	ND(0.3)	20.73	53.9
1/3/2001	2.52	18.95	0.36	18.12	39.95
2/7/2001	3.19	23.5	0.6	17.3	44.59
3/7/2001	2.6	18	ND(1)	17	37.6
4/4/2001	3	20	ND(1)	17	40
6/25/2001	3.4	28	ND(1)	12	43.4
7/18/2001	2.8	26	ND(1)	14	42.8
8/29/2001	ND(1)	16	ND(1)	12	28
9/26/2001	3.1	22	ND(1)	19	44.1
10/25/2001	2.9	17	ND(1)	17	36.9
11/28/2001	3	18	ND(1)	18	39
12/19/2001	2.9	17	ND(1)	18	37.9
1/30/2002	ND(0.9)	17.4	ND(0.3)	12.2	29.6
2/27/2002	3.1	15	ND(0.62)	16	34.1
3/27/2002	2.6	14	ND(0.31)	14	30.6
4/24/2002	2.8	13	ND(0.39)	14	29.8
5/29/2002	2.5	13	ND(0.31)	13	28.5
6/26/2002	2.3	12	ND(0.44)	14	28.3
7/31/2002	2.7	14	ND(0.31)	19	35.7
8/28/2002	2.5	13	ND(0.31)	16	31.5
9/25/2002	2.4	12	ND(0.35)	16	30.4
10/30/2002	2.6	13	ND(0.31)	18	33.6
11/26/2002	2	9	ND(0.35)	15	26
3/26/2003	1.8	8.2	ND(0.31)	12	22
4/30/2003	1.8	8.9	ND(0.26)	13	23.7
5/28/2003	1.7	9.4	ND(0.46)	14	25.1
6/25/2003	1.8	8.4	ND(0.31)	13	23.2
7/30/2003	1.8	9.1	ND(0.34)	17	27.9
8/27/2003	1.9	11	ND(0.46)	17	29.9
9/24/2003	1.9	9.3	ND(0.32)	16	27.2

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Table C5-E
EW-6 Explosives Concentration Vs. Time
(December 1998-June 2009)

EW-6	Explosives ^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
10/30/2003	1.9	8.6	ND(0.31)	15	25.5
11/25/2003	1.5	8.4	ND(0.31)	14	23.9
12/30/2003	1.7	8.3	ND(0.33)	13	23
1/28/2004	1.4	7.8	ND(0.4)	13	22.2
2/25/2004	1.5	7.5	ND(0.41)	12	21
3/31/2004	1.5	7.1	ND(0.39)	14	22.6
4/28/2004	1.3	6.8	ND(0.44)	15	23.1
5/26/2004	1.3	6.5	ND(0.44)	16	23.8
6/30/2004	1.3	6.3	ND(0.47)	15	22.6
7/28/2004	1.4	7.2	ND(0.39)	14	22.6
8/25/2004	1.6	9.3	ND(0.5)	21	31.9
9/29/2004	1.5	8.2	ND(0.49)	19	28.7
10/27/2004	1.4	6.8	ND(0.31)	12	20.2
11/23/2004	1.3	5.9	ND(0.36)	18	25.2
12/29/2004	1.3	6.2	ND(0.49)	12	19.5
1/26/2005	1.1	5.1	ND(0.66)	12	18.2
2/23/2005	1.1	5.2	ND(0.55)	15	21.3
3/30/2005	1.4	5	ND(0.77)	12	18.4
4/27/2005	1	4.9	ND(1.2)	12	17.9
5/25/2005	0.91	4	ND(0.39)	14	18.91
6/29/2005	0.89	4.2	ND(0.39)	9.1	14.19
7/27/2005	1	5	ND(0.45)	16	22
8/31/2005	1.1	5.5	ND(0.82)	12	18.6
9/28/2005	1	4.5	ND(0.39)	10	15.5
10/26/2005	1	4.3	ND(0.69)	10	15.3
11/30/2005	0.86	3.8	ND(0.4)	13	17.66
12/28/2005	0.84	3.8	ND(0.5)	13	17.64
1/25/2006	0.82	3.8	ND(0.48)	9.4	14.02
2/22/2006	0.81	3.6	ND(0.39)	11	15.41
3/29/2006	0.74	3.5	ND(0.47)	9.1	13.34
4/26/2006	0.69	3.3	ND(0.39)	8.9	12.89
5/31/2006	0.62	3	ND(0.39)	8.3	11.92
6/28/2006	0.53	3.1	ND(0.39)	8.3	11.93
7/26/2006	0.59	3.5	ND(0.58)	9.3	13.39
8/30/2006	0.63	3.1	ND(0.49)	8.4	12.13
9/27/2006	0.71	3.3	ND(0.39)	9	13.01
10/25/2006	0.69	3.3	ND(0.62)	7.8	11.79
11/29/2006	0.67	3.3	ND(0.55)	8.1	12.07
12/27/2006	0.57	2.6	ND(0.39)	6.7	9.87
1/31/2007	0.55	2.4	ND(0.39)	7.1	10.05
2/28/2007	0.55	2.4	ND(0.39)	6.8	9.75
3/28/2007	0.53	2.4	ND(0.39)	6.6	9.53
4/25/2007	0.42	1.8	ND(0.39)	5.7	7.92
5/30/2007	0.6	2.7	ND(0.51)	6.5	9.8
6/26/2007	0.6	2.9	ND(0.58)	6.1	9.6
7/25/2007	0.63	3.1	ND(0.49)	6.5	10.23
8/29/2007	0.64	2.6	ND(0.39)	4.8	8.04
9/26/2007	0.69	3.0	ND(0.46)	5.4	9.09
10/31/2007	0.67	2.6	ND(0.39)	4.8	8.07
11/28/2007	0.68	2.9	ND(0.53)	5.3	8.88
12/26/2007	0.53	1.8	ND(0.57)	4.2	6.53
1/30/2008	0.72	2.9	ND(0.53)	4.5	8.12
2/27/2008	0.62	2.2	ND(0.64)	2.9	5.72
3/26/2008	0.56	2.2	ND(0.39)	2.7	5.46
4/30/2008	0.6	2.4	ND(0.65)	3.3	6.3
5/28/2008	0.61	2.4	ND(0.39)	3.9	6.91

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Table C5-E
EW-6 Explosives Concentration Vs. Time
(December 1998-June 2009)

EW-6	Explosives⁽⁸³³⁰⁾ug/L				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
6/25/2008	0.54	2.1	ND(0.39)	3.6	6.24
7/30/2008	0.72	3.3	ND(0.39)	3.9	7.92
8/27/2008	0.78	3.1	ND(0.39)	3.5	7.38
9/24/2008	0.68	3.1	ND(0.39)	4	7.78
10/29/2008	0.76	2.9	ND(0.39)	2.7	6.36
11/24/2008	0.76	2.7	ND(0.39)	3.5	6.96
12/29/2008	0.88	3.1	ND(0.39)	4.6	8.58
1/28/2009	0.87	3.0	ND(0.39)	4.7	8.57
2/25/2009	0.84	2.8	ND(0.39)	4.5	8.14
3/25/2009	0.88	2.9	ND(0.39)	4.5	8.28
4/29/2009	0.79	2.5	ND(0.39)	4.1	7.39
5/27/2009	0.81	2.5	ND(0.39)	4	7.31
6/24/2009	0.78	2.5	ND(0.39)	4	7.28

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Figure C5-E
EW-6 Explosives Concentration Vs. Time
(December 1998 - Jun 2009)

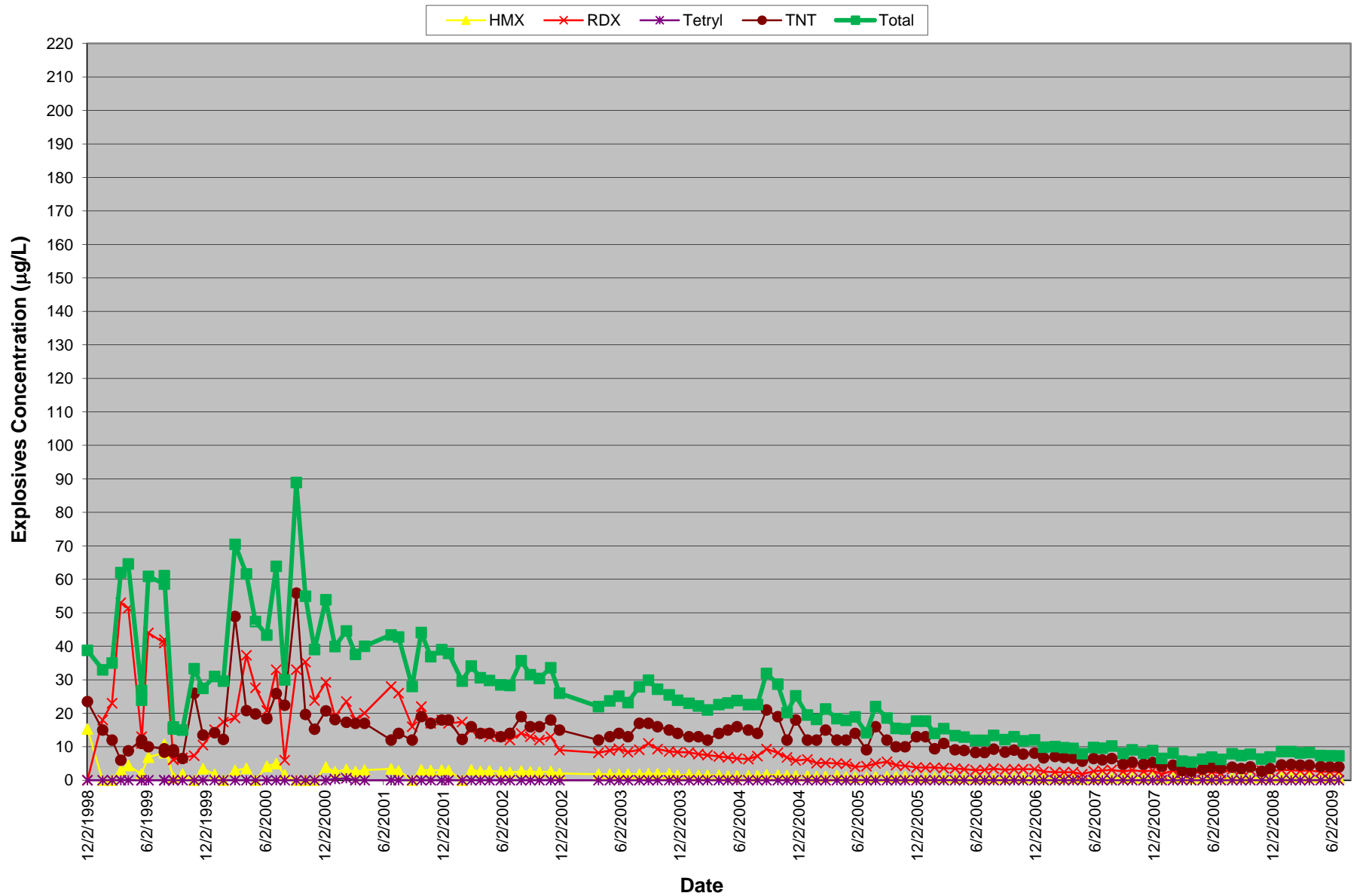


Table C5-F
GWTP Effluent Explosives Concentration Vs. Time
(January 2002-April 2014)

EW-6	Explosives^{(8330)ug/L}				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
Permit	200 µg/L	50 µg/L		Report	100 µg/L
1/28/2009	ND(0.31)	ND(0.16)	ND(0.39)	ND(0.16)	ND
2/25/2009	ND(0.31)	0.1	ND(0.39)	ND(0.16)	0.083
3/25/2009	ND(0.31)	0.1	ND(0.39)	ND(0.16)	0.081
4/29/2009	ND(0.49)	ND(0.25)	ND(0.61)	ND(0.25)	ND
5/27/2009	ND(0.31)	0.2	ND(0.39)	ND(0.16)	0.15
6/24/2009	ND(0.31)	0.2	ND(0.39)	ND(0.16)	0.21
7/29/2009	ND(0.32)	ND(0.16)	ND(0.40)	ND(0.16)	ND
8/26/2009	ND(0.53)	ND(0.27)	ND(0.66)	ND(0.27)	ND
9/30/2009	ND(0.57)	ND(0.29)	ND(0.72)	ND(0.29)	ND
10/28/2009	ND(0.37)	ND(0.19)	ND(0.47)	ND(0.19)	ND
11/23/2009	ND(0.36)	ND(0.18)	ND(0.45)	ND(0.18)	ND
12/30/2009	ND(0.39)	ND(0.20)	ND(0.49)	ND(0.20)	ND
1/27/2010	ND(0.36)	ND(0.19)	ND(0.46)	ND(0.19)	ND
2/25/2010	ND(0.49)	ND(0.25)	ND(0.61)	ND(0.25)	ND
3/31/2010	ND(0.42)	ND(0.22)	ND(0.53)	ND(0.22)	ND
4/28/2010	ND(0.51)	ND(0.26)	ND(0.64)	ND(0.26)	ND
5/26/2010	ND(0.74)	ND(0.38)	ND(0.94)	ND(0.38)	ND
6/30/2010	ND(0.44)	ND(0.23)	ND(0.56)	ND(0.23)	ND
7/28/2010	ND(0.51)	0.2	ND(0.64)	ND(0.26)	0.16
8/25/2010	ND(0.54)	0.2	ND(0.68)	ND(0.28)	0.18
9/29/2010	ND(0.55)	ND(0.28)	ND(0.69)	ND(0.28)	ND
10/27/2010	ND(0.37)	0.2	ND(0.47)	ND(0.19)	0.22
11/29/2010	0.078	0.3	ND(0.57)	ND(0.23)	0.378
12/29/2010	ND(0.49)	ND(0.25)	ND(0.61)	ND(0.25)	ND
1/26/2011	ND(0.31)	ND(0.16)	ND(0.39)	ND(0.16)	ND
2/23/2011	ND(0.57)	ND(0.30)	ND(0.72)	ND(0.30)	ND
3/30/2011	ND(0.35)	ND(0.18)	ND(0.44)	ND(0.18)	ND
4/27/2011	ND(0.37)	ND(0.19)	ND(0.46)	ND(0.19)	ND
5/25/2011	ND(0.52)	ND(0.27)	ND(0.65)	ND(0.27)	ND
6/29/2011	ND(0.61)	ND(0.31)	ND(0.77)	ND(0.31)	ND
7/27/2011	ND(0.53)	ND(0.27)	ND(0.67)	ND(0.27)	ND
8/31/2011	ND(0.77)	ND(0.40)	ND(0.97)	ND(0.40)	ND
9/28/2011	ND(0.44)	ND(0.23)	ND(0.56)	ND(0.23)	ND
10/26/2011	ND(0.61)	ND(0.31)	ND(0.77)	ND(0.31)	ND
11/30/2011	ND(0.65)	ND(0.33)	ND(0.81)	ND(0.33)	ND
12/28/2011	ND(0.44)	0.2	ND(0.55)	ND(0.23)	0.2
1/25/2012	ND(0.2)	0.6	ND(0.22)	ND(0.34)	0.58
2/29/2012	ND(0.2)	ND(0.22)	ND(0.22)	ND(0.34)	ND
3/28/2012	ND(0.2)	ND(0.22)	ND(0.22)	ND(0.34)	ND
4/25/2012	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND
5/30/2012	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND
6/27/2012	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND
7/25/2012	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND
8/29/2012	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND
9/26/2012	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND
10/31/2012	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND
11/28/2012	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND
12/26/2012	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND
1/30/2013	ND(0.25)	ND(0.25)	ND(0.8)	ND(0.25)	ND
2/27/2013	ND(0.25)	ND(0.25)	ND(0.8)	ND(0.25)	ND
3/27/2013	ND(0.25)	ND(0.25)	ND(0.8)	ND(0.25)	ND
4/24/2013	ND(0.25)	ND(0.25)	ND(0.8)	ND(0.25)	ND
5/29/2013	ND(0.25)	ND(0.25)	ND(0.8)	ND(0.25)	ND
6/26/2013	ND(0.2)	ND(0.2)	ND(1)	ND(0.2)	ND
7/31/2013	ND(0.2)	0.2	ND(1)	ND(0.2)	0.24

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

Table C5-F
GWTP Effluent Explosives Concentration Vs. Time
(January 2002-April 2014)

EW-6	Explosives⁽⁸³³⁰⁾ug/L				
Date	HMX	RDX	Tetryl	TNT	Total
HALs	400 ug/L	2 ug/L	NA	2ug/L	
Permit	200 µg/L	50 µg/L		Report	100 µg/L
8/28/2013	ND(0.2)	0.2	ND(1)	ND(0.2)	0.2
9/25/2013	ND(0.2)	ND(0.2)	ND(1)	ND(0.2)	ND
10/30/2013	ND(0.2)	ND(0.2)	ND(1)	ND(0.2)	ND
11/26/2013	ND(0.2)	ND(0.2)	ND(1)	ND(0.2)	ND
12/26/2013	ND(0.2)	ND(0.2)	ND(1)	ND(0.2)	ND
1/29/2014	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND
2/26/2014	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND
4/30/2014	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND

CY09 Carbon Change-Out: July 23, 2009

CY10 Carbon Change-Out: November 30, 2010

CY12 Carbon Change-Out: February 8, 2012

CY13 Carbon Change-Out: October 9, 2013

Notes:

J = Estimated Value

ug/L = micrograms per Liter

NA = Not Available

ND(1.0) = Non Detect, (method detection limit of laboratory)

C.1 Explosives**C.1.1 OU1 ON-POST G00 WELLS**

WELL	TABLE	WELL	TABLE
G0011	C.1.1-1	G0078	C.1.1-41
G0012	C.1.1-2	G0079	C.1.1-42
G0013	C.1.1-3	G0080	C.1.1-43
G0014	C.1.1-4	G0081	C.1.1-44
G0015	C.1.1-5	G0082	C.1.1-45
G0016	C.1.1-6	G0083	C.1.1-46
G0017	C.1.1-7	G0084	C.1.1-47
G0018	C.1.1-8	G0085	C.1.1-48
G0019	C.1.1-9	G0086	C.1.1-49
G0020	C.1.1-10	G0087	C.1.1-50
G0021	C.1.1-11	G0088	C.1.1-51
G0022	C.1.1-12	G0089	C.1.1-52
G0023	C.1.1-13	G0090	C.1.1-53
G0024	C.1.1-14	G0091	C.1.1-54
G0025	C.1.1-15	G0092	C.1.1-55
G0026	C.1.1-16	G0093	C.1.1-56
G0027	C.1.1-17	G0094	C.1.1-57
G0028	C.1.1-18	G0095	C.1.1-58
G0029	C.1.1-19	G0096	C.1.1-59
G0030	C.1.1-20	G0097	C.1.1-60
G0031	C.1.1-21	G0098	C.1.1-61
G0032	C.1.1-22	G0099	C.1.1-62
G0033	C.1.1-23	G0100	C.1.1-63
G0042	C.1.1-24	G0101	C.1.1-64
G0043	C.1.1-25	G0102	C.1.1-65
G0044	C.1.1-26	G0103	C.1.1-66
G0045	C.1.1-27	G0104	C.1.1-67
G0046	C.1.1-28	G0105	C.1.1-68
G0047	C.1.1-29	G0106	C.1.1-69
G0048	C.1.1-30	G0107	C.1.1-70
G0049	C.1.1-31	G0108	C.1.1-71
G0052	C.1.1-32	G0109	C.1.1-72
G0063	C.1.1-33	G0110	C.1.1-73
G0066/G0066R	C.1.1-34	G0111	C.1.1-74
G0067	C.1.1-35		
G0068	C.1.1-36		
G0070	C.1.1-37		
G0075	C.1.1-38		
G0076	C.1.1-39		
G0077	C.1.1-40		

TABLE C.1.1-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0011-EXPLOSIVES

FIELD ID			G0011			G0011			G0011			G0011			G0011			G0011			G0011		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			3/3/2011			3/1/2010			3/6/2009			3/12/2008			3/13/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.48	U	<	0.49	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.48	U	<	0.49	U	<	0.48	U
HMX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.49	U	<	0.48	U
MNX	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.48	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.49	U	<	0.48	U
RDX	0.8	1 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.49	U	0.8	0.48	
Tetryl	-	0 / 17	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0011-EXPLOSIVES

FIELD ID			G0011			G0011			G0011			G0011			G0011			G0011			G0011		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/29/2006			3/21/2005			3/16/2004			3/21/2003			3/21/2002			3/28/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.24	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.24	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.24	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.33	U	<	0.46	U	<	0.22	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.33	U	<	0.46	U	<	0.87	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.48	U	<	0.48	U	<	0.33	U	<	0.46	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.33	U	<	0.46	U	<	0.69	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.33	U	<	0.46	U	<	0.43	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.33	U	<	0.46	U	<	0.59	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.53	U	<	0.75	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.42	U	<	0.58	U	<	0.95	U	<	1	U	<	0.8	U
MNX	-	0 / 9	<	0.48	U	<	0.48	U	<	0.17	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.24	U	<	0.39	U	<	0.8	U	<	0.8	U
RDX	0.8	1 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.24	U	<	0.56	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 17	<	0.48	U	<	0.48	U	<	0.33	U	<	0.46	U	<	0.92	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0011-EXPLOSIVES

FIELD ID			G0011			G0011			G0011			G0011			G0011			G0011			G0011		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32			UW01		
COLLECT DATE	Detection	Frequency	3/26/1999			6/23/1998			7/11/1994			6/7/1994			10/5/1992			8/18/1992			11/8/1988		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	1.0	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U	<	0.56	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.5	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U	<	0.61	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	1.0	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U	<	0.78	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.5	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U	<	0.6	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.5	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U	<	0.55	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.8	U	<	0.5	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 15	<	0.8	U	<	1.0	U		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 15	<	0.8	U	<	1.0	U		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	0.8	U	<	1.0	U		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 15	<	0.8	U	<	1.0	U		NA			NA			NA			NA			NA	
HMX	-	0 / 20	<	0.8	U	<	0.5	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U	<	1.3	U
MNX	-	0 / 9		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.5	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U	<	1.13	U
RDX	0.8	1 / 21	<	0.8	U	<	1.0	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U	<	0.63	U
Tetryl	-	0 / 17	<	0.8	U	<	0.5	U	<	1.18	U	<	1.18	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0011-EXPLOSIVES

FIELD ID			G0011		
METHOD	Maximum	Detection	6N		
COLLECT DATE	Detection	Frequency	1/8/1982		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 21	<	1.9	U
1,3-Dinitrobenzene	-	0 / 21	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 21	<	1.2	U
2,4-Dinitrotoluene	-	0 / 21	<	0.9	U
2,6-Dinitrotoluene	-	0 / 21	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 19		NA	
2-Nitrotoluene	-	0 / 15		NA	
3-Nitrotoluene	-	0 / 15		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 15		NA	
4-Nitrotoluene	-	0 / 15		NA	
HMX	-	0 / 20		NA	
MNX	-	0 / 9		NA	
Nitrobenzene	-	0 / 21	<	2.1	U
RDX	0.8	1 / 21	<	9.6	U
Tetryl	-	0 / 17		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0012-EXPLOSIVES

FIELD ID			G0012			G0012			G0012			G0012			G0012			G0012			G0012		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			3/7/2011			3/1/2010			3/6/2009			3/12/2008			3/13/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	UJ	<	0.8	U	<	0.8	U	<	1	U	<	0.5	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.21	U	<	0.5	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.5	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.5	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	1	U	<	0.5	U	<	0.48	U	<	0.48	U
HMX	-	0 / 19	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	UJ	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.5	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 20	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.48	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.5	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 18	<	1.6	UJ	<	0.8	U	<	0.8	U	<	0.25	U	<	0.5	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0012-EXPLOSIVES

FIELD ID			G0012			G0012			G0012			G0012			G0012			G0012			G0012		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/29/2006			3/22/2005			3/17/2004			3/24/2003			3/25/2002			3/27/2001			3/17/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.3	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.3	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.3	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 19	<	0.48	U	<	0.48	U	<	0.31	U	<	0.57	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.57	U	<	0.88	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.48	U	<	0.48	U	<	0.31	U	<	0.57	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.57	U	<	0.69	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.57	U	<	0.44	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.57	U	<	0.6	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.5	U	<	0.93	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 19	<	0.48	U	<	0.48	U	<	0.39	U	<	0.72	U	<	0.96	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.3	U	<	0.4	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.3	U	<	0.57	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.57	U	<	0.94	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0012-EXPLOSIVES

FIELD ID			G0012			G0012			G0012			G0012			G0012			G0012		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			6N		
COLLECT DATE	Detection	Frequency	3/29/1999			6/23/1998			7/12/1994			6/15/1994			8/24/1992			1/7/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1	U	<	0.425	U	<	0.425	U	<	0.449	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.5	U	<	0.549	U	<	0.549	U	<	0.611	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	1	U	<	0.451	U	<	0.451	U	<	0.635	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.5	U	<	0.26	U	<	0.26	U	<	0.064	U		NA	
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.5	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.8	U	<	0.5	U	<	0.244	U	<	0.244	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1	U		NA			NA			NA			NA	
HMX	-	0 / 19	<	0.8	U	<	0.5	U	<	0.563	U	<	0.563	U	<	1.21	U		NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.5	U	<	0.817	U	<	0.817	U	<	0.645	U	<	2.1	U
RDX	-	0 / 20	<	0.8	U	<	1	U	<	0.412	U	<	0.412	U	<	1.17	U	<	9.6	U
Tetryl	-	0 / 18	<	0.8	U	<	0.5	U	<	3.26	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0013-EXPLOSIVES

FIELD ID			G0013			G0013			G0013			G0013			G0013			G0013			G0013		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013			None			3/13/2008			3/14/2007			3/28/2006			3/21/2005			3/17/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.25	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.25	U
2,4,6-Trinitrotoluene	0.17 J	1 / 24	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	0.17	0.25	J
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	Not Sampled in 2009, 2010, 2011, 2012			<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.79	U
HMX	-	0 / 19	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.62	U
MNX	-	0 / 6	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.25	U
Nitrobenzene	-	0 / 21	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.25	U
RDX	1.29	2 / 24	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.25	U
Tetryl	-	0 / 16	<	1.6	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0013-EXPLOSIVES

FIELD ID			G0013			G0013			G0013			G0013			G0013			G0013			G0013		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/21/2003			3/25/2002			3/28/2001			3/17/2000			3/29/1999			6/23/1998			7/12/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.21	U	<	0.31	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 21	<	0.21	U	<	0.21	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.5	U	<	0.549	U
2,4,6-Trinitrotoluene	0.17 J	1 / 24	<	0.21	U	<	0.26	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 24	<	0.41	U	<	0.21	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.5	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 24	<	0.41	U	<	0.81	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.5	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.41	U	<	0.33	U	<	0.8	U	<	1	U	<	0.8	U	<	0.5	U	<	0.244	U
2-Nitrotoluene	-	0 / 12	<	0.41	U	<	0.64	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1	U		NA	
3-Nitrotoluene	-	0 / 12	<	0.41	U	<	0.40	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.41	U	<	0.55	U	<	0.8	U	<	1	U	<	0.8	U	<	1	U		NA	
4-Nitrotoluene	-	0 / 12	<	0.67	U	<	1.3	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1	U		NA	
HMX	-	0 / 19	<	0.52	U	<	0.88	U	<	1	U	<	0.8	U	<	0.8	U	<	0.5	U	<	0.563	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.21	U	<	0.36	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.5	U	<	0.817	U
RDX	1.29	2 / 24	<	0.21	U	<	0.52	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.412	U
Tetryl	-	0 / 16	<	0.41	U	<	0.86	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.5	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0013-EXPLOSIVES

FIELD ID			G0013			G0013			G0013			G0013			G0013			G0013			G0013		
METHOD	Maximum	Detection	UW33			UW32			UW14			UW14			UW01			UW01			D1		
COLLECT DATE	Detection	Frequency	6/15/1994			8/24/1992			10/15/1990			4/23/1990			5/15/1989			11/8/1988			12/4/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.425	U	<	0.449	U	<	0.626	U	<	0.626	U	<	0.56	U	<	0.56	U	<	1.4	U
1,3-Dinitrobenzene	-	0 / 21	<	0.549	U	<	0.611	U	<	0.519	U	<	0.519	U	<	0.61	U	<	0.61	U		NA	
2,4,6-Trinitrotoluene	0.17 J	1 / 24	<	0.451	U	<	0.635	U	<	0.588	U	<	0.588	U	<	0.78	U	<	0.78	U	<	1.9	U
2,4-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.064	U	<	0.612	U	<	0.612	U	<	0.6	U	<	0.6	U	<	1.2	U
2,6-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.074	U	<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.244	U	<	0.158	U		NA			NA		NA		NA		NA			NA	
2-Nitrotoluene	-	0 / 12		NA			NA			NA			NA		NA		NA		NA			NA	
3-Nitrotoluene	-	0 / 12		NA			NA			NA			NA		NA		NA		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12		NA			NA			NA			NA		NA		NA		NA			NA	
4-Nitrotoluene	-	0 / 12		NA			NA			NA			NA		NA		NA		NA			NA	
HMX	-	0 / 19	<	0.563	U	<	1.21	U	<	1.65	U	<	1.65	U	<	1.3	U	<	1.3	U		NA	
MNX	-	0 / 6		NA			NA			NA			NA		NA		NA		NA			NA	
Nitrobenzene	-	0 / 21	<	0.817	U	<	0.645	U	<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U		NA	
RDX	1.29	2 / 24	<	0.412	U	<	1.17	U	<	2.11	U	<	2.11	U	1.29	NRL		0.68	NRL		<	9	U
Tetryl	-	0 / 16	<	1.18	U		NA		<	0.556	U	<	0.556	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0013-EXPLOSIVES

FIELD ID			G0013			G0013			G0013			G0013		
METHOD	Maximum	Detection	D1			D1			6N			6N		
COLLECT DATE	Detection	Frequency	6/18/1985			9/18/1984			1/18/1983			1/8/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 24	<	1.4	U	<	0.5	U	<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 21		NA			NA		<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	0.17 J	1 / 24	<	1.9	U	<	0.9	U	<	1.2	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 24	<	0.6	U	<	0.6	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 24	<	1.2	U	<	0.6	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 15		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
HMX	-	0 / 19		NA			NA			NA			NA	
MNX	-	0 / 6		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21		NA			NA		<	2.1	U	<	2.1	U
RDX	1.29	2 / 24	<	7	U	<	9	U	<	9.6	U	<	9.6	U
Tetryl	-	0 / 16		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = Not Analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0014-EXPLOSIVES

FIELD ID			G0014			G0014			G0014			G0014			G0014			G0014			G0014		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2013			3/5/2012			None			3/14/2007			3/29/2006			3/23/2005			3/17/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	5.8	1 / 24	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.23	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.23	U
2,4,6-Trinitrotoluene	4.2	3 / 24	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	0.24	0.23	
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.45	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.50	U	<	0.48	U	<	0.48	U	<	0.45	U
2-Amino-4,6-dinitrotoluene	3.25	1 / 15	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.45	U
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.45	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.45	U
4-Amino-2,6-dinitrotoluene	0.22 J	1 / 12	<	1.4	U	<	1.4	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.45	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.73	U
HMX	2.01	2 / 19	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.57	U
MNX	-	0 / 6	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.23	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.23	U
RDX	-	0 / 24	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.23	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.45	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0014-EXPLOSIVES

FIELD ID			G0014			G0014			G0014			G0014			G0014			G0014			G0014		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/21/2003			3/25/2002			3/28/2001			3/17/2000			3/29/1999			6/23/1998			7/12/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	5.8	1 / 24	<	0.31	U	<	0.31	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 21	<	0.31	U	<	0.21	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U
2,4,6-Trinitrotoluene	4.2	3 / 24	<	0.31	U	0.20	0.26	J	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 24	<	0.59	U	<	0.21	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 24	<	0.59	U	<	0.81	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	3.25	1 / 15	<	0.59	U	<	0.33	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U
2-Nitrotoluene	-	0 / 12	<	0.59	U	<	0.64	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
3-Nitrotoluene	-	0 / 12	<	0.59	U	<	0.40	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
4-Amino-2,6-dinitrotoluene	0.22 J	1 / 12	<	0.59	U	<	0.55	U	0.22	0.8	J	<	1	U	<	0.8	U	<	1.00	U		NA	
4-Nitrotoluene	-	0 / 12	<	0.96	U	<	1.3	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
HMX	2.01	2 / 19	<	0.75	U	<	0.88	U	<	1	U	<	0.8	U	<	0.8	U	0.941	0.500	J	2.01	NRL	
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.31	U	<	0.36	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U
RDX	-	0 / 24	<	0.31	U	<	0.52	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U
Tetryl	-	0 / 16	<	0.59	U	<	0.86	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0014-EXPLOSIVES

FIELD ID			G0014			G0014			G0014			G0014			G0014			G0014			G0014		
METHOD	Maximum	Detection	UW33			UW32			UW14			UW14			UW01			UW01			D1		
COLLECT DATE	Detection	Frequency	6/15/1994			8/24/1992			10/15/1990			4/23/1990			5/15/1989			11/8/1988			6/19/1985		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	5.8	1 / 24	<	0.425	U	<	0.449	U	<	0.626	U	<	0.626	U	5.8	NRL		<	2.8	U	<	1.4	U
1,3-Dinitrobenzene	-	0 / 21	<	0.549	U	<	0.611	U	<	0.519	U	<	0.519	U	<	0.61	U	<	0.61	U		NA	
2,4,6-Trinitrotoluene	4.2	3 / 24	<	0.451	U	<	0.635	U	<	0.588	U	<	0.588	U	<	0.78	U	<	0.78	U	4.2	NRL	
2,4-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.064	U	<	0.612	U	<	0.612	U	<	0.6	U	<	0.6	U	<	0.6	U
2,6-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.074	U	<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	3.25	1 / 15	<	0.244	U	3.25	NRA			NA			NA		NA			NA			NA		NA
2-Nitrotoluene	-	0 / 12		NA			NA			NA			NA		NA			NA			NA		NA
3-Nitrotoluene	-	0 / 12		NA			NA			NA			NA		NA			NA			NA		NA
4-Amino-2,6-dinitrotoluene	0.22 J	1 / 12		NA			NA			NA			NA		NA			NA			NA		NA
4-Nitrotoluene	-	0 / 12		NA			NA			NA			NA		NA			NA			NA		NA
HMX	2.01	2 / 19	<	0.563	U	<	1.21	U	<	1.65	U	<	1.65	U	<	1.3	U	<	1.3	U		NA	
MNX	-	0 / 6		NA			NA			NA			NA		NA			NA			NA		NA
Nitrobenzene	-	0 / 21	<	0.817	U	<	0.645	U	<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U		NA	
RDX	-	0 / 24	<	0.412	U	<	1.17	U	<	2.11	U	<	2.11	U	<	1.25	U	<	0.63	U	<	7	U
Tetryl	-	0 / 16	<	1.18	U		NA		<	0.556	U	<	0.556	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0014-EXPLOSIVES

FIELD ID			G0014			G0014			G0014			G0014		
METHOD	Maximum	Detection	D1			D1			6N			6N		
COLLECT DATE	Detection	Frequency	12/4/1984			9/18/1984			1/15/1983			1/8/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	5.8	1 / 24	<	1.4	U	<	0.5	U	<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 21		NA			NA		<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	4.2	3 / 24	<	1.9	U	<	0.9	U	<	1.2	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 24	<	1.2	U	<	0.6	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 24	<	1.2	U	<	0.6	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	3.25	1 / 15		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	0.22 J	1 / 12		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
HMX	2.01	2 / 19		NA			NA			NA			NA	
MNX	-	0 / 6		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21		NA			NA		<	2.1	U	<	2.1	U
RDX	-	0 / 24	<	9	U	<	9	U	<	9.6	U	<	9.6	U
Tetryl	-	0 / 16		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0015-EXPLOSIVES

FIELD ID			G0015			G0015			G0015			G0015			G0015			G0015			G0015		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013			3/8/2012			3/9/2011			3/1/2010			3/11/2009			3/13/2008			3/14/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.5	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	1.23	1 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.5	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	0.095 J	1 / 19	<	0.8	U	<	0.8	U	<	0.8	U	0.095	0.2	J	<	0.5	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.5	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.5	U	<	0.48	U	<	0.49	U
HMX	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.5	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.5	U	<	0.48	U	<	0.49	U
RDX	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.5	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.5	UJ	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0015-EXPLOSIVES

FIELD ID			G0015			G0015			G0015			G0015			G0015			G0015			G0015		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/28/2006			3/17/2005			3/23/2004			3/20/2003			3/26/2002			3/27/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.22	U	<	0.25	U	<	0.33	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.22	U	<	0.25	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	1.23	1 / 24	<	0.48	U	<	0.48	U	<	0.22	U	<	0.25	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.43	U	<	0.49	U	<	0.22	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.43	U	<	0.49	U	<	0.86	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.095 J	1 / 19	<	0.48	U	<	0.48	U	<	0.43	U	<	0.49	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.49	U	<	0.68	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.49	U	<	0.43	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.49	U	<	0.58	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.7	U	<	0.78	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 19	<	0.48	U	<	0.48	U	<	0.55	U	<	0.61	U	<	0.94	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.22	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.22	U	<	0.25	U	<	0.39	U	<	0.8	U	<	0.8	U
RDX	-	0 / 24	<	0.48	U	<	0.48	U	<	0.22	U	<	0.25	U	<	0.55	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.48	U	<	0.43	U	<	0.49	U	<	0.91	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0015-EXPLOSIVES

FIELD ID			G0015			G0015			G0015			G0015			G0015			G0015			G0015		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			D1			D1		
COLLECT DATE	Detection	Frequency	3/29/1999			6/23/1998			7/17/1994			6/11/1994			8/18/1992			6/18/1985			12/4/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	1.4	U	<	1.4	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U		NA			NA	
2,4,6-Trinitrotoluene	1.23	1 / 24	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U	1.23	NRL		<	1.9	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.6	U	<	1.2	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	1.2	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	0.095 J	1 / 19	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U		NA			NA	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
HMX	-	0 / 19	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U		NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U		NA			NA	
RDX	-	0 / 24	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	7	U	<	9	U
Tetryl	-	0 / 18	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0015-EXPLOSIVES

FIELD ID			G0015			G0015			G0015		
METHOD	Maximum	Detection	D1			6N			6N		
COLLECT DATE	Detection	Frequency	9/18/1984			1/18/1983			1/7/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 24	<	0.5	U	<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 21		NA		<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	1.23	1 / 24	<	0.9	U	<	1.2	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 24	<	0.6	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 24	<	0.6	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	0.095 J	1 / 19		NA			NA			NA	
2-Nitrotoluene	-	0 / 16		NA			NA			NA	
3-Nitrotoluene	-	0 / 16		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16		NA			NA			NA	
4-Nitrotoluene	-	0 / 16		NA			NA			NA	
HMX	-	0 / 19		NA			NA			NA	
MNX	-	0 / 10		NA			NA			NA	
Nitrobenzene	-	0 / 21		NA		<	2.1	U	<	2.1	U
RDX	-	0 / 24	<	9	U	<	9.6	U	<	9.6	U
Tetryl	-	0 / 18		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0016-EXPLOSIVES

FIELD ID			G0016			G0016			G0016			G0016			G0016			G0016			G0016		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2013			3/7/2012			3/9/2011			3/3/2010			3/11/2009			3/13/2008			3/14/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	78	4 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	63	19 / 31	0.64	0.8	J	0.2	0.8	J	<	0.8	U	0.19	0.4	J	<	0.48	U	0.6	0.48		0.74	0.5	
2,4-Dinitrotoluene	3.29	7 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	36 J	20 / 20	10.8	0.8		12.8	0.8		21.2	0.8		14	0.2		9	0.48		15	0.48		11	0.5	
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	10	16 / 17	3.5	1.4		2.9	1.4		2.9	0.8		2	0.2		1.2	0.48		2.2	0.48		2.5	0.5	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	6.5	4 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	4.81	9 / 31	<	0.8	U	<	0.8	UJ	1	0.8		<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0016-EXPLOSIVES

FIELD ID			G0016			G0016			G0016			G0016			G0016			G0016			G0016		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/28/2006			3/17/2005			3/17/2004			3/20/2003			3/26/2002			3/27/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	78	4 / 31	<	0.48	U	<	0.48	U	0.13	0.24	J	<	0.2	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.24	U	<	0.2	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	63	19 / 31	1.3	0.48		1.9	0.48		3.6	0.24		2.8	0.2		2.8	0.20	J	<	0.8	U	0.89	1.5	J
2,4-Dinitrotoluene	3.29	7 / 31	<	0.48	U	<	0.48	U	<	0.46	U	<	0.38	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 31	<	0.48	U	<	0.48	U	<	0.46	U	<	0.38	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	36 J	20 / 20	15	0.48		20	0.48	P	26	2.3		32	3.8		36	2.5	J	35	4		31	10	
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.46	U	<	0.38	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.46	U	<	0.38	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	10	16 / 17	4.1	0.48		7.5	0.48		8.4	0.46		7.3	0.38		9.5	0.42	J	10	0.8		10	1	
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.75	U	<	0.62	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	6.5	4 / 25	<	0.48	U	<	0.48	U	0.46	0.58	J	<	0.48	U	<	0.68	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.24	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.24	U	<	0.2	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	4.81	9 / 31	<	0.48	U	0.52	0.48	P	1.3	0.24		0.73	0.2		0.86	0.40	J	0.51	0.8	J	<	0.8	U
Tetryl	-	0 / 22	<	0.48	U	<	0.48	U	<	0.46	U	<	0.38	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0016-EXPLOSIVES

FIELD ID			G0016			G0016			G0016			G0016			G0016			G0016			G0016		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW14		
COLLECT DATE	Detection	Frequency	3/31/1999			6/26/1998			10/4/1997			7/17/1994			6/11/1994			8/18/1992			8/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	78	4 / 31	<	0.8	U	<	1.0	U	<	0.125	U	<	0.425	U	<	0.425	U	78	NRL		<	0.626	U
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.50	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.519	U
2,4,6-Trinitrotoluene	63	19 / 31	<	0.8	U	<	1.0	U	0.92	0.29		0.97	NRL		1.02	NRL		12.2	NRL		<	0.588	U
2,4-Dinitrotoluene	3.29	7 / 31	<	0.8	U	<	0.50	U	0.55	0.233		<	0.26	U	<	0.26	U	<	0.064	U	<	0.612	U
2,6-Dinitrotoluene	-	0 / 31	<	0.8	U	<	0.50	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	1.15	U
2-Amino-4,6-dinitrotoluene	36 J	20 / 20	32.9	4		26.1	0.50	U	29.6	0.173		31.0	NRL		28.0	NRL		5.96	NRA			NA	
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.0	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.0	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	10	16 / 17	6.47	0.8		<	1.0	U	8.14	0.309			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.0	U	<	0.368	U		NA			NA			NA			NA	
HMX	6.5	4 / 25	<	0.8	U	0.7	0.50	U	<	0.16	U	<	0.563	U	<	0.563	U	2.78	NRL		<	1.65	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.50	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	1.07	U
RDX	4.81	9 / 31	<	0.8	U	<	1.0	U	<	0.558	U	<	0.879	U	<	0.412	U	4.81	NRL		<	2.11	U
Tetryl	-	0 / 22	<	0.8	U	<	0.50	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		<	0.556	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.1-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0016-EXPLOSIVES**

FIELD ID			G0016			G0016			G0016			G0016			G0016			G0016			G0016		
METHOD	Maximum	Detection	UW14			UW14			UW01			UW01			D1			D1			D1		
COLLECT DATE	Detection	Frequency	10/15/1990			4/23/1990			5/15/1989			11/8/1988			6/19/1985			12/4/1984			9/18/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	78	4 / 31	1.57	NRL		1.98	NRL		<	0.56	U	<	1.12	U	<	1.4	U	<	1.4	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 28	<	0.519	U	<	0.519	U	<	0.61	U	<	0.61	U		NA			NA			NA	
2,4,6-Trinitrotoluene	63	19 / 31	<	0.588	U	<	0.588	U	63	NRL		<	0.98	U	6.92	NRL		<	1.9	U	<	0.9	U
2,4-Dinitrotoluene	3.29	7 / 31	<	0.612	U	<	0.612	U	2.03	NRL		1.47	NRL		<	0.6	U	<	1.2	U	3	NRL	
2,6-Dinitrotoluene	-	0 / 31	<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U	<	1.2	U	<	1.2	U	<	0.6	U
2-Amino-4,6-dinitrotoluene	36 J	20 / 20		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	10	16 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
HMX	6.5	4 / 25	<	1.65	U	<	1.65	U	6.5	NRL		<	1.3	U		NA			NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U		NA			NA			NA	
RDX	4.81	9 / 31	<	2.11	U	<	2.11	U	1.99	NRL		1.01	NRL		<	7	U	<	9	U	<	9	U
Tetryl	-	0 / 22	<	0.556	U	<	0.556	U		NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0016-EXPLOSIVES

FIELD ID			G0016			G0016			G0016		
METHOD	Maximum	Detection	6N			6N			6N		
COLLECT DATE	Detection	Frequency	11/3/1983			1/15/1983			1/7/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	78	4 / 31	<	3.5	U	<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 28	<	3.9	U	<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	63	19 / 31	<	3.5	U	1.53	NRL		1.58	NRL	
2,4-Dinitrotoluene	3.29	7 / 31	2.59	NRL		1.74	NRL		3.29	NRL	
2,6-Dinitrotoluene	-	0 / 31	<	4.2	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	36 J	20 / 20		NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	10	16 / 17		NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA	
HMX	6.5	4 / 25		NA			NA			NA	
MNX	-	0 / 10		NA			NA			NA	
Nitrobenzene	-	0 / 28	<	4.8	U	<	2.1	U	<	2.1	U
RDX	4.81	9 / 31	<	16	U	<	9.6	U	<	9.6	U
Tetryl	-	0 / 22		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0017-EXPLOSIVES

FIELD ID			G0017			G0017			G0017			G0017			G0017			G0017			G0017		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2013			3/7/2012			3/7/2011			3/3/2010			3/11/2009			3/14/2008			3/14/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	62	25 / 31	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.99	U	16	0.48		29	0.48		13	0.5	
1,3-Dinitrobenzene	6.44	1 / 28	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	26	25 / 31	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.4	U	2.8	0.48		4.9	0.48		2.1	0.5	
2,4-Dinitrotoluene	0.26 J	2 / 31	<	0.8	UJ	<	0.8	UJ	0.26	0.8	J	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 31	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	35	15 / 20	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.2	U	1.6	0.48		2.3	0.48		2.4	0.5	
2-Nitrotoluene	0.34 J	1 / 16	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	4.6	12 / 16	<	1.4	UJ	<	1.4	UJ	<	0.8	UJ	<	0.2	U	1	0.48		1.5	0.48		1.2	0.5	
4-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.99	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	14.7	13 / 24	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	1.4	1 / 10	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	2	U	1.4	0.48		<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 28	<	0.8	UJ	<	0.8	UJ	<	0.8	UJ	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	116	26 / 32	<	0.8	UJ	2.1	0.8	J	1	0.8	J	<	0.2	U	27	0.48		1.4	0.48		<	0.5	U
Tetryl	-	0 / 21	<	1.6	UJ	<	0.8	UJ	<	0.8	UJ	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0017-EXPLOSIVES

FIELD ID			G0017			G0017			G0017			G0017			G0017			G0017			G0017		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/17/2005			3/23/2004			3/20/2003			3/26/2002			3/27/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	62	25 / 31	18	0.48		18	0.48		38	2.2		<	0.17	U	42	4.0	J	56	8		43	16.	
1,3-Dinitrobenzene	6.44	1 / 28	<	0.48	U	<	0.48	U	<	0.22	U	<	0.17	U	<	0.26	U	<	1.6	U	<	0.8	U
2,4,6-Trinitrotoluene	26	25 / 31	3.3	0.48		3.2	0.48		6.8	0.22		5.5	0.17	J	10	0.33	J	13	1.6		13	1.5	
2,4-Dinitrotoluene	0.26 J	2 / 31	<	0.48	U	<	0.48	U	<	0.43	U	<	0.32	U	<	0.26	U	<	1.6	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 31	<	0.48	U	<	0.48	U	<	0.43	U	<	0.32	U	<	1.0	U	<	1.6	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	35	15 / 20	2.3	0.48		2.8	0.48	P	4.8	0.43		5.2	0.32	J	7.2	0.41	J	6.1	1.6		7.00	1	
2-Nitrotoluene	0.34 J	1 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.32	U	<	0.81	U	0.34	1.6	J	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.32	U	<	0.51	U	<	1.6	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	4.6	12 / 16	1.4	0.48		1.7	0.48		2.6	0.43		2.9	0.32	J	4.0	0.69	J	4.3	1.6		4.6	1	
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.7	U	<	0.52	U	<	1.6	U	<	1.6	U	<	1.1	U
HMX	14.7	13 / 24	<	0.48	U	<	0.48	U	0.45	0.55	J	0.52	0.4	J	1.4	1.1	J	<	2	U	1.5	0.8	
MNX	1.4	1 / 10	<	0.48	U	<	0.48	U	<	0.22	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.22	U	<	0.17	U	<	0.46	U	<	1.6	U	<	0.8	U
RDX	116	26 / 32	<	0.48	U	0.39	0.48	JP	2.3	0.22		1.6	0.17	J	4.9	0.66	J	4.1	1.6	U	3.5	0.8	
Tetryl	-	0 / 21	<	0.48	U	<	0.48	U	<	0.43	U	<	0.32	U	<	1.1	U	<	1.6	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0017-EXPLOSIVES

FIELD ID			G0017			G0017			G0017			G0017			G0017			G0017			G0017		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW33			99		
COLLECT DATE	Detection	Frequency	3/31/1999			6/26/1998			7/17/94			6/12/1994			8/18/1992			7/25/1991			6/2/1991		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	62	25 / 31	35.6	4		27.1	1.00		23.0	NRL		32.0	NRL		<	0.449	U	62.0	NRL			NA	
1,3-Dinitrobenzene	6.44	1 / 28	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.549	U		NA	
2,4,6-Trinitrotoluene	26	25 / 31	9.49	0.8		8.08	1.00		5.67	NRL		9.50	NRL		0.898	NRL		7.89	NRL			NA	
2,4-Dinitrotoluene	0.26 J	2 / 31	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	0.233	NRL		<	0.26	U		NA	
2,6-Dinitrotoluene	-	0 / 31	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U		NA	
2-Amino-4,6-dinitrotoluene	35	15 / 20	4.85	0.8		4.60	0.500		5.46	NRL		11.9	NRL		35.0	NRA		<	0.5	U		NA	
2-Nitrotoluene	0.34 J	1 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	4.6	12 / 16	1.85	0.8		3.01	1.00	J		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
HMX	14.7	13 / 24	1.07	0.8		0.659	0.500	J	2.76	NRL		8.24	NRL		<	1.21	U	3.45	NRL			NA	
MNX	1.4	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U		NA	
RDX	116	26 / 32	6.9	0.8		1.22	1.00		11.5	NRL		13.0	NRL		<	1.17	U	8.80	NRL		9.27	NRL	
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA		<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0017-EXPLOSIVES

FIELD ID			G0017			G0017			G0017			G0017			G0017			G0017			G0017		
METHOD	Maximum	Detection	UW14			UW14			UW01			UW01			D1			D1			D1		
COLLECT DATE	Detection	Frequency	10/15/1990			4/24/1990			5/15/1989			11/8/1988			6/19/1985			12/4/1984			9/18/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	62	25 / 31	49.3	NRL		43.4	NRL		38.0	NRL		49.0	NRL		20.0	NRL		19.5	NRL		10.0	NRL	
1,3-Dinitrobenzene	6.44	1 / 28	<	0.519	U	6.44	NRL		<	0.61	U	<	0.61	U		NA			NA			NA	
2,4,6-Trinitrotoluene	26	25 / 31	18.6	NRL		15.8	NRL		13.1	NRL		12.5	NRL		20.0	NRL		<	1.9	U	<	0.9	U
2,4-Dinitrotoluene	0.26 J	2 / 31	<	0.612	U	<	0.612	U	<	0.6	U	<	0.6	U	<	0.6	U	<	1.2	U	<	0.6	U
2,6-Dinitrotoluene	-	0 / 31	<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U	<	1.2	U	<	1.2	U	<	0.6	U
2-Amino-4,6-dinitrotoluene	35	15 / 20		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	0.34 J	1 / 16		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	4.6	12 / 16		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16		NA			NA			NA			NA			NA			NA			NA	
HMX	14.7	13 / 24	4.04	NRL		14.7	NRL		7.18	NRL		4.93	NRL			NA			NA			NA	
MNX	1.4	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U		NA			NA			NA	
RDX	116	26 / 32	8.31	NRL		28.7	NRL		28.1	NRL		11.0	NRL		24.0	NRL		18.4	NRL		16.6	NRL	
Tetryl	-	0 / 21	<	0.556	U	<	0.556	U		NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0017-EXPLOSIVES

FIELD ID	G0017					G0017			G0017			G0017		
METHOD	Maximum	Detection	6N			6N			6N			6N		
COLLECT DATE	Detection	Frequency	2/10/1984			11/3/1983			1/15/1983			1/7/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	62	25 / 31	25.5	NRL		10.8	NRL		25.3	NRL		13.6	NRL	
1,3-Dinitrobenzene	6.44	1 / 28	<	1.24	U	<	3.9	U	<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	26	25 / 31	26.0	NRL		16.2	NRL		14.4	NRL		9.20	NRL	
2,4-Dinitrotoluene	0.26 J	2 / 31	<	0.62	U	<	1.9	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 31	<	1.58	U	<	4.2	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	35	15 / 20		NA			NA			NA			NA	
2-Nitrotoluene	0.34 J	1 / 16		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	4.6	12 / 16		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16		NA			NA			NA			NA	
HMX	14.7	13 / 24		NA			NA			NA			NA	
MNX	1.4	1 / 10		NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	1.36	U	<	4.8	U	<	2.1	U	<	2.1	U
RDX	116	26 / 32	35.0	NRL		116	NRL		32.3	NRL		<	9.6	U
Tetryl	-	0 / 21		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0018-EXPLOSIVES

FIELD ID			G0018			G0018			G0018			G0018			G0018			G0018			G0018		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/5/2012			3/9/2011			3/3/2010			3/11/2009			3/14/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.51	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.51	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.51	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.51	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.51	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.51	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.51	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.51	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.51	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.51	U
HMX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.51	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.51	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.51	U
RDX	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.51	U
Tetryl	-	0 / 19	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.51	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0018-EXPLOSIVES

FIELD ID			G0018			G0018			G0018			G0018			G0018			G0018			G0018		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/28/2006			3/16/2005			3/17/2004			3/18/2003			3/22/2002			3/26/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.51	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.51	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.51	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.20	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.51	U	<	0.48	U	<	0.38	U	<	0.31	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.51	U	<	0.48	U	<	0.38	U	<	0.31	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.51	U	<	0.48	U	<	0.38	U	<	0.31	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.51	U	<	0.48	U	<	0.38	U	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.51	U	<	0.48	U	<	0.38	U	<	0.31	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.51	U	<	0.48	U	<	0.38	U	<	0.31	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.51	U	<	0.48	U	<	0.62	U	<	0.5	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 20	<	0.51	U	<	0.48	U	<	0.48	U	<	0.39	U	<	0.68	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.51	U	<	0.48	U	<	0.2	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.51	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	-	0 / 24	<	0.51	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 19	<	0.51	U	<	0.48	U	<	0.38	U	<	0.31	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0018-EXPLOSIVES

FIELD ID			G0018			G0018			G0018			G0018			G0018			G0018			G0018		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			D1		
COLLECT DATE	Detection	Frequency	3/29/1999			6/18/1998			10/4/1997			7/15/1994			6/11/1994			8/18/1992			6/19/1985		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	1.4	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U		NA	
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	1.9	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.6	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	-	0 / 20	<	0.8	U	<	0.500	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U		NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U		NA	
RDX	-	0 / 24	<	0.8	U	<	1.00	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	<	7	U
Tetryl	-	0 / 19	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0018-EXPLOSIVES

FIELD ID			G0018			G0018			G0018		
METHOD	Maximum	Detection	D1			6N			6N		
COLLECT DATE	Detection	Frequency	12/4/1984			1/14/1983			1/7/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 24	<	1.4	U	<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 22		NA		<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 24	<	1.9	U	<	1.2	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 24	<	1.2	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 24	<	1.2	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 20		NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17		NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA	
HMX	-	0 / 20		NA			NA			NA	
MNX	-	0 / 10		NA			NA			NA	
Nitrobenzene	-	0 / 22		NA		<	2.1	U	<	2.1	U
RDX	-	0 / 24	<	9	U	<	9.6	U	<	9.6	U
Tetryl	-	0 / 19		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0019-EXPLOSIVES

FIELD ID			G0019			G0019			G0019			G0019			G0019			G0019			G0019		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/14/2012			3/10/2011			3/15/2010			3/12/2009			3/19/2008			3/14/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.25	1 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	0.991	1 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	1.7 J	16 / 31	<	0.8	U	<	0.8	U	<	0.8	U	0.097	0.4	J	0.6	0.48		0.96	0.48		0.7	0.49	
2,4-Dinitrotoluene	0.269	1 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	10	20 / 21	4.1	0.8	J	4.5	0.8		2.7	0.8		2.3	0.2	J	4.2	0.48		5.3	0.48		10	0.49	
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	12	17 / 17	4.1	1.4	J	5	1.4		3.1	0.8		1.8	0.2	J	3	0.48		4.7	0.48		9.9	0.49	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	2.07	15 / 25	0.23	0.8	J	0.22	0.8	J	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	6.66	18 / 32	0.38	0.8	J	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0019-EXPLOSIVES

FIELD ID			G0019			G0019			G0019			G0019			G0019			G0019			G0019		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/28/2006			3/17/2005			3/17/2004			3/25/2003			3/26/2002			3/26/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.25	1 / 31	<	0.48	U	<	0.48	U	0.25	0.21		<	0.22	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	0.991	1 / 28	<	0.48	U	<	0.48	U	<	0.21	U	<	0.22	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	1.7 J	16 / 31	0.58	0.48		0.74	0.48		1.6	0.21		1.4	0.22		1.7	0.20	J	<	0.8	U	1.1	1.5	J
2,4-Dinitrotoluene	0.269	1 / 31	<	0.48	U	<	0.48	U	<	0.41	U	<	0.42	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 31	<	0.48	U	<	0.48	U	<	0.41	U	<	0.42	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	10	20 / 21	6.4	0.48		3.5	0.48	J	3.9	0.41		2.8	0.42		3.7	0.25		2.6	0.8		3	1	
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.41	U	<	0.42	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.41	U	<	0.42	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	12	17 / 17	12	0.48		6.5	0.48		4.7	0.41		1.6	0.42		2.0	0.42		1.6	0.8		1.9	1	
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.67	U	<	0.68	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	2.07	15 / 25	<	0.48	U	0.43	0.48	J	0.72	0.52		0.36	0.53	J	0.78	0.68		0.76	1	J	1	0.8	
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.21	U	<	0.22	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	6.66	18 / 32	<	0.48	U	0.61	0.48		0.9	0.21		1	0.22		1.5	0.40		2.2	0.8		1.8	0.8	
Tetryl	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.42	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0019-EXPLOSIVES

FIELD ID			G0019			G0019			G0019			G0019			G0019			G0019			G0019		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998			10/3/1997			7/16/1994			6/13/1994			8/19/1992			7/25/1991		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.25	1 / 31	<	0.8	U	<	1.00	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	0.991	1 / 28	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	0.991	NRL		<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	1.7 J	16 / 31	1.21	0.8		2.07	1.00	U	1.53	0.29		1.37	NRL		0.926	NRL		1.30	NRL		<	0.451	U
2,4-Dinitrotoluene	0.269	1 / 31	<	0.8	U	<	0.500	U	0.269	0.233		<	0.26	U	<	0.26	U	<	0.064	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 31	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	10	20 / 21	2.83	0.8		2.63	0.500	U	3.03	0.173		2.68	NRL		2.65	NRL		4.53	NRL		<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	12	17 / 17	2.01	0.8		2.77	1.00	J	2.68	0.309			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	2.07	15 / 25	1.39	0.8		1.50	0.500	J	1.94	0.16		1.40	NRL		1.36	NRL		2.07	NRL		2.07	NRL	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	6.66	18 / 32	3.22	0.8		4.14	1.00	U	4.63	0.558		6.66	NRL		5.58	NRL		5.13	NRL		3.22	NRL	
Tetryl	-	0 / 22	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.1-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0019-EXPLOSIVES**

FIELD ID			G0019			G0019			G0019			G0019			G0019			G0019			G0019		
METHOD	Maximum	Detection	99			UW14			UW14			UW01			UW01			D1			D1		
COLLECT DATE	Detection	Frequency	6/2/1991			10/16/1990			4/23/1990			5/15/1989			11/8/1988			6/19/1985			12/4/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.25	1 / 31	NA		<	0.626	U	<	0.626	U	<	0.56	U	<	0.56	U	<	1.4	U	<	1.4	U	
1,3-Dinitrobenzene	0.991	1 / 28	NA		<	0.519	U	<	0.519	U	<	0.61	U	<	0.61	U		NA			NA		
2,4,6-Trinitrotoluene	1.7 J	16 / 31	NA		<	0.588	U	<	0.588	U	<	0.78	U	<	0.78	U	<	1.9	U	<	1.9	U	
2,4-Dinitrotoluene	0.269	1 / 31	NA		<	0.612	U	<	0.612	U	<	0.6	U	<	0.6	U	<	0.6	U	<	1.2	U	
2,6-Dinitrotoluene	-	0 / 31	NA		<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U	<	1.2	U	<	1.2	U	
2-Amino-4,6-dinitrotoluene	10	20 / 21	NA			NA			NA			NA			NA			NA			NA		
2-Nitrotoluene	-	0 / 17	NA			NA			NA			NA			NA			NA			NA		
3-Nitrotoluene	-	0 / 17	NA			NA			NA			NA			NA			NA			NA		
4-Amino-2,6-dinitrotoluene	12	17 / 17	NA			NA			NA			NA			NA			NA			NA		
4-Nitrotoluene	-	0 / 17	NA			NA			NA			NA			NA			NA			NA		
HMX	2.07	15 / 25	NA		<	1.65	U	<	1.65	U	<	1.3	U	<	1.3	U		NA			NA		
MNX	-	0 / 10	NA			NA			NA			NA			NA			NA			NA		
Nitrobenzene	-	0 / 28	NA		<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U		NA			NA		
RDX	6.66	18 / 32	3.32	NRL		3.26	NRL		3.43	NRL		<	6.3	U	4.10	NRL		<	7	U	<	9	U
Tetryl	-	0 / 22	NA		<	0.556	U	<	0.556	U		NA			NA			NA			NA		

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0019-EXPLOSIVES

FIELD ID			G0019			G0019			G0019			G0019		
METHOD	Maximum	Detection	D1			6N			6N			6N		
COLLECT DATE	Detection	Frequency	9/19/1984			11/3/1983			1/15/1983			1/7/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	0.25	1 / 31	<	0.5	U	<	3.5	U	<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	0.991	1 / 28		NA		<	3.9	U	<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	1.7 J	16 / 31	<	0.9	U	<	3.5	U	<	1.2	U	<	1.2	U
2,4-Dinitrotoluene	0.269	1 / 31	<	0.6	U	<	1.9	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 31	<	0.6	U	<	4.2	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	10	20 / 21		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	12	17 / 17		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA			NA	
HMX	2.07	15 / 25		NA			NA			NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA	
Nitrobenzene	-	0 / 28		NA		<	4.8	U	<	2.1	U	<	2.1	U
RDX	6.66	18 / 32	<	9	U	<	16	U	<	9.6	U	<	9.6	U
Tetryl	-	0 / 22		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0020-EXPLOSIVES

FIELD ID			G0020			G0020			G0020			G0020			G0020			G0020			G0020		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/8/2012			3/9/2011			3/16/2010			3/12/2009			3/19/2008			3/14/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	4.43	3 / 30	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,4,6-Trinitrotoluene	0.096 J	1 / 30	<	0.8	U	<	0.8	U	<	0.8	U	0.096	0.4	J	<	0.48	U	<	0.49	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 30	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 30	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	0.34 J	1 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.5	U
HMX	2.36	8 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.5	U
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
RDX	3.48	12 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
Tetryl	-	0 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0020-EXPLOSIVES

FIELD ID			G0020			G0020			G0020			G0020			G0020			G0020			G0020		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/17/2006			3/17/2005			3/17/2004			3/24/2003			3/25/2002			3/27/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	4.43	3 / 30	<	0.48	U	<	0.48	U	<	0.17	U	<	0.28	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.17	U	<	0.28	U	<	0.25	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	0.096 J	1 / 30	<	0.48	U	<	0.48	U	<	0.17	U	<	0.28	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 30	<	0.48	U	<	0.48	U	<	0.34	U	<	0.54	U	<	0.25	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 30	<	0.48	U	<	0.48	U	<	0.34	U	<	0.54	U	<	0.98	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.34	U	<	0.54	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.34	U	<	0.54	U	<	0.78	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.34	U	<	0.54	U	<	0.49	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	0.34 J	1 / 17	<	0.48	U	<	0.48	U	<	0.34	U	0.34	0.54	J	<	0.67	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.54	U	<	0.88	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	2.36	8 / 25	<	0.48	U	<	0.48	U	<	0.42	U	0.6	0.68	J	0.62	1.1	J	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.17	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.17	U	<	0.28	U	<	0.44	U	<	0.8	U	<	0.8	U
RDX	3.48	12 / 31	<	0.48	U	<	0.48	U	0.17	0.17	J	1	0.28		0.81	0.63		<	0.8	U	<	0.8	U
Tetryl	-	0 / 22	<	0.48	U	<	0.48	U	<	0.34	U	<	0.54	U	<	1.0	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0020-EXPLOSIVES

FIELD ID			G0020			G0020			G0020			G0020			G0020			G0020			G0020		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998			10/3/1997			7/17/1994			6/13/1994			8/18/1992			7/25/1991		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	4.43	3 / 30	<	0.8	U	<	1.00	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	0.096 J	1 / 30	<	0.8	U	<	1.00	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 30	<	0.8	U	<	0.500	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 30	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.173	U	<	2.44	U	<	2.44	U	<	0.158	U	<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	0.34 J	1 / 17	<	0.8	U	<	1.00	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	2.36	8 / 25	<	0.8	U	<	0.500	U	0.526	0.16		1.57	NRL		1.52	NRL		<	1.21	U	2.28	NRL	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	3.48	12 / 31	<	0.8	U	<	1.00	U	0.685	0.558		1.35	NRL		1.49	NRL		3.48	NRL		2.08	NRL	
Tetryl	-	0 / 22	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0020-EXPLOSIVES

FIELD ID			G0020			G0020			G0020			G0020			G0020			G0020			G0020		
METHOD	Maximum	Detection	99			UW14			UW14			UW01			UW01			D1			D1		
COLLECT DATE	Detection	Frequency	6/2/1991			10/16/1990			4/24/1990			5/15/1989			11/8/1988			12/4/1984			9/20/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	4.43	3 / 30	NA			4.43	NRL		3.22	NRL		<	0.56	U	<	0.56	U	<	1.4	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 28	NA			<	0.519	U	<	0.519	U	<	0.61	U	<	0.61	U		NA			NA	
2,4,6-Trinitrotoluene	0.096 J	1 / 30	NA			<	0.588	U	<	0.588	U	<	0.78	U	<	0.78	U	<	1.9	U	<	0.9	U
2,4-Dinitrotoluene	-	0 / 30	NA			<	0.612	U	<	0.612	U	<	0.6	U	<	0.6	U	<	1.2	U	<	0.6	U
2,6-Dinitrotoluene	-	0 / 30	NA			<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U	<	1.2	U	<	0.6	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	NA				NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17	NA				NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	NA				NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	0.34 J	1 / 17	NA				NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	NA				NA			NA			NA			NA			NA			NA	
HMX	2.36	8 / 25	NA			2.36	NRL		1.84	NRL		<	1.3	U	<	1.3	U		NA			NA	
MNX	-	0 / 10	NA				NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	NA			<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U		NA			NA	
RDX	3.48	12 / 31	0.982	NRL		2.11	NRL		<	2.11	U	1.49	NRL		1.27	NRL		<	9	U	<	9	U
Tetryl	-	0 / 22	NA			<	0.556	U	<	0.556	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0020-EXPLOSIVES

FIELD ID			G0020			G0020			G0020		
METHOD	Maximum	Detection	6N			6N			6N		
COLLECT DATE	Detection	Frequency	11/3/1983			1/15/1983			1/7/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	4.43	3 / 30	4.19	NRL		<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 28	<	3.9	U	<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	0.096 J	1 / 30	<	3.5	U	<	1.2	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 30	<	1.9	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 30	<	4.2	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 21		NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	0.34 J	1 / 17		NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA	
HMX	2.36	8 / 25		NA			NA			NA	
MNX	-	0 / 10		NA			NA			NA	
Nitrobenzene	-	0 / 28	<	4.8	U	<	2.1	U	<	2.1	U
RDX	3.48	12 / 31	<	16	U	<	9.6	U	<	9.6	U
Tetryl	-	0 / 22		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0021-EXPLOSIVES

FIELD ID			G0021			G0021			G0021			G0021			G0021			G0021			G0021		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/13/2012			3/11/2011			3/17/2010			3/12/2009			3/18/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 39	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.5	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 29	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.5	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 39	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.5	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 39	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.5	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 39	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.49	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.5	U	<	0.49	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.5	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	1.3	6 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	1.3	0.49	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.5	U	<	0.49	U
HMX	6.04	20 / 24	0.94	0.8	J	<	0.8	U	<	0.8	U	0.78	0.39		0.75	0.48		<	0.5	U	4.1	0.49	
MNX	0.17 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.5	U	<	0.49	U
Nitrobenzene	-	0 / 29	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.5	U	<	0.49	U
RDX	117	32 / 39	0.9	0.8	J	<	0.8	U	<	0.8	U	0.36	0.2		<	0.48	U	<	0.5	U	7.7	0.49	
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	UJ	<	0.5	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0021-EXPLOSIVES

FIELD ID			G0021			G0021			G0021			G0021			G0021			G0021			G0021		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/16/2005			3/17/2004			3/18/2003			3/21/2002			3/22/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 39	<	0.48	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 29	<	0.48	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.19	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 39	<	0.48	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.26	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 39	<	0.48	U	<	0.48	U	<	0.39	U	<	0.31	U	<	0.19	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 39	<	0.48	U	<	0.48	U	<	0.39	U	<	0.31	U	<	0.72	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.39	U	<	0.31	U	<	0.29	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.39	U	<	0.31	U	<	0.57	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.39	U	<	0.31	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	1.3	6 / 17	1.3	0.48		1.2	0.48		0.66	0.39		0.25	0.31	J	0.24	0.49	J	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.62	U	<	0.5	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	6.04	20 / 24	3.7	0.48		3.7	0.48		3.4	0.49		2.8	0.39		2.9	0.79		1.3	1.0		2.3	0.8	
MNX	0.17 J	1 / 10	<	0.48	U	<	0.48	U	0.17	0.2	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 29	<	0.48	U	<	0.48	U	<	0.2	U	<	0.16	U	<	0.33	U	<	0.8	U	<	0.8	U
RDX	117	32 / 39	9.4	0.48		9.7	0.48		9.9	1		8.1	0.8		8.7	2.3		5.5	0.8		7.2	0.8	
Tetryl	-	0 / 21	<	0.48	U	<	0.48	U	<	0.39	U	<	0.31	U	<	0.77	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0021-EXPLOSIVES

FIELD ID			G0021			G0021			G0021			G0021			G0021			G0021			G0021		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW14		
COLLECT DATE	Detection	Frequency	3/31/1999			6/18/1998			10/3/1997			7/14/1994			6/15/1994			8/25/1992			10/15/1990		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 39	<	0.8	U	<	1.00	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.626	U
1,3-Dinitrobenzene	-	0 / 29	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.519	U
2,4,6-Trinitrotoluene	-	0 / 39	<	0.8	U	<	1.00	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.588	U
2,4-Dinitrotoluene	-	0 / 39	<	0.8	U	<	0.500	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.612	U
2,6-Dinitrotoluene	-	0 / 39	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	1.15	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.173	U	<	2.44	U	<	2.44	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	1.3	6 / 17	<	0.8	U	<	1.00	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	6.04	20 / 24	2.04	0.8		2.81	0.500		1.82	0.16		4.94	NRL		4.91	NRL		2.63	NRL		<	1.65	U
MNX	0.17 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 29	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	1.07	U
RDX	117	32 / 39	7.2	0.8		7.56	1.00		<	5.58	U	18.0	NRL		17.0	NRL		7.13	NRL		<	2.11	U
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		<	0.556	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0021-EXPLOSIVES

FIELD ID			G0021			G0021			G0021			G0021			G0021			G0021			G0021		
METHOD	Maximum	Detection	UW14			UW01			UW01			UW01			UW01			UW01			UW01		
COLLECT DATE	Detection	Frequency	4/24/1990			5/15/1989			11/8/1988			7/26/1988			1/25/1988			4/15/1987			9/24/1986		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 39	<	0.626	U	<	0.56	U	<	0.56	U	<	0.56	U	<	0.56	U	<	0.56	U	<	0.56	U
1,3-Dinitrobenzene	-	0 / 29	<	0.519	U	<	0.61	U	<	0.61	U		NA			NA			NA			NA	
2,4,6-Trinitrotoluene	-	0 / 39	<	0.588	U	<	0.78	U	<	0.78	U	<	0.78	U	<	0.78	U	<	0.78	U	<	0.78	U
2,4-Dinitrotoluene	-	0 / 39	<	0.612	U	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U
2,6-Dinitrotoluene	-	0 / 39	<	1.15	U	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U
2-Amino-4,6-dinitrotoluene	-	0 / 20		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	1.3	6 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
HMX	6.04	20 / 24	2.50	NRL		5.59	NRL		6.04	NRL			NA			NA			NA			NA	
MNX	0.17 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 29	<	1.07	U	<	1.13	U	<	1.13	U		NA			NA			NA			NA	
RDX	117	32 / 39	<	2.11	U	5.52	NRL		6.81	NRL		6.84	NRL		8.38	NRL		10.3	NRL		8.49	NRL	
Tetryl	-	0 / 21	<	0.556	U		NA			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0021-EXPLOSIVES

FIELD ID			G0021			G0021			G0021			G0021			G0021			G0021			G0021		
METHOD	Maximum	Detection	D1			D1			D1			D1			D1			D1			6N		
COLLECT DATE	Detection	Frequency	3/12/1986			12/11/1985			9/11/1985			6/18/1985			12/4/1984			9/19/1984			6/15/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 39	<	1.4	U	<	1.40	U	<	1.4	U	<	1.4	U	<	1.4	U	<	0.5	U	<	1.08	U
1,3-Dinitrobenzene	-	0 / 29		NA			NA		<	NA	U		NA			NA			NA		<	1.24	U
2,4,6-Trinitrotoluene	-	0 / 39	<	1.9	U	<	1.90	U	<	1.9	U	<	1.9	U	<	1.9	U	<	0.9	U	<	1.08	U
2,4-Dinitrotoluene	-	0 / 39	<	0.56	U	<	0.56	U	<	0.56	U	<	0.6	U	<	1.2	U	<	0.6	U	<	0.62	U
2,6-Dinitrotoluene	-	0 / 39	<	1.2	U	<	1.2	U	<	1.2	U	<	1.2	U	<	1.2	U	<	0.6	U	<	1.58	U
2-Amino-4,6-dinitrotoluene	-	0 / 20		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	1.3	6 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA			NA	
HMX	6.04	20 / 24		NA			NA			NA			NA			NA			NA			NA	
MNX	0.17 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 29		NA			NA			NA			NA			NA			NA		<	1.36	U
RDX	117	32 / 39	13.6	NRL		21.7	NRL		13.2	NRL		9.02	NRL		58.4	NRL		50.7	NRL		33.6	NRL	
Tetryl	-	0 / 21		NA			NA			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0021-EXPLOSIVES

FIELD ID			G0021			G0021			G0021			G0021		
METHOD	Maximum	Detection	6N			6N			6N			6N		
COLLECT DATE	Detection	Frequency	2/10/1984			11/3/1983			1/18/1983			1/6/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 39	<	1.08	U	<	3.5	U	<	1.9	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 29	<	1.24	U	<	3.9	U	<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 39	<	1.08	U	<	3.5	U	<	1.2	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 39	<	0.62	U	<	1.9	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 39	<	1.58	U	<	4.2	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 20		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	1.3	6 / 17		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA			NA	
HMX	6.04	20 / 24		NA			NA			NA			NA	
MNX	0.17 J	1 / 10		NA			NA			NA			NA	
Nitrobenzene	-	0 / 29	<	1.36	U	<	4.8	U	<	2.1	U	<	2.1	U
RDX	117	32 / 39	74.0	NRL		81.5	NRL		66.4	NRL		117	NRL	
Tetryl	-	0 / 21		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0022-EXPLOSIVES

FIELD ID			G0022			G0022			G0022			G0022			G0022			G0022			G0022		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/14/2012			3/15/2011			3/17/2010			3/13/2009			3/13/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	26	34 / 38	0.55	0.8	J	<	0.8	U	0.94	0.8		1.1	1		0.64	0.48		9.1	0.48		10	0.48	
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	420	36 / 38	3.7	0.8	J	2	0.8		9.1	0.8		9.8	0.4		3.9	0.48		24	0.48		14	0.48	
2,4-Dinitrotoluene	0.09 J	1 / 38	<	0.8	U	<	0.8	U	<	0.8	U	0.09	0.4	J	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 38	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	6.9	18 / 19	3.4	0.8	J	4.3	0.8		5.8	0.8		6.9	0.2		2.4	0.48		6.3	0.48		6.9	0.48	
2-Nitrotoluene	1.3	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	0.18 J	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.18	0.4	J	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	8.4	17 / 17	5.6	1.4	J	6	1.4		8.4	0.8		7	0.2		3.3	0.48		6.6	0.48		6.4	0.48	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	10.5	23 / 23	2.1	0.8	J	3.1	0.8	J	3.4	0.8		4	0.4		4.3	0.48		5.3	0.48		3.4	0.48	
MNX	0.3 J	2 / 10	<	0.8	U	<	0.8	U	0.3	0.8	J	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	94	37 / 38	2.9	0.8	J	4.5	0.8		7.3	0.8		12	0.2		9.5	0.48		28	0.48		21	0.48	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	UJ	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0022-EXPLOSIVES

FIELD ID			G0022			G0022			G0022			G0022			G0022			G0022			G0022		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/16/2005			3/17/2004			3/18/2003			3/21/2002			3/22/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	26	34 / 38	12	0.48		12	0.48		14	1.2		<	0.16	U	13	1.8		19	1.6		17	8	
1,3-Dinitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.24	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	420	36 / 38	9.1	0.48		5.2	0.48		4.8	0.24		4.3	0.16	J	6.8	0.30		10	0.8		8.3	1.5	
2,4-Dinitrotoluene	0.09 J	1 / 38	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.24	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 38	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.93	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	6.9	18 / 19	5.5	0.48		3.3	0.48	P	2	0.46		1.3	0.31	J	1.6	0.38		2.1	0.8		1.7	1	
2-Nitrotoluene	1.3	1 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.74	U	1.3	0.8		<	1.1	U
3-Nitrotoluene	0.18 J	1 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.46	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	8.4	17 / 17	7.3	0.48		6.1	0.48		4.1	0.46		2.7	0.31	J	1.4	0.63		1.5	0.8		1.9	1	
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.75	U	<	0.5	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	10.5	23 / 23	2.8	0.48		1.9	0.48		1.3	0.58		0.64	0.39	J	1.8	1.0		3.2	1.0		4.8	0.8	
MNX	0.3 J	2 / 10	<	0.48	U	0.26	0.48	J	<	0.24	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.24	U	<	0.16	U	<	0.42	U	<	0.8	U	<	0.8	U
RDX	94	37 / 38	15	0.48		9	0.48		4.3	0.24		2	0.16	J	2.7	0.60		12	0.8		27	8	
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.99	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0022-EXPLOSIVES

FIELD ID			G0022			G0022			G0022			G0022			G0022			G0022			G0022		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW14			UW14		
COLLECT DATE	Detection	Frequency	4/1/1999			6/25/1998			7/14/1994			6/15/1994			8/25/1992			10/16/1990			4/24/1990		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	26	34 / 38	19	4		16.3	1.00		17.0	NRL		17.0	NRL		19.3	NRL		10.7	NRL		26.0	NRL	
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.519	U	<	0.519	
2,4,6-Trinitrotoluene	420	36 / 38	8.9	0.8		6.86	1.00		11.0	NRL		12.0	NRL		18.7	NRL		17.7	NRL		22.0	NRL	
2,4-Dinitrotoluene	0.09 J	1 / 38	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.612	U	<	0.612	U
2,6-Dinitrotoluene	-	0 / 38	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	1.15	U	<	1.15	U
2-Amino-4,6-dinitrotoluene	6.9	18 / 19	2.2	0.8		<	0.500	U	1.40	NRL		1.41	NRL		2.48	NRL		NA		<	NA	U	
2-Nitrotoluene	1.3	1 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
3-Nitrotoluene	0.18 J	1 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	8.4	17 / 17	2.2	0.8		1.24	1.00	J		NA		1.44	NRL			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
HMX	10.5	23 / 23	6.9	0.8		8.58	0.500		2.24	NRL		2.35	NRL		10.5	NRL		8.20	NRL		9.81	NRL	
MNX	0.3 J	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	1.07	U	<	1.07	U
RDX	94	37 / 38	43	4		23.7	1.00		8.10	NRL		8.16	NRL		35.8	NRL		94.0	NRL		94.0	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA		<	0.556	U	<	0.556	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0022-EXPLOSIVES

FIELD ID			G0022			G0022			G0022			G0022			G0022			G0022			G0022		
METHOD	Maximum	Detection	UW01			UW01			UW01			UW01			UW01			UW01			D1		
COLLECT DATE	Detection	Frequency	5/15/1989			11/8/1988			7/26/1988			1/25/1988			4/15/1987			9/24/1986			3/12/1986		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	26	34 / 38	25.0	NRL		23.0	NRL		20.0	NRL		21.0	NRL		25.5	NRL		22.9	NRL		19.4	NRL	
1,3-Dinitrobenzene	-	0 / 28	<	0.61	U	<	0.61	U		NA			NA			NA			NA			NA	
2,4,6-Trinitrotoluene	420	36 / 38	24.0	NRL		28.0	NRL		32.0	NRL		420	NRL		35.8	NRL		40.0	NRL		32.6	NRL	
2,4-Dinitrotoluene	0.09 J	1 / 38	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U	<	0.56	U
2,6-Dinitrotoluene	-	0 / 38	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	6.9	18 / 19		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	1.3	1 / 16		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	0.18 J	1 / 16		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	8.4	17 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16		NA			NA			NA			NA			NA			NA			NA	
HMX	10.5	23 / 23	6.78	NRL		6.76	NRL			NA			NA			NA			NA			NA	
MNX	0.3 J	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28	<	1.13	U	<	1.13	U		NA			NA			NA			NA			NA	
RDX	94	37 / 38	53.0	NRL		35.0	NRL		36.0	NRL		49.0	NRL		50.0	NRL		30.5	NRL		66.3	NRL	
Tetryl	-	0 / 20		NA			NA			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0022-EXPLOSIVES

FIELD ID			G0022			G0022			G0022			G0022			G0022			G0022			G0022		
METHOD	Maximum	Detection	D1			D1			D1			D1			D1			6N			6N		
COLLECT DATE	Detection	Frequency	12/11/1985			9/11/1985			6/19/1985			12/4/1984			9/20/1984			6/15/1984			2/10/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	26	34 / 38	25.5	NRL		24.8	NRL		20.0	NRL		20.9	NRL		10.0	NRL		<	1.08	U	14.0	NRL	
1,3-Dinitrobenzene	-	0 / 28		NA			NA			NA			NA			NA		<	1.24	U	<	1.24	U
2,4,6-Trinitrotoluene	420	36 / 38	41.9	NRL		46.4	NRL		20.0	NRL		<	1.9	U	<	0.9	U	4.00	NRL		45.5	NRL	
2,4-Dinitrotoluene	0.09 J	1 / 38	<	0.56	U	<	0.56	U	<	0.6	U	<	1.2	U	<	0.6	U	<	0.62	U	<	0.62	U
2,6-Dinitrotoluene	-	0 / 38	<	1.2	U	<	1.2	U	<	1.2	U	<	1.2	U	<	0.6	U	<	1.58	U	<	1.58	U
2-Amino-4,6-dinitrotoluene	6.9	18 / 19		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	1.3	1 / 16		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	0.18 J	1 / 16		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	8.4	17 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16		NA			NA			NA			NA			NA			NA			NA	
HMX	10.5	23 / 23		NA			NA			NA			NA			NA			NA			NA	
MNX	0.3 J	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 28		NA			NA			NA			NA			NA		<	1.36	U	<	1.36	U
RDX	94	37 / 38	72.9	NRL		62.6	NRL		37.7	NRL		47.7	NRL		40.5	NRL		33.6	NRL		29.0	NRL	
Tetryl	-	0 / 20		NA			NA			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0022-EXPLOSIVES

FIELD ID	G0022					G0022			G0022		
METHOD	Maximum	Detection	6N			6N			6N		
COLLECT DATE	Detection	Frequency	11/3/1983			1/19/1983			1/12/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	26	34 / 38	<	3.5	U	6.1	NRL		13.9	NRL	
1,3-Dinitrobenzene	-	0 / 28	<	3.9	U	<	2.2	U	<	2.2	U
2,4,6-Trinitrotoluene	420	36 / 38	9.29	NRL		30.9	NRL		99.7	NRL	
2,4-Dinitrotoluene	0.09 J	1 / 38	<	1.9	U	<	0.9	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 38	<	4.2	U	<	0.68	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	6.9	18 / 19		NA			NA			NA	
2-Nitrotoluene	1.3	1 / 16		NA			NA			NA	
3-Nitrotoluene	0.18 J	1 / 16		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	8.4	17 / 17		NA			NA			NA	
4-Nitrotoluene	-	0 / 16		NA			NA			NA	
HMX	10.5	23 / 23		NA			NA			NA	
MNX	0.3 J	2 / 10		NA			NA			NA	
Nitrobenzene	-	0 / 28	<	4.8	U	<	2.1	U	<	2.1	U
RDX	94	37 / 38	23.2	NRL		16.7	NRL		<	9.6	U
Tetryl	-	0 / 20		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0023-EXPLOSIVES

FIELD ID			G0023			G0023			G0023			G0023			G0023			G0023			G0023		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/13/2012			3/10/2011			3/17/2010			3/16/2009			3/18/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	352	38 / 43	<	0.8	U	0.29	0.8	J	0.48	0.8	J	6.8	0.99		32	0.48		42	0.48		59	0.97	
1,3-Dinitrobenzene	1.85	1 / 33	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	5290	39 / 43	<	0.8	U	<	0.8	U	1.2	0.8		2.8	0.4		15	0.48		18	0.48		29	0.49	
2,4-Dinitrotoluene	12.3	17 / 43	<	0.8	U	<	0.8	U	<	0.8	U	0.12	0.4	J	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	2.85	4 / 43	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	17	20 / 23	<	0.8	U	<	0.8	U	1.1	0.8		2.3	0.2		3.1	0.48		2.7	0.48		3.1	0.49	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	19	15 / 17	<	1.4	U	<	1.4	U	1.5	0.8		2.1	0.2		4.1	0.48		3.1	0.48		2.5	0.49	
4-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	77.1	28 / 28	1.7	0.8	J	2.6	0.8		1.7	0.8		1.2	0.4		1.1	0.48		1.3	0.48	J	2.4	0.49	
MNX	0.14 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	5.22	2 / 32	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	307	42 / 43	<	0.8	U	0.82	0.8	J	2.8	0.8		2	0.2		4	0.48		2.8	0.48		9.2	0.49	
Tetryl	6.72	1 / 23	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0023-EXPLOSIVES

FIELD ID			G0023			G0023			G0023			G0023			G0023			G0023			G0023		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/16/2005			3/18/2004			3/18/2003			3/21/2002			3/23/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	352	38 / 43	60	4.8		64	2.4		84	1.9		<	0.22	U	68	2.6		170	16.0		160	40	
1,3-Dinitrobenzene	1.85	1 / 33	<	0.48	U	<	0.48	U	<	0.19	U	<	0.22	U	<	0.17	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	5290	39 / 43	26	0.48		26	0.48		57	1.9		25	2.2	J	48	2.2		220	16.0		280	75	
2,4-Dinitrotoluene	12.3	17 / 43	<	0.48	U	<	0.48	U	0.42	0.36		<	1.3	UJ	0.46	0.17		1.4	0.8		1.4	1.1	
2,6-Dinitrotoluene	2.85	4 / 43	<	0.48	U	<	0.48	U	<	0.36	U	<	0.43	U	<	0.67	U	2	0.8		<	1.1	U
2-Amino-4,6-dinitrotoluene	17	20 / 23	2.9	0.48		2.7	0.48	P	4.2	0.36		1.9	0.43	J	2.6	0.27		8.1	0.8		8.7	1	
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.36	U	<	0.43	U	<	0.53	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.36	U	<	0.43	U	<	0.34	U		NA		<	1.1	U
4-Amino-2,6-dinitrotoluene	19	15 / 17	2.1	0.48		2.4	0.48		3.4	0.36		1.5	0.43	J	5.4	0.46	J	4.3	0.8		8	1	
4-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.58	U	<	0.69	U	<	1.1	U		NA		<	1.1	U
HMX	77.1	28 / 28	2.4	0.48		1.6	0.48		2.4	0.46		2.3	0.54	J	1.9	0.74		2.6	1.0		6.6	0.8	
MNX	0.14 J	1 / 10	<	0.48	U	<	0.48	U	0.14	0.19	J		NA			NA			NA			NA	
Nitrobenzene	5.22	2 / 32	<	0.48	U	<	0.48	U	<	0.19	U	<	0.22	U	<	0.30	U	3.7	0.8		<	0.8	U
RDX	307	42 / 43	23	0.48		7.3	0.48		11	1.9		8.6	0.22	J	6.9	0.43		14	0.8		27	40	J
Tetryl	6.72	1 / 23	<	0.48	U	<	0.48	U	<	0.36	U	<	0.43	U	<	0.72	U	<	4	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0023-EXPLOSIVES

FIELD ID			G0023			G0023			G0023			G0023			G0023			G0023			G0023		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	4/2/1999			6/18/1998			7/15/1994			6/21/1994			7/1/1993			6/24/1993			10/14/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	352	38 / 43	83	8		104	1.00		140	NRL		130	NRL		110	NRL		88.0	NRL		86.0	NRL	
1,3-Dinitrobenzene	1.85	1 / 33	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	5290	39 / 43	130	8		174	10.00		230	NRL		280	NRL		240	NRL		180	NRL		180	NRL	
2,4-Dinitrotoluene	12.3	17 / 43	1.1	0.8		<	0.500	U	0.882	NRL		0.301	NRL		0.186	NRL		0.187	NRL		<	0.064	U
2,6-Dinitrotoluene	2.85	4 / 43	<	0.8	U	<	0.500	U	1.65	NRL		2.85	NRL		<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	17	20 / 23	9.9	0.8		10.7	0.500		16.0	NRL		17.0	NRL		15.6	NRL		11.2	NRL		8.98	NRL	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 15	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	19	15 / 17	7	0.8		10.0	1.00		19.0	NRL			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 15	<	0.8	U	<	1.00	U		NA			NA			NA			NA			NA	
HMX	77.1	28 / 28	6.4	0.8		15.6	0.500		44.0	NRL		44.0	NRL		77.1	NRL		26.1	NRL		46.4	NRL	
MNX	0.14 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	5.22	2 / 32	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	5.22	NRL		<	0.645	U	<	0.645	U
RDX	307	42 / 43	24	8		22.3	1.00		61.0	NRL		68.0	NRL		77.0	NRL		46.4	NRL		65.5	NRL	
Tetryl	6.72	1 / 23	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U	<	1.18	U	<	1.56	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0023-EXPLOSIVES

FIELD ID			G0023			G0023			G0023			G0023			G0023			G0023			G0023		
METHOD	Maximum	Detection	UW32			UW33			UW33			UW14			UW14			UW01			UW01		
COLLECT DATE	Detection	Frequency	9/2/1992			7/25/1991			7/25/1991			10/16/1990			4/25/1990			5/15/1989			11/8/1988		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	352	38 / 43	100	NRL		25.0	NRL		58.0	NRL		91.0	NRL		80.0	NRL		12.0	NRL		99.0	NRL	
1,3-Dinitrobenzene	1.85	1 / 33	<	0.611	U	<	0.61	U	<	5.5	U	<	0.519	U	1.85	NRL		<	0.61	U	<	0.61	U
2,4,6-Trinitrotoluene	5290	39 / 43	200	NRL		24.0	NRL		170	NRL		280	NRL		200	NRL		360	NRL		310	NRL	
2,4-Dinitrotoluene	12.3	17 / 43	0.353	NRL		<	0.6	U	<	2.6	U	<	0.612	U	<	0.612	U	<	0.6	U	<	0.6	U
2,6-Dinitrotoluene	2.85	4 / 43	<	0.074	U	<	0.55	U	<	2.6	U	<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U
2-Amino-4,6-dinitrotoluene	17	20 / 23	11.5	NRL			NA		<	5	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 16		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 15		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	19	15 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 15		NA			NA			NA			NA			NA			NA			NA	
HMX	77.1	28 / 28	60.0	NRL		6.78	NRL		17.0	NRL		11.8	NRL		9.85	NRL		13.0	NRL		12.6	NRL	
MNX	0.14 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	5.22	2 / 32	<	0.645	U	<	1.13	U	<	8.2	U	<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U
RDX	307	42 / 43	52.9	NRL		53.0	NRL		88.0	NRL		70.0	NRL		56.0	NRL		80.0	NRL		55.0	NRL	
Tetryl	6.72	1 / 23		NA			NA		<	12	U	<	0.556	U	6.72	NRL			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0023-EXPLOSIVES

FIELD ID			G0023			G0023			G0023			G0023			G0023			G0023			G0023		
METHOD	Maximum	Detection	UW01			UW01			UW01			UW01			D1			D1			D1		
COLLECT DATE	Detection	Frequency	7/26/1988			1/25/1988			4/15/1987			9/24/1986			3/12/1986			12/11/1985			9/11/1985		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	352	38 / 43	69.0	NRL		92.0	NRL		35.0	NRL		130	NRL		100	NRL		<	140	U	208	NRL	
1,3-Dinitrobenzene	1.85	1 / 33		NA			NA			NA			NA			NA			NA			NA	
2,4,6-Trinitrotoluene	5290	39 / 43	340	NRL		490	NRL		130	NRL		460	NRL		281	NRL		455	NRL		508	NRL	
2,4-Dinitrotoluene	12.3	17 / 43	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U	0.95	NRL		<	0.56	U	<	0.56	U
2,6-Dinitrotoluene	2.85	4 / 43	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U	<	1.2	U	<	1.2	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	17	20 / 23		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 16		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 15		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	19	15 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 15		NA			NA			NA			NA			NA			NA			NA	
HMX	77.1	28 / 28		NA			NA			NA			NA			NA			NA			NA	
MNX	0.14 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	5.22	2 / 32		NA			NA			NA			NA			NA			NA			NA	
RDX	307	42 / 43	38.0	NRL		28.0	NRL		27.6	NRL		11.8	NRL		30.2	NRL		37.3	NRL		56.7	NRL	
Tetryl	6.72	1 / 23		NA			NA			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0023-EXPLOSIVES

FIELD ID			G0023			G0023			G0023			G0023			G0023			G0023			G0023		
METHOD	Maximum	Detection	D1			D1			D1			6N			6N			6N			6N		
COLLECT DATE	Detection	Frequency	6/19/1985			12/4/1984			9/20/1984			6/15/1984			2/10/1984			11/3/1983			1/19/1983		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	352	38 / 43	<	17.5	U	102	NRL		10.0	GT		<	1.08	U	73.4	NRL		119	NRL		159	NRL	
1,3-Dinitrobenzene	1.85	1 / 33		NA			NA			NA		<	1.24	U	<	1.24	U	<	3.9	U	<	2.2	U
2,4,6-Trinitrotoluene	5290	39 / 43	54.0	NRL		<	1.9	U	<	0.9	U	5.60	NRL		498	NRL		929	NRL		902	NRL	
2,4-Dinitrotoluene	12.3	17 / 43	<	0.6	U	<	1.2	U	2.00	NRL		0.879	NRL		1.71	NRL		<	1.9	U	0.964	NRL	
2,6-Dinitrotoluene	2.85	4 / 43	<	1.2	U	<	1.2	U	<	0.6	U	<	1.36	U	<	1.58	U	<	4.2	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	17	20 / 23		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 16		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 15		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	19	15 / 17		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 15		NA			NA			NA			NA			NA			NA			NA	
HMX	77.1	28 / 28		NA			NA			NA			NA			NA			NA			NA	
MNX	0.14 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	5.22	2 / 32		NA			NA			NA			NA		<	1.36	U	<	4.8	U	<	2.1	U
RDX	307	42 / 43	45.6	NRL		38.4	NRL		81.2	NRL		40.8	NRL		99.0	NRL		96.2	NRL		135	NRL	
Tetryl	6.72	1 / 23		NA			NA			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0023-EXPLOSIVES

FIELD ID			G0023		
METHOD	Maximum	Detection	6N		
COLLECT DATE	Detection	Frequency	1/7/1982		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	352	38 / 43	352	NRL	
1,3-Dinitrobenzene	1.85	1 / 33	<	2.2	U
2,4,6-Trinitrotoluene	5290	39 / 43	5290	NRL	
2,4-Dinitrotoluene	12.3	17 / 43	12.3	NRL	
2,6-Dinitrotoluene	2.85	4 / 43	2.00	NRL	
2-Amino-4,6-dinitrotoluene	17	20 / 23		NA	
2-Nitrotoluene	-	0 / 16		NA	
3-Nitrotoluene	-	0 / 15		NA	
4-Amino-2,6-dinitrotoluene	19	15 / 17		NA	
4-Nitrotoluene	-	0 / 15		NA	
HMX	77.1	28 / 28		NA	
MNX	0.14 J	1 / 10		NA	
Nitrobenzene	5.22	2 / 32	<	2.1	U
RDX	307	42 / 43	307	NRL	
Tetryl	6.72	1 / 23		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0024-EXPLOSIVES

FIELD ID			G0024			G0024			G0024			G0024			G0024			G0024			G0024		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/12/2012			3/14/2011			3/16/2010			3/13/2009			3/12/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 41	<	0.8	U	0.64	0.8	J	<	0.8	U	<	1	UJ	<	0.49	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 31	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.49	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	323	35 / 41	2.2	0.8	J	2.9	0.8	J	3	0.8		0.59	0.4	J	9.6	0.49		16	0.48		20	0.48	
2,4-Dinitrotoluene	0.563	2 / 41	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.49	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 41	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	UJ	<	0.49	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	11.1	19 / 22	2.4	0.8	J	2.6	0.8		2.3	0.8		<	0.2	UJ	4.9	0.49		6	0.48		9.6	0.48	
2-Nitrotoluene	0.34 J	1 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.49	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.49	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	14	16 / 19	2	1.4	J	1.7	1.4		1.6	0.8		<	0.2	UJ	5	0.49		5.4	0.48		6.1	0.48	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	UJ	<	0.49	U	<	0.48	U	<	0.48	U
HMX	8.62	21 / 26	0.69	0.8	J	0.64	0.8	J	0.37	0.8	J	<	0.4	UJ	0.91	0.49		1.7	0.48		2.1	0.48	
MNX	3.9 J	2 / 10	<	0.8	U	<	0.8	U	<	0.8	U	3.9	2	J	<	0.49	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 31	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	UJ	<	0.49	U	<	0.48	U	<	0.48	U
RDX	180	36 / 41	1.4	0.8	J	0.93	0.8		1.4	0.8		<	0.2	UJ	3.1	0.49		4.4	0.48		6.5	0.48	
Tetryl	-	0 / 23	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	UJ	<	0.49	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0024-EXPLOSIVES

FIELD ID			G0024			G0024			G0024			G0024			G0024			G0024			G0024		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/15/2005			3/16/2004			3/18/2003			3/20/2002			3/22/2001			3/23/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 41	<	0.48	U	<	0.48	U	<	0.19	U	<	0.2	U	<	0.40	U	0.38	0.8	J	<	0.8	U
1,3-Dinitrobenzene	-	0 / 31	<	0.48	U	<	0.48	U	<	0.19	U	<	0.2	U	<	0.27	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	323	35 / 41	<	0.48	U	0.93	0.48		1.2	0.19		2.4	0.2		7.6	0.34		6.9	0.8		8	1.5	
2,4-Dinitrotoluene	0.563	2 / 41	<	0.48	U	<	0.48	U	<	0.36	U	<	0.38	U	<	0.27	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 41	<	0.48	U	<	0.48	U	<	0.36	U	<	0.38	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	11.1	19 / 22	<	0.48	U	7.1	0.48	J	6.7	0.36		2.1	0.38		1.8	0.42		1.5	0.8		6.6	1	
2-Nitrotoluene	0.34 J	1 / 18	<	0.48	U	<	0.48	U	<	0.36	U	<	0.38	U	<	0.82	U	0.34	0.8	J	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.36	U	<	0.38	U	<	0.52	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	14	16 / 19	<	0.48	U	5.3	0.48		6.1	0.36		4.8	0.38		2.5	0.71		0.96	0.8		6.9	1	
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.58	U	<	0.62	U	<	1.7	U	<	0.8	U	<	1.1	U
HMX	8.62	21 / 26	<	0.48	U	1.8	0.48		2.5	0.46		1.9	0.48		0.67	1.1	J	<	1	U	3	0.8	
MNX	3.9 J	2 / 10	<	0.48	U	<	0.48	U	0.11	0.19	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 31	<	0.48	U	<	0.48	U	<	0.19	U	<	0.2	U	<	0.47	U	<	0.8	U	<	0.8	U
RDX	180	36 / 41	<	0.48	U	4	0.48		6.4	0.19		7.8	0.2		5.4	0.67		1.2	0.8		9.3	0.8	
Tetryl	-	0 / 23	<	0.48	U	<	0.48	U	<	0.36	U	<	0.38	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0024-EXPLOSIVES

FIELD ID			G0024			G0024			G0024			G0024			G0024			G0024			G0024		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	4/1/1999			6/30/1998			10/4/1997			12/15/1996			7/15/1994			6/15/1994			8/26/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 41	0.26	0.8	J	<	1.00	U	0.721	0.125		1.3	0.125		0.597	NRL		0.513	NRL		<	0.449	U
1,3-Dinitrobenzene	-	0 / 31	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	323	35 / 41	10	0.8		14.4	1.00		23.4	0.29		18	0.29		11.0	NRL		7.23	NRL		2.69	NRL	
2,4-Dinitrotoluene	0.563	2 / 41	<	0.8	U	<	0.500	U	0.563	0.233		0.26	0.233		<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 41	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	11.1	19 / 22	11	0.8		6.71	0.500		11.1	0.173		6.5	0.173		5.60	NRL		5.41	NRL		1.72	NRL	
2-Nitrotoluene	0.34 J	1 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	14	16 / 19	14	0.8		8.32	1.00	J	10.4	0.309		12	0.309			NA		<	0.704	U		NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	8.62	21 / 26	5.9	0.8		4.47	0.500		4.66	0.16		6.5	0.16		8.62	NRL		8.18	NRL		6.13	NRL	
MNX	3.9 J	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 31	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	180	36 / 41	16	4		13.2	1.00		14.2	0.558		21.1	0.558		27.0	NRL		32.0	NRL		20.3	NRL	
Tetryl	-	0 / 23	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	12	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0024-EXPLOSIVES

FIELD ID			G0024			G0024			G0024			G0024			G0024			G0024			G0024		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			UW01			UW01			UW01		
COLLECT DATE	Detection	Frequency	5/29/1991			10/16/1990			4/24/1990			5/15/1989			11/8/1988			7/26/1988			1/25/1988		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 41	<	0.21	U	<	0.626	U	<	0.626	U	<	0.56	U	<	0.56	U	<	0.56	U	<	0.56	U
1,3-Dinitrobenzene	-	0 / 31	<	0.458	U	<	0.519	U	<	0.519	U	<	0.61	U	<	0.61	U		NA			NA	
2,4,6-Trinitrotoluene	323	35 / 41	3.27	NRL		<	0.588	U	4.69	NRL		10.3	NRL		9.82	NRL		<	0.78	U	27.0	NRL	
2,4-Dinitrotoluene	0.563	2 / 41	<	0.397	U	<	0.612	U	<	0.612	U	<	0.6	U	<	0.6	U	<	0.6	U	<	0.6	U
2,6-Dinitrotoluene	-	0 / 41	<	0.6	U	<	1.15	U	<	1.15	U	<	0.55	U	<	0.55	U	<	0.55	U	<	0.55	U
2-Amino-4,6-dinitrotoluene	11.1	19 / 22	<	0.8	U		NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	0.34 J	1 / 18		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	14	16 / 19		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
HMX	8.62	21 / 26	<	0.533	U	<	1.65	U	1.78	NRL		5.19	NRL		2.66	NRL			NA			NA	
MNX	3.9 J	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 31	<	0.682	U	<	1.07	U	<	1.07	U	<	1.13	U	<	1.13	U		NA			NA	
RDX	180	36 / 41	0.985	NRL		<	2.11	U	11.9	NRL		37.8	NRL		18	NRL		1.36	NRL		34.7	NRL	
Tetryl	-	0 / 23	<	0.631	U	<	0.556	U	<	0.556	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0024-EXPLOSIVES

FIELD ID			G0024			G0024			G0024			G0024			G0024			G0024			G0024		
METHOD	Maximum	Detection	UW01			UW01			D1			D1			D1			D1			3S		
COLLECT DATE	Detection	Frequency	4/15/1987			9/24/1986			3/12/1986			12/11/1985			9/11/1985			6/19/1985			12/4/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 41	<	0.56	U	<	0.56	U	<	1.4	U	<	1.4	U	<	1.4	U	<	1.4	U			NA
1,3-Dinitrobenzene	-	0 / 31		NA			NA			NA			NA			NA			NA				NA
2,4,6-Trinitrotoluene	323	35 / 41	<	0.78	U	13.5	NRL		19.6	NRL		14.0	NRL		5.01	NRL		15.0	NRL				NA
2,4-Dinitrotoluene	0.563	2 / 41	<	0.6	U	<	0.6	U	<	0.56	U	<	0.56	U	<	0.56	U	<	0.6	U			NA
2,6-Dinitrotoluene	-	0 / 41	<	0.55	U	<	0.55	U	<	1.2	U	<	1.2	U	<	1.2	U	<	1.2	U			NA
2-Amino-4,6-dinitrotoluene	11.1	19 / 22		NA			NA			NA			NA			NA			NA				NA
2-Nitrotoluene	0.34 J	1 / 18		NA			NA			NA			NA			NA			NA				NA
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA				NA
4-Amino-2,6-dinitrotoluene	14	16 / 19		NA			NA			NA			NA			NA			NA				NA
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA				NA
HMX	8.62	21 / 26		NA			NA			NA			NA			NA			NA				NA
MNX	3.9 J	2 / 10		NA			NA			NA			NA			NA			NA				NA
Nitrobenzene	-	0 / 31		NA			NA			NA			NA			NA			NA				NA
RDX	180	36 / 41	0.89	NRL		16.9	NRL		50.0	NRL		48.6	NRL		14.1	NRL		41.2	NRL		<	9	U
Tetryl	-	0 / 23		NA			NA			NA			NA			NA			NA				NA

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0024-EXPLOSIVES

FIELD ID			G0024			G0024			G0024			G0024			G0024			G0024			G0024		
METHOD	Maximum	Detection	D1			3S			D1			3S			6N			3S			6N		
COLLECT DATE	Detection	Frequency	12/4/1984			9/19/1984			9/19/1984			6/15/1984			6/15/1984			2/10/1984			2/10/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 41	<	1.4	U		NA		<	0.5	U		NA		<	1.08	U		NA		<	1.08	U
1,3-Dinitrobenzene	-	0 / 31		NA			NA			NA			NA		<	1.24	U		NA		<	1.24	U
2,4,6-Trinitrotoluene	323	35 / 41	13.1	NRL			NA		<	0.9	U		NA		<	1.08	U		NA		2.10	NRL	
2,4-Dinitrotoluene	0.563	2 / 41	<	1.2	U		NA		<	0.6	U		NA		<	0.62	U		NA		<	0.62	U
2,6-Dinitrotoluene	-	0 / 41	<	1.2	U		NA		<	0.6	U		NA		<	1.58	U		NA		<	1.58	U
2-Amino-4,6-dinitrotoluene	11.1	19 / 22		NA			NA			NA			NA			NA			NA			NA	
2-Nitrotoluene	0.34 J	1 / 18		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	14	16 / 19		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
HMX	8.62	21 / 26		NA			NA			NA			NA			NA			NA			NA	
MNX	3.9 J	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 31		NA			NA			NA			NA		<	1.36	U		NA		<	1.36	U
RDX	180	36 / 41		NA		80.1	NRL			NA		54.8	NRL			NA		<	10	U		NA	
Tetryl	-	0 / 23		NA			NA			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0024-EXPLOSIVES

FIELD ID			G0024			G0024			G0024			G0024			G0024			G0024		
METHOD	Maximum	Detection	3S			6N			3S			6N			3S			6N		
COLLECT DATE	Detection	Frequency	11/2/1983			11/2/1983			1/15/1983			1/15/1983			1/6/1982			1/6/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	1.3	7 / 41	NA		<	3.5	U		NA		<	1.9	U		NA		<	1.9	U	
1,3-Dinitrobenzene	-	0 / 31	NA		<	3.9	U		NA		<	2.2	U		NA		<	2.2	U	
2,4,6-Trinitrotoluene	323	35 / 41	NA		11.7	NRL			NA		16.0	NRL			NA		323	NRL		
2,4-Dinitrotoluene	0.563	2 / 41	NA		<	1.9	U		NA		<	0.9	U		NA		<	0.9	U	
2,6-Dinitrotoluene	-	0 / 41	NA		<	4.2	U		NA		<	0.68	U		NA		<	0.68	U	
2-Amino-4,6-dinitrotoluene	11.1	19 / 22	NA			NA			NA			NA			NA			NA		
2-Nitrotoluene	0.34 J	1 / 18	NA			NA			NA			NA			NA			NA		
3-Nitrotoluene	-	0 / 18	NA			NA			NA			NA			NA			NA		
4-Amino-2,6-dinitrotoluene	14	16 / 19	NA			NA			NA			NA			NA			NA		
4-Nitrotoluene	-	0 / 18	NA			NA			NA			NA			NA			NA		
HMX	8.62	21 / 26	NA			NA			NA			NA			NA			NA		
MNX	3.9 J	2 / 10	NA			NA			NA			NA			NA			NA		
Nitrobenzene	-	0 / 31	NA		<	4.8	U		NA		<	2.1	U		NA		<	2.1	U	
RDX	180	36 / 41	171	NRL		NA		180	NRL			NA		150	NRL			NA		
Tetryl	-	0 / 23	NA			NA			NA			NA			NA			NA		

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0025-EXPLOSIVES

FIELD ID			G0025			G0025			G0025			G0025			G0025			G0025			G0025		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			None			3/12/2007			3/13/2006			3/15/2005			3/15/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
2-Amino-4,6-dinitrotoluene	0.709	7 / 13	<	0.8	U	0.16	0.8	J				<	0.51	U	<	0.48	U	<	0.48	U	0.3	0.46	J
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
4-Amino-2,6-dinitrotoluene	0.23 J	1 / 12	<	1.4	U	<	1.4	U				<	0.51	U	<	0.48	U	<	0.48	U	0.23	0.46	J
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.75	U
HMX	-	0 / 13	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.58	U
MNX	-	0 / 6	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
RDX	-	0 / 14	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
Tetryl	-	0 / 12	<	1.6	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0025-EXPLOSIVES

FIELD ID			G0025			G0025			G0025			G0025			G0025			G0025			G0025		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW32		
COLLECT DATE	Detection	Frequency	3/17/2003			3/20/2002			3/21/2001			3/16/2000			3/30/1999			6/26/1998			8/19/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.16	U	<	0.38	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 14	<	0.16	U	<	0.25	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.16	U	<	0.32	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 14	<	0.31	U	<	0.25	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 14	<	0.31	U	<	0.98	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	0.709	7 / 13	0.35	0.31		0.36	0.40	J	0.2	0.8	J	<	1	U	0.281	0.8	J	<	0.500	U	0.709	NRL	
2-Nitrotoluene	-	0 / 12	<	0.31	U	<	0.78	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
3-Nitrotoluene	-	0 / 12	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
4-Amino-2,6-dinitrotoluene	0.23 J	1 / 12	<	0.31	U	<	0.67	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA	
4-Nitrotoluene	-	0 / 12	<	0.5	U	<	1.6	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
HMX	-	0 / 13	<	0.39	U	<	1.1	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	1.210	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.16	U	<	0.44	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.645	U
RDX	-	0 / 14	<	0.16	U	<	0.63	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	1.170	U
Tetryl	-	0 / 12	<	0.31	U	<	1.0	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0025-EXPLOSIVES

FIELD ID			G0025		
METHOD	Maximum	Detection	6N		
COLLECT DATE	Detection	Frequency	1/6/1982		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 14	<	1.9	U
1,3-Dinitrobenzene	-	0 / 14	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 14	<	1.2	U
2,4-Dinitrotoluene	-	0 / 14	<	0.9	U
2,6-Dinitrotoluene	-	0 / 14	<	0.68	U
2-Amino-4,6-dinitrotoluene	0.709	7 / 13		NA	
2-Nitrotoluene	-	0 / 12		NA	
3-Nitrotoluene	-	0 / 12		NA	
4-Amino-2,6-dinitrotoluene	0.23 J	1 / 12		NA	
4-Nitrotoluene	-	0 / 12		NA	
HMX	-	0 / 13		NA	
MNX	-	0 / 6		NA	
Nitrobenzene	-	0 / 14	<	2.1	U
RDX	-	0 / 14	<	9.6	U
Tetryl	-	0 / 12		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0026-EXPLOSIVES

FIELD ID			G0026			G0026			G0026			G0026			G0026			G0026			G0026		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/2/2010			3/9/2009			3/13/2008			3/13/2007			3/27/2006			3/22/2005		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 18				<	1	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 18				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 18				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 18				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 18	Abandoned 2010			<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 17				<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 14				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 14				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 14				<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 14				<	1	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
HMX	-	0 / 17				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
MNX	-	0 / 7				<	2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 18				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
RDX	-	0 / 18				<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 16				<	0.24	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0026-EXPLOSIVES

FIELD ID			G0026			G0026			G0026			G0026			G0026			G0026			G0026		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/23/2004			3/21/2003			3/22/2002			3/28/2001			3/13/2000			3/29/1999			6/24/1998		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 18	<	0.24	U	<	0.27	U	<	0.44	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U
1,3-Dinitrobenzene	-	0 / 18	<	0.24	U	<	0.27	U	<	0.29	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	-	0 / 18	<	0.24	U	<	0.27	U	<	0.37	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	-	0 / 18	<	0.46	U	<	0.52	U	<	0.29	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 18	<	0.46	U	<	0.52	U	<	1.1	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	-	0 / 17	<	0.46	U	<	0.52	U	<	0.46	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U
2-Nitrotoluene	-	0 / 14	<	0.46	U	<	0.52	U	<	0.90	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 14	<	0.46	U	<	0.52	U	<	0.57	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	0.46	U	<	0.52	U	<	0.77	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U
4-Nitrotoluene	-	0 / 14	<	0.75	U	<	0.83	U	<	1.8	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U
HMX	-	0 / 17	<	0.58	U	<	0.65	U	<	1.2	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U
MNX	-	0 / 7	<	0.24	U		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 18	<	0.24	U	<	0.27	U	<	0.51	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U
RDX	-	0 / 18	<	0.24	U	<	0.27	U	<	0.73	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U
Tetryl	-	0 / 16	<	0.46	U	<	0.52	U	<	1.2	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0026-EXPLOSIVES

FIELD ID			G0026			G0026			G0026			G0026			G0026		
METHOD	Maximum	Detection	UW51			UW33			UW33			UW32			6N		
COLLECT DATE	Detection	Frequency	10/4/1997			7/13/1994			6/20/1994			8/25/1992			1/8/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 18	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 18	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 18	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 18	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 18	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 17	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 14	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 14	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 14	<	0.368	U		NA			NA			NA			NA	
HMX	-	0 / 17	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U		NA	
MNX	-	0 / 7		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 18	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	2.1	U
RDX	-	0 / 18	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	<	9.6	U
Tetryl	-	0 / 16	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0027-EXPLOSIVES

FIELD ID			G0027			G0027			G0027			G0027			G0027			G0027			G0027		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/2/2010			3/9/2009			3/13/2008			3/13/2007			3/27/2006			3/22/2005		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17				<	1	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 17				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 17				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 17				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 17	Abandoned 2010			<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 16				<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 13				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 13				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 13				<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 13				<	1	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
HMX	-	0 / 16				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
MNX	-	0 / 7				<	2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 17				<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
RDX	-	0 / 17				<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 15				<	0.24	U	<	0.48	U	<	0.48	U	<	0.50	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0027-EXPLOSIVES

FIELD ID			G0027			G0027			G0027			G0027			G0027			G0027			G0027		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/23/2004			3/21/2003			3/22/2002			3/28/2001			3/13/2000			3/29/1999			6/24/1998		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.17	U	<	0.25	U	<	0.44	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 17	<	0.17	U	<	0.25	U	<	0.30	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 17	<	0.17	U	<	0.25	U	<	0.37	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	UJ
2,4-Dinitrotoluene	-	0 / 17	<	0.33	U	<	0.48	U	<	0.30	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2,6-Dinitrotoluene	-	0 / 17	<	0.33	U	<	0.48	U	<	1.1	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.33	U	<	0.48	U	<	0.46	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 13	<	0.33	U	<	0.48	U	<	0.91	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 13	<	0.33	U	<	0.48	U	<	0.57	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	-	0 / 13	<	0.33	U	<	0.48	U	<	0.78	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 13	<	0.53	U	<	0.77	U	<	1.9	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
HMX	-	0 / 16	<	0.41	U	<	0.6	U	<	1.3	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	UJ
MNX	-	0 / 7	<	0.17	U		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.17	U	<	0.25	U	<	0.52	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
RDX	-	0 / 17	<	0.17	U	<	0.25	U	<	0.74	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 15	<	0.33	U	<	0.48	U	<	1.2	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0027-EXPLOSIVES

FIELD ID			G0027			G0027			G0027			G0027		
METHOD	Maximum	Detection	UW33			UW33			UW32			6N		
COLLECT DATE	Detection	Frequency	7/13/1994			6/21/1994			8/25/1992			1/8/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 17	<	0.425	U	<	0.425	U	<	0.449	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 17	<	0.549	U	<	0.549	U	<	0.611	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.451	U	<	0.451	U	<	0.635	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 17	<	0.26	U	<	0.26	U	<	0.064	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 17	<	0.26	U	<	0.26	U	<	0.074	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.244	U	<	0.244	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 13		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 13		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 13		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 13		NA			NA			NA			NA	
HMX	-	0 / 16	<	0.563	U	<	0.563	U	<	1.21	U		NA	
MNX	-	0 / 7		NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.817	U	<	0.817	U	<	0.645	U	<	2.1	U
RDX	-	0 / 17	<	0.412	U	<	0.412	U	<	1.17	U	<	9.6	U
Tetryl	-	0 / 15	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0028-EXPLOSIVES

FIELD ID			G0028			G0028			G0028			G0028			G0028			G0028			G0028		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			3/7/2011			3/2/2010			3/9/2009			3/13/2008			3/13/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	0.359	2 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	1.59	6 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 19	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0028-EXPLOSIVES

FIELD ID			G0028			G0028			G0028			G0028			G0028			G0028			G0028		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/27/2006			3/22/2005			3/23/2004			3/20/2003			3/25/2002			3/30/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.25	UJ	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.31	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.25	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.97	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.39	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.77	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.66	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.67	U	<	0.5	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.359	2 / 20	<	0.48	U	<	0.48	U	<	0.52	U	0.26	0.39	J	<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.44	U	<	0.8	U	<	0.8	U
RDX	1.59	6 / 21	<	0.48	U	<	0.48	U	<	0.21	U	0.44	0.16		<	0.63	U	0.69	0.8	J	1	0.8	
Tetryl	-	0 / 19	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	1.0	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0028-EXPLOSIVES

FIELD ID			G0028			G0028			G0028			G0028			G0028			G0028			G0028		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			6N		
COLLECT DATE	Detection	Frequency	3/29/1999			6/24/1998			10/4/1997			7/13/1994			6/22/1994			8/26/1992			1/8/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	1.00	UJ	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	1.00	UJ	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	UJ	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.368	U		NA			NA			NA			NA	
HMX	0.359	2 / 20	<	0.8	U	<	0.500	UJ	0.359	0.16		<	0.563	U	<	0.563	U	<	1.21	U		NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	2.1	U
RDX	1.59	6 / 21	<	0.8	U	<	1.00	UJ	1.42	0.558		1.59	NRL		1.58	NRL		<	1.17	U	<	9.6	U
Tetryl	-	0 / 19	<	0.8	U	<	0.500	UJ	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0029-EXPLOSIVES

FIELD ID			G0029			G0029			G0029			G0029			G0029			G0029			G0029		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/23/2005			3/16/2004			3/25/2003			3/20/2002			3/23/2001			3/16/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 10				<	0.48	U	<	0.2	U	<	0.22	U	<	0.44	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 10				<	0.48	U	<	0.2	U	<	0.22	U	<	0.30	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 10				<	0.48	U	<	0.2	U	<	0.22	U	<	0.37	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 10				<	0.48	U	<	0.39	U	<	0.43	U	<	0.30	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 10	Abandoned 2005			<	0.48	U	<	0.39	U	<	0.43	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 9				<	0.48	U	<	0.39	U	<	0.43	U	<	0.46	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.39	U	<	0.43	U	<	0.91	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.39	U	<	0.43	U	<	0.57	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 8				<	0.48	U	<	0.39	U	<	0.43	U	<	0.78	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.63	U	<	0.7	U	<	1.9	U	<	0.8	U	<	1.1	U
HMX	-	0 / 9				<	0.48	U	<	0.49	U	<	0.55	U	<	1.3	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.48	U	<	0.2	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 10				<	0.48	U	<	0.2	U	<	0.22	U	<	0.52	U	<	0.8	U	<	0.8	U
RDX	-	0 / 10				<	0.48	U	<	0.2	U	<	0.22	U	<	0.74	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 8				<	0.48	U	<	0.39	U	<	0.43	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0029-EXPLOSIVES

FIELD ID	G0029					G0029			G0029			G0029		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW32			6N		
COLLECT DATE	Detection	Frequency	3/26/1999			6/25/1998			8/21/1992			1/6/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.449	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.611	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.635	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.064	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.074	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
3-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
4-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
HMX	-	0 / 9	<	0.8	U	<	0.500	U	<	1.21	U		NA	
MNX	-	0 / 2		NA			NA			NA			NA	
Nitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.645	U	<	2.1	U
RDX	-	0 / 10	<	0.8	U	<	1.00	U	<	1.17	U	<	9.6	U
Tetryl	-	0 / 8	<	0.8	U	<	0.500	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0030-EXPLOSIVES

FIELD ID			G0030			G0030			G0030			G0030			G0030			G0030			G0030		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/23/2005			3/16/2004			3/25/2003			3/20/2002			3/23/2001			3/16/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 11				<	0.48	U	<	0.23	U	<	0.21	U	<	0.48	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 11				<	0.48	U	<	0.23	U	<	0.21	U	<	0.32	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 11				<	0.48	U	<	0.23	U	<	0.21	U	<	0.40	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 11				<	0.48	U	<	0.44	U	<	0.41	U	<	0.32	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 11	Abandoned 2005			<	0.48	U	<	0.44	U	<	0.41	U	<	1.2	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 9				<	0.48	U	<	0.44	U	<	0.41	U	<	0.50	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.44	U	<	0.41	U	<	0.98	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.44	U	<	0.41	U	<	0.62	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 8				<	0.48	U	<	0.44	U	<	0.41	U	<	0.84	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.71	U	<	0.67	U	<	2.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 10				<	0.48	U	<	0.55	U	<	0.52	U	<	1.4	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.48	U	<	0.23	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 11				<	0.48	U	<	0.23	U	<	0.21	U	<	0.56	U	<	0.8	U	<	0.8	U
RDX	0.68	1 / 11				<	0.48	U	<	0.23	U	<	0.21	U	<	0.80	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 8				<	0.48	U	<	0.44	U	<	0.41	U	<	1.3	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0030-EXPLOSIVES

FIELD ID			G0030			G0030			G0030			G0030			G0030		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW32			UW01			6N		
COLLECT DATE	Detection	Frequency	3/26/1999			6/24/1998			8/23/1992			11/8/1988			1/6/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 11	<	0.8	U	<	1.00	U	<	0.449	U	<	0.56	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 11	<	0.8	U	<	0.500	U	<	0.611	U	<	0.61	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 11	<	0.8	U	<	1.00	U	<	0.635	U	<	0.78	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 11	<	0.8	U	<	0.500	U	<	0.064	U	<	0.6	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 11	<	0.8	U	<	0.500	U	<	0.074	U	<	0.55	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.158	U		NA			NA	
2-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA	
HMX	-	0 / 10	<	0.8	U	<	0.500	U	<	1.21	U	<	1.3	U		NA	
MNX	-	0 / 2		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 11	<	0.8	U	<	0.500	U	<	0.645	U	<	1.13	U	<	2.1	U
RDX	0.68	1 / 11	<	0.8	U	<	1.00	U	<	1.17	U	0.68	NRL		<	9.6	U
Tetryl	-	0 / 8	<	0.8	U	<	0.500	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0031-EXPLOSIVES

FIELD ID			G0031			G0031			G0031			G0031			G0031			G0031			G0031		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/22/2005			3/16/2004			3/25/2003			3/20/2002			3/26/2001			3/16/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 10				<	0.48	U	<	0.18	U	<	0.27	U	<	0.27	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 10				<	0.48	U	<	0.18	U	<	0.27	U	<	0.18	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 10				<	0.48	U	<	0.18	U	<	0.27	U	<	0.22	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 10				<	0.48	U	<	0.35	U	<	0.53	U	<	0.18	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 10	Abandoned 2005			<	0.48	U	<	0.35	U	<	0.53	U	<	0.69	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 9				<	0.48	U	<	0.35	U	<	0.53	U	<	0.28	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.35	U	<	0.53	U	<	0.55	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.35	U	<	0.53	U	<	0.35	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 8				<	0.48	U	<	0.35	U	<	0.53	U	<	0.47	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.57	U	<	0.85	U	<	1.1	U	<	0.8	U	<	1.1	U
HMX	-	0 / 9				<	0.48	U	<	0.44	U	<	0.66	U	<	0.76	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.48	U	<	0.18	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 10				<	0.48	U	<	0.18	U	<	0.27	U	<	0.31	U	<	0.8	U	<	0.8	U
RDX	-	0 / 10				<	0.48	U	<	0.18	U	<	0.27	U	<	0.45	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 8				<	0.48	U	<	0.35	U	<	0.53	U	<	0.74	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0031-EXPLOSIVES

FIELD ID	G0031					G0031			G0031			G0031		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW32			6N		
COLLECT DATE	Detection	Frequency	3/26/1999			6/25/1998			8/23/1992			1/6/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.449	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.611	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.635	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.064	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.074	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
3-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
4-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
HMX	-	0 / 9	<	0.8	U	<	0.500	U	<	1.21	U		NA	
MNX	-	0 / 2		NA			NA			NA			NA	
Nitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.645	U	<	2.1	U
RDX	-	0 / 10	<	0.8	U	<	1.00	U	<	1.17	U	<	9.6	U
Tetryl	-	0 / 8	<	0.8	U	<	0.500	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0032/74-EXPLOSIVES

FIELD ID			G0032			G0032			G0032			G0032			G0032/74			G0032/74			G0032/74		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			None			3/13/2007			3/27/2006			3/22/2005			3/16/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 15	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.25	U
1,3-Dinitrobenzene	-	0 / 15	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.25	U
2,4,6-Trinitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.25	U
2,4-Dinitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.50	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.77	U
HMX	-	0 / 15	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.6	U
MNX	-	0 / 6	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.25	U
Nitrobenzene	-	0 / 15	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.25	U
RDX	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.25	U
Tetryl	-	0 / 12	<	1.6	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0032/74-EXPLOSIVES

FIELD ID			G0032			G0032			G0032			G0032			G0032			G0032			G0032		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW32		
COLLECT DATE	Detection	Frequency	3/20/2003			3/21/2002			3/30/2001			3/13/2000			3/26/1999			6/11/1998			10/5/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 15	<	0.18	U	<	0.34	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 15	<	0.18	U	<	0.22	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 15	<	0.18	U	<	0.28	U	<	0.8	U	<	1.5	U	<	0.8	U	<	0.500	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 15	<	0.36	U	<	0.22	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 15	<	0.36	U	<	0.87	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.36	U	<	0.35	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.158	U
2-Nitrotoluene	-	0 / 12	<	0.36	U	<	0.69	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
3-Nitrotoluene	-	0 / 12	<	0.36	U	<	0.43	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.36	U	<	0.59	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA	
4-Nitrotoluene	-	0 / 12	<	0.58	U	<	1.4	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
HMX	-	0 / 15	<	0.45	U	<	0.95	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	1.21	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 15	<	0.18	U	<	0.39	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.645	U
RDX	-	0 / 16	<	0.18	U	<	0.56	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	1.17	U
Tetryl	-	0 / 12	<	0.36	U	<	0.92	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0032/74-EXPLOSIVES

FIELD ID			G0032			G0032			G0032		
METHOD	Maximum	Detection	UW32			UW01			6N		
COLLECT DATE	Detection	Frequency	8/18/1992			11/8/1988			1/8/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 15	<	0.449	U		NA		<	1.9	U
1,3-Dinitrobenzene	-	0 / 15	<	0.611	U		NA		<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 15	<	0.635	U		NA		<	1.2	U
2,4-Dinitrotoluene	-	0 / 15	<	0.064	U		NA		<	0.9	U
2,6-Dinitrotoluene	-	0 / 15	<	0.074	U		NA		<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.158	U		NA			NA	
2-Nitrotoluene	-	0 / 12		NA			NA			NA	
3-Nitrotoluene	-	0 / 12		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12		NA			NA			NA	
4-Nitrotoluene	-	0 / 12		NA			NA			NA	
HMX	-	0 / 15	<	1.21	U	<	1.3	U		NA	
MXN	-	0 / 6		NA			NA			NA	
Nitrobenzene	-	0 / 15	<	0.645	U		NA		<	2.1	U
RDX	-	0 / 16	<	1.17	U	<	0.63	U	<	9.6	U
Tetryl	-	0 / 12		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MXN = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0033-EXPLOSIVES

FIELD ID			G0033			G0033			G0033			G0033			G0033			G0033			G0033		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			None			3/15/2007			3/27/2006			3/22/2005			3/16/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
1,3-Dinitrobenzene	-	0 / 17	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
2,4-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
2,6-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.75	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.58	U
MNX	-	0 / 6	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
Nitrobenzene	-	0 / 17	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
RDX	-	0 / 17	<	0.8	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.24	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U				<	0.51	U	<	0.48	U	<	0.48	U	<	0.46	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0033-EXPLOSIVES

FIELD ID			G0033			G0033			G0033			G0033			G0033			G0033			G0033		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/20/2003			3/20/2002			3/30/2001			3/14/2000			3/26/1999			6/11/1998			7/11/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.22	U	<	0.59	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 17	<	0.22	U	<	0.39	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.22	U	<	0.64	U	<	0.8	U	<	1.5	U	<	0.8	U	<	0.500	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 17	<	0.42	U	<	0.39	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 17	<	0.42	U	<	1.5	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.42	U	<	0.62	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U
2-Nitrotoluene	-	0 / 12	<	0.42	U	<	1.2	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
3-Nitrotoluene	-	0 / 12	<	0.42	U	<	0.76	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.42	U	<	1.0	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA	
4-Nitrotoluene	-	0 / 12	<	0.68	U	<	2.5	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
HMX	-	0 / 16	<	0.53	U	<	1.7	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.22	U	<	0.69	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U
RDX	-	0 / 17	<	0.22	U	<	0.99	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U
Tetryl	-	0 / 14	<	0.42	U	<	1.6	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0033-EXPLOSIVES

FIELD ID			G0033			G0033			G0033			G0033		
METHOD	Maximum	Detection	UW33			UW32			UW32			6N		
COLLECT DATE	Detection	Frequency	6/7/1994			10/6/1992			8/17/1992			1/8/1982		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 17	<	0.425	U	<	0.449	U	<	0.449	U	<	1.9	U
1,3-Dinitrobenzene	-	0 / 17	<	0.549	U	<	0.611	U	<	0.611	U	<	2.2	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.451	U	<	0.635	U	<	0.635	U	<	1.2	U
2,4-Dinitrotoluene	-	0 / 17	<	0.26	U	<	0.064	U	<	0.064	U	<	0.9	U
2,6-Dinitrotoluene	-	0 / 17	<	0.26	U	<	0.074	U	<	0.074	U	<	0.68	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.244	U	<	0.158	U	<	0.158	U		NA	
2-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 12		NA			NA			NA			NA	
HMX	-	0 / 16	<	0.563	U	<	1.21	U	<	1.21	U		NA	
MNX	-	0 / 6		NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.817	U	<	0.645	U	<	0.645	U	<	2.1	U
RDX	-	0 / 17	<	0.412	U	<	1.17	U	<	1.17	U	<	9.6	U
Tetryl	-	0 / 14	<	1.18	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0042-EXPLOSIVES

FIELD ID	G0042					G0042			G0042			G0042			G0042			G0042			G0042		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2013			None			3/13/2008			3/13/2007			3/29/2006			3/18/2005			3/23/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.3	U
1,3-Dinitrobenzene	0.74	2 / 17	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.3	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.3	U
2,4-Dinitrotoluene	-	0 / 17	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.58	U
2,6-Dinitrotoluene	-	0 / 17	<	0.8	U	Not Sampled			<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.58	U
2-Amino-4,6-dinitrotoluene	2.4	14 / 17	0.86	0.8	J	in 2009, 2010, 2011, 2012			0.76	0.48		1.6	0.48		1.6	0.48		1.8	0.48	P	2.4	0.58	
2-Nitrotoluene	-	0 / 13	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.58	U
3-Nitrotoluene	-	0 / 13	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.58	U
4-Amino-2,6-dinitrotoluene	2.8	13 / 13	0.95	1.4	J				1	0.48		1.5	0.48		2.1	0.48		2.4	0.48		2.4	0.58	
4-Nitrotoluene	-	0 / 13	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.93	U
HMX	-	0 / 17	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.73	U
MNX	-	0 / 6	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.3	U
Nitrobenzene	-	0 / 17	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.3	U
RDX	-	0 / 17	<	0.8	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.3	U
Tetryl	-	0 / 15	<	1.6	U				<	0.48	U	<	0.48	U	<	0.48	U	<	0.48	U	<	0.58	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0042-EXPLOSIVES

FIELD ID			G0042			G0042			G0042			G0042			G0042			G0042			G0042		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW51		
COLLECT DATE	Detection	Frequency	3/20/2003			3/21/2002			3/28/2001			3/17/2000			3/30/1999			6/24/1998			10/4/1997		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.19	U	<	0.40	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.125	U
1,3-Dinitrobenzene	0.74	2 / 17	<	0.19	U	<	0.27	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.989	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.19	U	<	0.33	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.29	U
2,4-Dinitrotoluene	-	0 / 17	<	0.37	U	<	0.27	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.233	U
2,6-Dinitrotoluene	-	0 / 17	<	0.37	U	<	1.0	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.2	U
2-Amino-4,6-dinitrotoluene	2.4	14 / 17	1.9	0.37		1.2	0.42		0.84	0.8		0.92	1	J	0.766	0.8	J	<	0.500	U	0.832	0.173	
2-Nitrotoluene	-	0 / 13	<	0.37	U	<	0.82	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.319	U
3-Nitrotoluene	-	0 / 13	<	0.37	U	<	0.52	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.514	U
4-Amino-2,6-dinitrotoluene	2.8	13 / 13	2.8	0.37		2.8	0.70		1.5	0.8		1.2	1		1.38	0.8		1.03	1.00	J*	1.26	0.309	
4-Nitrotoluene	-	0 / 13	<	0.6	U	<	1.7	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.368	U
HMX	-	0 / 17	<	0.47	U	<	1.1	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.16	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.19	U	<	0.47	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.231	U
RDX	-	0 / 17	<	0.19	U	<	0.67	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.558	U
Tetryl	-	0 / 15	<	0.37	U	<	1.1	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	0.253	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0042-EXPLOSIVES

FIELD ID			G0042			G0042			G0042			G0042		
METHOD	Maximum	Detection	UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	7/15/1994			6/21/1994			8/24/1992			3/19/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 17	<	0.425	U	<	0.425	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	0.74	2 / 17	0.7	NRL		0.74	NRL		<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.451	U	<	0.451	U	<	0.635	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 17	<	0.26	U	<	0.26	U	<	0.064	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 17	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	2.4	14 / 17	<	0.69	U	0.59	NRL		0.864	NRL		<	0.5	U
2-Nitrotoluene	-	0 / 13		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 13		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	2.8	13 / 13		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 13		NA			NA			NA			NA	
HMX	-	0 / 17	<	0.563	U	<	0.563	U	<	1.21	U	<	0.563	U
MNX	-	0 / 6		NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	-	0 / 17	<	0.412	U	<	0.412	U	<	1.17	U	<	0.412	U
Tetryl	-	0 / 15	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0043-EXPLOSIVES

FIELD ID			G0043			G0043			G0043			G0043			G0043			G0043			G0043		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/13/2007			3/28/2006			3/18/2005			3/23/2004			3/20/2003			3/22/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.24	U
1,3-Dinitrobenzene	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.16	U
2,4,6-Trinitrotoluene	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.20	U
2,4-Dinitrotoluene	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.43	U	<	0.31	U	<	0.16	U
2,6-Dinitrotoluene	-	0 / 14	Abandoned 2009			<	0.49	U	<	0.48	U	<	0.48	U	<	0.43	U	<	0.31	U	<	0.62	U
2-Amino-4,6-dinitrotoluene	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.43	U	<	0.31	U	<	0.25	U
2-Nitrotoluene	-	0 / 10				<	0.49	U	<	0.48	U	<	0.48	U	<	0.43	U	<	0.31	U	<	0.49	U
3-Nitrotoluene	-	0 / 10				<	0.49	U	<	0.48	U	<	0.48	U	<	0.43	U	<	0.31	U	<	0.31	U
4-Amino-2,6-dinitrotoluene	-	0 / 10				<	0.49	U	<	0.48	U	<	0.48	U	<	0.43	U	<	0.31	U	<	0.42	U
4-Nitrotoluene	-	0 / 10				<	0.49	U	<	0.48	U	<	0.48	U	<	0.69	U	<	0.5	U	<	1.0	U
HMX	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.39	U	<	0.68	U
MNX	-	0 / 4				<	0.49	U	<	0.48	U	<	0.48	U	<	0.22	U		NA			NA	
Nitrobenzene	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.28	U
RDX	-	0 / 14				<	0.49	U	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.40	U
Tetryl	-	0 / 12				<	0.49	U	<	0.48	U	<	0.48	U	<	0.43	U	<	0.31	U	<	0.66	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0043-EXPLOSIVES

FIELD ID			G0043			G0043			G0043			G0043			G0043			G0043			G0043		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/28/2001			3/17/2000			3/30/1999			6/24/1998			7/15/1994			6/21/1994			8/26/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 10	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
HMX	-	0 / 14	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 4		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 12	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0043-EXPLOSIVES

FIELD ID				G0043	
METHOD	Maximum	Detection		UW33	
COLLECT DATE	Detection	Frequency		3/20/1992	
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 14	<	0.425	U
1,3-Dinitrobenzene	-	0 / 14	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.451	U
2,4-Dinitrotoluene	-	0 / 14	<	0.26	U
2,6-Dinitrotoluene	-	0 / 14	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.5	U
2-Nitrotoluene	-	0 / 10		NA	
3-Nitrotoluene	-	0 / 10		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 10		NA	
4-Nitrotoluene	-	0 / 10		NA	
HMX	-	0 / 14	<	0.563	U
MNX	-	0 / 4		NA	
Nitrobenzene	-	0 / 14	<	0.817	U
RDX	-	0 / 14	<	0.412	U
Tetryl	-	0 / 12		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0044-EXPLOSIVES

FIELD ID			G0044			G0044			G0044			G0044			G0044			G0044			G0044		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			3/7/2011			3/2/2010			3/9/2009			3/17/2008			3/13/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,4-Dinitrotoluene	22.1	12 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	0.373	2 / 20	<	0.8	U	<	0.8	U	<	0.8	U	0.076	0.2	J	<	0.48	U	<	0.49	U	<	0.5	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.5	U
HMX	6.1	13 / 20	1.8	0.8	J	0.43	0.8	J	0.15	0.8	J	0.24	0.4	J	<	0.48	U	<	0.49	U	0.95	0.5	
MNX	0.15 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.5	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
RDX	8.8	17 / 20	3.3	0.8	J	1.4	0.8	J	1	0.8		0.35	0.2		<	0.48	U	<	0.49	U	1.1	0.5	
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0044-EXPLOSIVES

FIELD ID			G0044			G0044			G0044			G0044			G0044			G0044			G0044		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/27/2006			3/22/2005			3/23/2004			3/20/2003			3/25/2002			3/30/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.23	U	<	0.2	U	<	0.30	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.23	U	<	0.2	U	<	0.20	UJ	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.23	U	<	0.2	U	<	0.25	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	22.1	12 / 20	<	0.48	U	0.45	0.48	J	0.78	0.44		1.1	0.39		0.51	0.20		0.51	0.8	J	1	1.1	J
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	0.78	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.373	2 / 20	<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	0.31	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	0.61	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	0.52	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.71	U	<	0.62	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	6.1	13 / 20	1.3	0.48	J	5.1	0.48		6.1	0.55		4.1	0.49		1.8	0.85	J	0.86	1	J	0.4	0.8	J
MNX	0.15 J	1 / 10	<	0.48	U	<	0.48	U	0.15	0.23	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.23	U	<	0.2	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	8.8	17 / 20	2	0.48		7.8	0.48		8.8	0.23		6.8	0.2		4.7	0.50	J	3.7	0.8		1.8	0.8	
Tetryl	-	0 / 18	<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	0.82	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0044-EXPLOSIVES

FIELD ID			G0044			G0044			G0044			G0044			G0044			G0044		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/26/1999			6/24/1998			7/13/1994			6/21/1994			8/25/1992			3/17/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	UJ	<	0.425	U	<	0.425	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	UJ	<	0.549	U	<	0.549	U	<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	1.00	UJ	<	0.451	U	<	0.451	U	<	0.635	U	<	0.451	U
2,4-Dinitrotoluene	22.1	12 / 20	1.02	0.8		1.01	0.500	J	5.01	NRL		5.70	NRL		22.1	NRL		14.0	NRL	
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	UJ	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	0.373	2 / 20	<	0.8	U	<	0.500	UJ	<	0.244	U	<	0.244	U	0.373	NRL		<	0.5	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ		NA			NA			NA			NA	
HMX	6.1	13 / 20	0.361	0.8	J	<	0.500	UJ	<	0.563	U	<	0.563	U	<	1.21	U	<	0.563	U
MNX	0.15 J	1 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	UJ	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	8.8	17 / 20	1.14	0.8		<	1.00	UJ	0.86	NRL		0.779	NRL		7.91	NRL		4.87	NRL	
Tetryl	-	0 / 18	<	0.8	U	<	0.500	UJ	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0045-EXPLOSIVES

FIELD ID			G0045			G0045			G0045			G0045			G0045			G0045			G0045		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2013			3/7/2012			3/7/2011			3/3/2010			3/11/2009			3/14/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	0.776	1 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0045-EXPLOSIVES

FIELD ID			G0045			G0045			G0045			G0045			G0045			G0045			G0045		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/17/2005			3/18/2004			3/20/2003			3/26/2002			3/27/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.2	U	<	0.28	U	<	0.28	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.2	U	<	0.28	U	<	0.19	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.2	U	<	0.28	U	<	0.23	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.39	U	<	0.54	U	<	0.19	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.39	U	<	0.54	U	<	0.72	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.39	U	<	0.54	U	<	0.29	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.39	U	<	0.54	U	<	0.57	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.39	U	<	0.54	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.39	U	<	0.54	U	<	0.49	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.62	U	<	0.87	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	0.776	1 / 20	<	0.48	U	<	0.48	U	<	0.49	U	<	0.68	U	<	0.79	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.2	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.2	U	<	0.28	U	<	0.33	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.2	U	<	0.28	U	<	0.47	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.48	U	<	0.39	U	<	0.54	U	<	0.77	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0045-EXPLOSIVES

FIELD ID			G0045			G0045			G0045			G0045			G0045			G0045		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/31/1999			6/26/1998			7/17/1994			6/12/1994			8/19/1992			3/16/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.5	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	0.776	1 / 20	<	0.8	U	<	0.500	U	0.776	NRL		<	0.563		<	1.21		<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	-	0 / 20	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	0.412	U
Tetryl	-	0 / 18	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0046-EXPLOSIVES

FIELD ID			G0046			G0046			G0046			G0046			G0046			G0046			G0046		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013			40,975.00			3/7/2011			3/12/2010			3/9/2009			3/14/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	5.98	2 / 19	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0046-EXPLOSIVES

FIELD ID			G0046			G0046			G0046			G0046			G0046			G0046			G0046		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/28/2006			3/18/2005			3/23/2004			3/19/2003			3/25/2002			3/27/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.31	U	<	0.16	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.31	U	<	0.16	U	<	0.23	UJ	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.31	U	<	0.16	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.6	U	<	0.31	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.6	U	<	0.31	U	<	0.88	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.6	U	<	0.31	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.6	U	<	0.31	U	<	0.69	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.6	U	<	0.31	U	<	0.44	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.6	U	<	0.31	U	<	0.60	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.98	U	<	0.5	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 21	<	0.48	U	<	0.48	U	<	0.76	U	<	0.39	U	<	0.96	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.31	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.31	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
RDX	-	0 / 21	<	0.48	U	<	0.48	U	<	0.31	U	<	0.16	U	<	0.57	U	<	0.8	U	<	0.8	U
Tetryl	5.98	2 / 19	<	0.48	U	<	0.48	U	<	0.6	U	<	0.31	U	<	0.94	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0046-EXPLOSIVES

FIELD ID			G0046			G0046			G0046			G0046			G0046			G0046			G0046		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/30/1999			6/23/1998			10/4/1997			7/17/1994			6/22/1994			8/19/1992			3/20/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	1.00	UJ	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	1.00	UJ	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.368	U		NA			NA			NA			NA	
HMX	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U	<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	-	0 / 21	<	0.8	U	<	1.00	UJ	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	<	0.412	U
Tetryl	5.98	2 / 19	<	0.8	U	<	0.500	UJ	<	0.253	U	5.69	NRL		5.98	NRL			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0047-EXPLOSIVES

FIELD ID			G0047			G0047			G0047			G0047			G0047			G0047			G0047		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/8/2012			3/9/2011			3/16/2010			3/12/2009			3/19/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	UJ	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	0.19	1 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 19	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0047-EXPLOSIVES

FIELD ID			G0047			G0047			G0047			G0047			G0047			G0047			G0047		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/16/2005			3/18/2004			3/19/2003			3/22/2002			3/26/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.16	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	0.19	1 / 21	<	0.48	U	<	0.48	U	<	0.17	U	0.19	0.16		<	0.20	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.34	U	<	0.31	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.34	U	<	0.31	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.34	U	<	0.31	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.34	U	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.34	U	<	0.31	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.34	U	<	0.31	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.54	U	<	0.5	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 21	<	0.48	U	<	0.48	U	<	0.42	U	<	0.39	U	<	0.68	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.17	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	-	0 / 21	<	0.48	U	<	0.48	U	<	0.17	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 19	<	0.48	U	<	0.48	U	<	0.34	U	<	0.31	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0047-EXPLOSIVES

FIELD ID			G0047			G0047			G0047			G0047			G0047			G0047			G0047		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998			10/4/1997			7/17/1994			6/22/1994			8/19/1992			3/23/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	1.00	UJ	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	0.19	1 / 21	<	0.8	U	<	1.00	UJ	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	UJ	<	0.368	U		NA			NA			NA			NA	
HMX	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U	<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.500	UJ	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	-	0 / 21	<	0.8	U	<	1.00	UJ	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	<	0.412	U
Tetryl	-	0 / 19	<	0.8	U	<	0.500	UJ	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0048-EXPLOSIVES

FIELD ID			G0048			G0048			G0048			G0048			G0048			G0048			G0048		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/13/2012			3/10/2011			3/17/2010			3/18/2009			None			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	160	3 / 14				<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U						
1,3-Dinitrobenzene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
2,4,6-Trinitrotoluene	210	5 / 14				<	0.8	U	<	0.8	U	3.4	0.4		<	0.48	U						
2,4-Dinitrotoluene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
2,6-Dinitrotoluene	1.6 J	2 / 14	No 2013 Sample Well Dry			<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	No 2008 Sample Well Dry			No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	5.3	10 / 14				<	0.8	U	<	0.8	U	2.3	0.2		<	0.48	U						
2-Nitrotoluene	-	0 / 10				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
3-Nitrotoluene	-	0 / 10				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
4-Amino-2,6-dinitrotoluene	3.5 J	5 / 10				<	1.4	U	<	0.8	U	3.3	0.2		<	0.48	U						
4-Nitrotoluene	-	0 / 10				<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U						
HMX	6.79	13 / 14				1.3	0.8	J	1.5	0.8		4.3	0.4		0.71	0.48							
MNX	0.63 J	2 / 4				<	0.8	U	0.63	0.8	J	0.45	2	J	<	0.48	U						
Nitrobenzene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
RDX	22	14 / 14				2.4	0.8	J	4.3	0.8		19	0.2		2.3	0.48							
Tetryl	-	0 / 12				<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U						

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0048-EXPLOSIVES

FIELD ID			G0048			G0048			G0048			G0048			G0048			G0048			G0048		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			None			3/22/2002			3/23/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	160	3 / 14													<	0.35	U	160	16		<	0.8	U
1,3-Dinitrobenzene	-	0 / 14													<	0.23	U	<	4	U	<	0.8	U
2,4,6-Trinitrotoluene	210	5 / 14													<	0.29	U	210	16		<	1.5	U
2,4-Dinitrotoluene	-	0 / 14													<	0.23	U	<	4	U	<	1.1	U
2,6-Dinitrotoluene	1.6 J	2 / 14	No 2006 Sample			No 2005 Sample			No 2004 Sample			No 2003 Sample			<	0.90	U	1.6	4	J	<	1.1	U
2-Amino-4,6-dinitrotoluene	5.3	10 / 14	Well Dry			Well Dry			Well Dry			Well Dry			1.4	0.36		5.3	4		1.2	1	
2-Nitrotoluene	-	0 / 10													<	0.71	U	<	4	U	<	1.1	U
3-Nitrotoluene	-	0 / 10													<	0.45	U	<	4	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	3.5 J	5 / 10													1.6	0.61		3.5	4	J	0.95	1	J
4-Nitrotoluene	-	0 / 10													<	1.5	U	<	4	U	<	1.1	U
HMX	6.79	13 / 14													2.6	0.99		3.3	5	J	3.2	0.8	
MNX	0.63 J	2 / 4														NA			NA			NA	
Nitrobenzene	-	0 / 14													<	0.41	U	<	4	U	<	0.8	U
RDX	22	14 / 14													14	5.8		11	4		6.8	0.8	
Tetryl	-	0 / 12													<	0.96	U	<	4	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0048-EXPLOSIVES

FIELD ID			G0048			G0048			G0048			G0048			G0048			G0048			G0048		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	4/2/1999			6/18/1998			10/3/1997			7/16/1994			6/23/1994			9/1/1992			3/23/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	160	3 / 14	<	0.8	U	<	1.00	U	<	0.125	U	<	0.425	U	1.58	NRL		<	0.449	U	0.77	NRL	
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	210	5 / 14	<	0.8	U	<	1.00	U	<	0.29	U	1.65	NRL		1.58	NRL		<	0.635	U	24.0	NRL	
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.26	U
2,6-Dinitrotoluene	1.6 J	2 / 14	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	5.3	10 / 14	0.41	0.8	J	<	0.500	U	0.548	0.173		0.56	NRL		0.56	NRL		0.287	NRL		<	0.5	U
2-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	3.5 J	5 / 10	0.39	0.8	J	<	1.00	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	6.79	13 / 14	4.9	0.8		2.95	0.500		3.15	0.16		1.76	NRL		1.84	NRL		<	1.21	U	6.79	NRL	
MNX	0.63 J	2 / 4		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.817	U
RDX	22	14 / 14	11	0.8		10.2	1.00		12.4	0.558		19.0	NRL		22.0	NRL		4.75	NRL		22.0	NRL	
Tetryl	-	0 / 12	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0049-EXPLOSIVES

FIELD ID			G0049			G0049			G0049			G0049			G0049			G0049			G0049		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/13/2012			3/10/2011			3/18/2010			3/16/2009			3/18/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	6.99	13 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.5	U	0.84	0.54	
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.54	U
2,4,6-Trinitrotoluene	1.9	6 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.54	U
2,4-Dinitrotoluene	0.313	2 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.54	U
2,6-Dinitrotoluene	0.35 J	1 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.54	U
2-Amino-4,6-dinitrotoluene	9.72	14 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	1.5	0.54	
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.54	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.54	U
4-Amino-2,6-dinitrotoluene	0.57 J	4 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.54	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.5	U	<	0.54	U
HMX	5.27	2 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.54	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.5	U	<	0.54	U
Nitrobenzene	1.23	1 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.54	U
RDX	0.503	1 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.54	U
Tetryl	-	0 / 19	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.5	U	<	0.54	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0049-EXPLOSIVES

FIELD ID			G0049			G0049			G0049			G0049			G0049			G0049			G0049		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/16/2005			3/18/2004			3/18/2003			3/21/2002			3/23/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	6.99	13 / 21	0.81	0.49		0.46	0.48	J	1.4	0.22		<	0.67	U	2.3	0.30		4.8	0.8		1.7	0.8	
1,3-Dinitrobenzene	-	0 / 21	<	0.49	U	<	0.48	U	<	0.22	U	<	0.67	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	1.9	6 / 21	<	0.49	U	<	0.48	U	0.23	0.22		<	0.67	U	<	0.37	U	<	0.8	U	1.4	1.5	J
2,4-Dinitrotoluene	0.313	2 / 21	<	0.49	U	<	0.48	U	<	0.43	U	<	1.3	U	<	0.20	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	0.35 J	1 / 21	<	0.49	U	<	0.48	U	<	0.43	U	<	1.3	U	<	0.78	U	0.35	0.8	J	<	1.1	U
2-Amino-4,6-dinitrotoluene	9.72	14 / 21	1.3	0.49		1.5	0.48		2	0.43		1.1	1.3	J	2.1	0.31		2	0.8		2.6	1	
2-Nitrotoluene	-	0 / 17	<	0.49	U	<	0.48	U	<	0.43	U	<	1.3	U	<	0.61	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.49	U	<	0.48	U	<	0.43	U	<	1.3	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	0.57 J	4 / 17	<	0.49	U	<	0.48	U	<	0.43	U	<	1.3	U	0.33	0.52	J	0.32	0.8	J	0.57	1	J
4-Nitrotoluene	-	0 / 17	<	0.49	U	<	0.48	U	<	0.69	U	<	2.1	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	5.27	2 / 21	<	0.49	U	0.3	0.48	JP	<	0.54	U	<	1.6	U	<	0.85	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.49	U	<	0.48	U	<	0.22	U		NA			NA			NA			NA	
Nitrobenzene	1.23	1 / 21	<	0.49	U	<	0.48	U	<	0.22	U	<	0.67	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	0.503	1 / 21	<	0.49	U	<	0.48	U	<	0.22	U	<	0.67	U	<	0.50	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 19	<	0.49	U	<	0.48	U	<	0.43	U	<	1.3	U	<	0.82	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0049-EXPLOSIVES

FIELD ID			G0049			G0049			G0049			G0049			G0049			G0049			G0049		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	4/2/1999			6/18/1998			10/3/1997			7/16/1994			6/20/1994			8/24/1992			3/26/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	6.99	13 / 21	<	0.8	U	2.56	1.00		2.30	0.125		3.71	NRL		4.86	NRL		5.67	NRL		6.99	NRL	
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	1.1	U
2,4,6-Trinitrotoluene	1.9	6 / 21	<	0.8	U	<	1.00	U	0.772	0.29		0.882	NRL		1.28	NRL		1.9	NRL		<	1.88	U
2,4-Dinitrotoluene	0.313	2 / 21	<	0.8	U	<	0.500	U	0.313	0.233		<	0.26	U	<	0.26	U	0.118	NRL		<	0.26	U
2,6-Dinitrotoluene	0.35 J	1 / 21	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	9.72	14 / 21	9.72	0.8		1.56	0.500		0.963	0.173		1.06	NRL		1.23	NRL		0.722	NRL		<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	0.57 J	4 / 17	<	0.8	U	<	1.00	U	0.345	0.309			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	5.27	2 / 21	<	0.8	U	<	0.500	U	<	0.16	U	5.27	NRL		<	0.563	U	<	1.21	U	<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	1.23	1 / 21	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	1.23	NRL		<	0.817	U
RDX	0.503	1 / 21	<	0.8	U	<	1.00	U	<	0.558	U	0.503	NRL		<	0.412	U	<	1.17	U	<	0.412	U
Tetryl	-	0 / 19	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0052-EXPLOSIVES

FIELD ID			G0052			G0052			G0052			G0052			G0052			G0052			G0052		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/23/2005			3/16/2004			3/25/2003			3/20/2002			3/26/2001			3/16/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 10				<	0.48	U	<	0.23	U	<	0.29	U	<	0.33	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 10				<	0.48	U	<	0.23	U	<	0.29	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 10				<	0.48	U	<	0.23	U	<	0.29	U	<	0.27	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	0.072	1 / 10				<	0.48	U	<	0.44	U	<	0.57	U	<	0.22	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 10	Abandoned 2005			<	0.48	U	<	0.44	U	<	0.57	U	<	0.85	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.25	1 / 10				<	0.48	U	<	0.44	U	<	0.57	U	<	0.34	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.44	U	<	0.57	U	<	0.67	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.44	U	<	0.57	U	<	0.42	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 8				<	0.48	U	<	0.44	U	<	0.57	U	<	0.57	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 8				<	0.48	U	<	0.72	U	<	0.92	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 10				<	0.48	U	<	0.56	U	<	0.72	U	<	0.93	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.48	U	<	0.23	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 10				<	0.48	U	<	0.23	U	<	0.29	U	<	0.38	U	<	0.8	U	<	0.8	U
RDX	-	0 / 10				<	0.48	U	<	0.23	U	<	0.29	U	<	0.55	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 8				<	0.48	U	<	0.44	U	<	0.57	U	<	0.90	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0052-EXPLOSIVES

FIELD ID	G0052					G0052			G0052			G0052		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/26/1999			6/25/1998			8/23/1992			3/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.449	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.611	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.635	U	<	0.451	U
2,4-Dinitrotoluene	0.072	1 / 10	<	0.8	U	<	0.500	U	0.072	NRL		<	0.26	U
2,6-Dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.074	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	0.25	1 / 10	<	0.8	U	<	0.500	U	0.25	NRL		<	0.5	U
2-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
3-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
4-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA	
HMX	-	0 / 10	<	0.8	U	<	0.500	U	<	1.21	U	<	0.563	U
MNX	-	0 / 2		NA			NA			NA			NA	
Nitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.645	U	<	0.817	U
RDX	-	0 / 10	<	0.8	U	<	1.00	U	<	1.17	U	<	0.412	U
Tetryl	-	0 / 8	<	0.8	U	<	0.500	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-33
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0063-EXPLOSIVES

FIELD ID			G0063			G0063			G0063			G0063			G0063			G0063			G0063		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013			3/5/2012			3/7/2011			3/1/2010			3/6/2009			3/12/2008			3/13/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	5.3	4 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	UJ	<	0.48	U	<	0.48	U
MNX	5.2	2 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	27	6 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 15	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-33
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0063-EXPLOSIVES

FIELD ID			G0063			G0063			G0063			G0063			G0063			G0063			G0063		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/29/2006			3/18/2005			3/18/2004			3/24/2003			3/21/2002			3/27/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.22	U	<	0.22	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.22	U	<	0.22	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.22	U	<	0.22	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.43	U	<	0.43	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.43	U	<	0.43	U	<	0.99	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.43	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.43	U	<	0.43	U	<	0.78	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.43	U	<	0.43	U	<	0.50	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.43	U	<	0.43	U	<	0.67	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 15	<	0.48	U	<	0.48	U	<	0.7	U	<	0.7	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	5.3	4 / 17	<	0.48	U	0.82	0.48		5.3	0.55		1.6	0.55		0.46	1.1	J	<	1	U	<	0.8	U
MNX	5.2	2 / 10	<	0.48	U	0.53	0.48		5.2	0.22			NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.22	U	<	0.22	U	<	0.45	U	<	0.8	U	<	0.8	U
RDX	27	6 / 17	2.9	0.48		8.5	0.48		27	2.2		9.6	0.22		3.0	0.64		0.73	0.8	J	<	0.8	U
Tetryl	-	0 / 15	<	0.48	U	<	0.48	U	<	0.43	U	<	0.43	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-33
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0063-EXPLOSIVES

FIELD ID	G0063					G0063			G0063		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51		
COLLECT DATE	Detection	Frequency	3/30/1999			9/2/1992			3/15/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 17	<	0.8	U	<	0.45	U	<	0.43	U
1,3-Dinitrobenzene	-	0 / 17	<	0.8	U	<	0.61	U	<	0.55	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.8	U	<	0.64	U	<	0.45	U
2,4-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.07	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.07	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.16	U		NA	
2-Nitrotoluene	-	0 / 15	<	0.8	U		NA			NA	
3-Nitrotoluene	-	0 / 15	<	0.8	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	0.8	U		NA			NA	
4-Nitrotoluene	-	0 / 15	<	0.8	U		NA			NA	
HMX	5.3	4 / 17	<	0.8	U	<	1.21	U	<	0.56	U
MNX	5.2	2 / 10		NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.8	U	<	0.65	U	<	0.82	U
RDX	27	6 / 17	<	0.8	U	<	1.17	U	<	0.41	U
Tetryl	-	0 / 15	<	0.8	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-34
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0066/G0066R*-EXPLOSIVES

FIELD ID			G0066R			G0066R			G0066R			G0066			G0066			G0066			G0066		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/21/2013			3/15/2012			3/10/2011			3/17/2010			3/12/2009			None			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	390	14 / 15	17.1	0.8	J	<	0.8	UJ	41.2	0.8		0.34	0.99	J	37	0.48							
1,3-Dinitrobenzene	2.31	2 / 15	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U						
2,4,6-Trinitrotoluene	820	14 / 15	24.2	0.8	J	<	0.8	UJ	24.2	0.8		9.1	0.4	J	160	2.5	J	No 2008 Sample Well Dry			No 2007 Sample Well Dry		
2,4-Dinitrotoluene	24	10 / 15	<	0.8	U	<	0.8	UJ	0.57	0.8	J	<	0.4	U	<	0.48	U						
2,6-Dinitrotoluene	5	7 / 15	<	0.8	U	<	0.8	UJ	1.2	0.8		<	0.2	U	0.72	0.48							
2-Amino-4,6-dinitrotoluene	87	15 / 15	13	0.8	J	0.61	0.8	J	26.2	0.8		13	0.2	J	23	0.48							
2-Nitrotoluene	2.5	1 / 11	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U						
3-Nitrotoluene	-	0 / 11	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U						
4-Amino-2,6-dinitrotoluene	55 J	10 / 11	8.4	1.4	J	<	1.4	UJ	28.8	0.8		12	0.2	J	25	0.48							
4-Nitrotoluene	-	0 / 11	<	0.8	U	<	0.8	UJ	<	0.8	U	<	1	U	<	0.48	U						
HMX	79.2	14 / 15	5.6	0.8	J	6.3	0.8	J	1.7	0.8	J	2.8	0.4	J	2.1	0.48							
MNX	0.51	1 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	2	U	0.51	0.48							
Nitrobenzene	19.6	3 / 15	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U						
RDX	103	15 / 15	0.72	0.8	J	2	0.8	J	1.9	0.8		1.3	0.2	J	16	0.48							
Tetryl	0.32 J	1 / 13	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	U	<	0.48	U						

Notes:

*G0066 was abandoned and replaced by G0066R in 2010.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-34
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0066/G0066R*-EXPLOSIVES

FIELD ID			G0066			G0066			G0066			G0066			G0066			G0066			G0066		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			3/19/2003			3/25/2002			3/26/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	390	14 / 15										0.71	0.2	J	83	3.3	J	390	40		83	40	
1,3-Dinitrobenzene	2.31	2 / 15										<	0.2	U	<	0.22	UJ	<	2	U	<	0.8	U
2,4,6-Trinitrotoluene	820	14 / 15	No 2006 Sample			No 2005 Sample			No 2004 Sample			120	20	J	210	28	J	630	40		450	75	
2,4-Dinitrotoluene	24	10 / 15	Well Dry			Well Dry			Well Dry			2.4	0.39	J	3.4	0.22	J	11	2		9.7	1.1	
2,6-Dinitrotoluene	5	7 / 15										1.1	0.39	J	1.8	0.86	J	<	2	U	2.7	1.1	
2-Amino-4,6-dinitrotoluene	87	15 / 15										16	0.39	J	17	0.35	J	22	2		34	50	J
2-Nitrotoluene	2.5	1 / 11										<	0.39	U	<	0.68	U	2.5	2		<	1.1	U
3-Nitrotoluene	-	0 / 11										<	0.39	U	<	0.43	U	<	0.8		<	1.1	U
4-Amino-2,6-dinitrotoluene	55 J	10 / 11										29	3.9	J	29	5.8	J	17	1.6		18	1	JE
4-Nitrotoluene	-	0 / 11										<	0.62	U	<	1.4	U	<	0.8		<	1.1	U
HMX	79.2	14 / 15										5.7	0.49	J	7.1	0.94	J	6.2	2		5.1	0.8	
MNX	0.51	1 / 5											NA			NA			NA			NA	
Nitrobenzene	19.6	3 / 15										<	0.2	U	<	0.39	U	<	2	U	9.4	0.8	
RDX	103	15 / 15										14	2	J	30	5.5	J	18	8		23	40	J
Tetryl	0.32 J	1 / 13										<	0.39	U	0.32	0.91	J	<	8	U	<	1.3	U

Notes:

*G0066 was abandoned and replaced by G0066R in 2010.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-34
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0066/G0066R*-EXPLOSIVES

FIELD ID			G0066			G0066			G0066			G0066			G0066			G0066		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW33		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998			7/17/1994			6/20/1994			10/13/1992			8/19/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	390	14 / 15	70.3	4		69.6	1.00	J	130	NRL		130	NRL		190	NRL		180	NRL	
1,3-Dinitrobenzene	2.31	2 / 15	<	4	U	<	0.500	UJ	1.28	NRL		<	11	U	<	0.611	U	2.31	NRL	
2,4,6-Trinitrotoluene	820	14 / 15	257	16		219	50.00	J	400	NRL		420	NRL		750	NRL		820	NRL	
2,4-Dinitrotoluene	24	10 / 15	6.62	4		8.81	0.500	J	10.0	NRL		<	13	U	20.0	NRL		24.0	NRL	
2,6-Dinitrotoluene	5	7 / 15	2.4	4	J	<	0.500	UJ	5.00	NRL		<	5.2	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	87	15 / 15	45.4	4		47.0	0.500	J	69.0	NRL		66.0	NRL		81.0	NRL		87.0	NRL	
2-Nitrotoluene	2.5	1 / 11	<	4	U	<	1.00	UJ		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 11	<	4	U	<	1.00	UJ		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	55 J	10 / 11	46.7	4		55.0	1.00	J		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 11	<	4	U	<	1.00	UJ		NA			NA			NA			NA	
HMX	79.2	14 / 15	3.05	4	J	6.13	0.500	J	<	5.6	U	7.97	NRL		13.0	NRL		79.2	NRL	
MNX	0.51	1 / 5		NA			NA			NA			NA			NA			NA	
Nitrobenzene	19.6	3 / 15	19.6	4		<	0.500	UJ	1.25	NRL		<	41	U	<	0.645	U	<	0.645	U
RDX	103	15 / 15	23.4	4		6.63	1.00	J	55.0	NRL		54.0	NRL		103	NRL		96.4	NRL	
Tetryl	0.32 J	1 / 13	<	4	U	<	0.500	UJ	<	12	U	<	24	U		NA			NA	

Notes:

*G0066 was abandoned and replaced by G0066R in 2010.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-35
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0067-EXPLOSIVES

FIELD ID			G0067			G0067			G0067			G0067			G0067			G0067			G0067		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/12/2012			3/10/2011			3/18/2010			3/19/2009			3/18/2008			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	No 2007 Sample Well Dry		
1,3-Dinitrobenzene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U			
2,4,6-Trinitrotoluene	0.85	1 / 18	<	0.8	U	0.85	0.8		<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U			
2,4-Dinitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U			
2,6-Dinitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U			
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 18	<	0.8	U	0.14	0.8	J	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U			
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U			
3-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U			
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U			
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U			
HMX	0.47 J	1 / 18	<	0.8	U	0.47	0.8	J	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U			
MNX	-	0 / 7	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U			
Nitrobenzene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U			
RDX	3.7	1 / 18	<	0.8	U	3.7	0.8		<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U			
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U			

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-35
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0067-EXPLOSIVES

FIELD ID			G0067			G0067			G0067			G0067			G0067			G0067			G0067		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			3/18/2004			3/18/2003			3/22/2002			3/23/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 18							<	0.18	U	<	0.16	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 18							<	0.18	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	0.85	1 / 18	No 2006 Sample			No 2005 Sample			<	0.18	U	<	0.16	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 18	Well Dry			Well Dry			<	0.35	U	<	0.31	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 18							<	0.35	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 18							<	0.35	U	<	0.31	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 14							<	0.35	U	<	0.31	U	<	0.86	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 14							<	0.35	U	<	0.31	U	<	0.54	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 14							<	0.35	U	<	0.31	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 14							<	0.57	U	<	0.5	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	0.47 J	1 / 18							<	0.44	U	<	0.39	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 7							<	0.18	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 18							<	0.18	U	<	0.16	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	3.7	1 / 18							<	0.18	U	<	0.16	U	<	0.70	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 16							<	0.35	U	<	0.31	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-35
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0067-EXPLOSIVES

FIELD ID			G0067			G0067			G0067			G0067			G0067			G0067			G0067		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	4/2/1999			6/18/1998			10/4/1997			7/16/1994			6/22/1994			10/13/1992			8/24/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 18	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	0.85	1 / 18	<	0.8	U	<	1.00	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 18	<	0.8	U	<	0.500	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 18	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 18	<	0.8	U	<	0.500	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	0.47 J	1 / 18	<	0.8	U	<	0.500	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 7		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 18	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	3.7	1 / 18	<	0.8	U	<	1.00	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-36
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0068-EXPLOSIVES

FIELD ID			G0068			G0068			G0068			G0068			G0068			G0068			G0068		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			None			3/14/2007			3/28/2006			3/22/2005			3/17/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.25	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.25	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.25	U
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.48	U	<	0.48	U	<	0.5	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.48	U
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.48	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.48	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.78	U
HMX	0.68	1 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	0.68	0.6	
MNX	0.14 J	1 / 6	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	0.14	0.25	J
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.25	U
RDX	1.5	3 / 14	<	0.8	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	1.5	0.25	
Tetryl	-	0 / 12	<	1.6	U	<	0.8	U				<	0.48	U	<	0.48	U	<	0.5	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-36
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0068-EXPLOSIVES

FIELD ID			G0068			G0068			G0068			G0068			G0068			G0068			G0068		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW32		
COLLECT DATE	Detection	Frequency	3/21/2003			3/25/2002			3/28/2001			3/17/2000			3/29/1999			6/23/1998			10/12/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.26	U	<	0.29	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ	<	0.449	U
1,3-Dinitrobenzene	-	0 / 14	<	0.26	U	<	0.19	UJ	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.26	U	<	0.24	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	UJ	<	0.635	U
2,4-Dinitrotoluene	-	0 / 14	<	0.5	U	<	0.19	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ	<	0.064	U
2,6-Dinitrotoluene	-	0 / 14	<	0.5	U	<	0.74	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.5	U	<	0.30	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	UJ	<	0.158	U
2-Nitrotoluene	-	0 / 12	<	0.5	U	<	0.59	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ		NA	
3-Nitrotoluene	-	0 / 12	<	0.5	U	<	0.37	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.5	U	<	0.50	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	UJ		NA	
4-Nitrotoluene	-	0 / 12	<	0.81	U	<	1.2	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ		NA	
HMX	0.68	1 / 14	<	0.63	U	<	0.82	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	UJ	<	1.21	U
MNX	0.14 J	1 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.26	U	<	0.34	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ	<	0.645	U
RDX	1.5	3 / 14	0.86	0.26		0.42	0.48	J	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ	<	1.17	U
Tetryl	-	0 / 12	<	0.5	U	<	0.79	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	UJ		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-36
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0068-EXPLOSIVES

FIELD ID				G0068	
METHOD	Maximum	Detection		UW32	
COLLECT DATE	Detection	Frequency		8/23/1992	
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 14	<	0.449	U
1,3-Dinitrobenzene	-	0 / 14	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.635	U
2,4-Dinitrotoluene	-	0 / 14	<	0.064	U
2,6-Dinitrotoluene	-	0 / 14	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.158	U
2-Nitrotoluene	-	0 / 12		NA	
3-Nitrotoluene	-	0 / 12		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12		NA	
4-Nitrotoluene	-	0 / 12		NA	
HMX	0.68	1 / 14	<	1.21	U
MNX	0.14 J	1 / 6		NA	
Nitrobenzene	-	0 / 14	<	0.645	U
RDX	1.5	3 / 14	<	1.17	U
Tetryl	-	0 / 12		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-37
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0070-EXPLOSIVES

FIELD ID			G0070			G0070			G0070			G0070			G0070			G0070			G0070		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/12/2012			3/15/2011			3/15/2010			3/17/2009			3/12/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.49	U
HMX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-37
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0070-EXPLOSIVES

FIELD ID			G0070			G0070			G0070			G0070			G0070			G0070			G0070		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/15/2005			3/17/2004			3/18/2003			3/20/2002			3/22/2001			3/23/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.30	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.25	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.20	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.79	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.32	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.62	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.53	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.5	U	<	0.5	U	<	1.3	U	<	0.8	U	<	1.1	U
HMX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.39	U	<	0.39	U	<	0.86	U	<	1.0	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.51	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.84	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-37
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0070-EXPLOSIVES

FIELD ID			G0070			G0070			G0070			G0070			G0070			G0070		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	4/1/1999			6/29/1998			7/15/1994			6/22/1994			10/13/1992			9/7/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 20	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 20	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 18	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-38
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0075-EXPLOSIVES

FIELD ID			G0075			G0075			G0075			G0075			G0075			G0075			G0075		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/12/2012			3/15/2011			3/15/2010			3/16/2009			3/12/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	5.8	8 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	UJ	<	0.49	U	0.84	0.48	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	12	10 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.49	U	1.3	0.48	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	UJ	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	5.3	11 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.18	0.2	J	<	0.48	UJ	<	0.49	U	3.2	0.48	
2-Nitrotoluene	0.63 J	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	4.2	11 / 16	<	1.4	U	<	1.4	U	<	0.8	U	0.32	0.2		<	0.48	UJ	<	0.49	U	3.9	0.48	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	UJ	<	0.49	U	<	0.48	U
MNX	1.6	4 / 10	<	0.8	J	1.2	0.8	J	1.6	0.8		1.5	0.4		<	0.48	UJ	<	0.49	U	<	0.48	U
HMX	4.6	13 / 16	1.3	0.8	U	<	0.8	U	0.3	0.8	J	<	2	U	<	0.48	UJ	1.1	0.49	J	2.5	0.48	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.49	U	<	0.48	U
RDX	14	15 / 16	0.7	0.8	J	0.57	0.8	J	2.3	0.8		1.8	0.2		<	0.48	UJ	3.1	0.49		11	0.48	
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	UJ	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-38
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0075-EXPLOSIVES

FIELD ID			G0075			G0075			G0075			G0075			G0075			G0075			G0075		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/15/2005			3/17/2004			3/18/2003			3/21/2002			3/22/2001			3/23/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	5.8	8 / 16	<	0.48	U	0.79	0.48		1.3	0.24		<	0.16	U	4.0	0.35		5.8	0.8		4.3	0.8	
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.24	U	<	0.16	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	12	10 / 16	1.4	0.48		1.4	0.48		1.4	0.24		1.2	0.16		2.0	0.20	J	8.5	0.8		12	1.5	
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.91	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	5.3	11 / 16	2	0.48		1.8	0.48	P	2.6	0.46		2.3	0.31		1.7	0.37		2.9	0.8		5.3	1	
2-Nitrotoluene	0.63 J	1 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.72	U	0.63	0.8	J	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.45	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	4.2	11 / 16	3.6	0.48		2.4	0.48		2.5	0.46		2.3	0.31		2.2	0.62		2.2	0.8		4.2	1	
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.75	U	<	0.5	U	<	1.5	U	<	0.8	U	<	1.1	U
MNX	1.6	4 / 10	<	0.48	U	<	0.48	U	0.21	0.24	J		NA			NA			NA			NA	
HMX	4.6	13 / 16	2.1	0.48		2.9	0.48		3.2	0.58		3.3	0.39		2.8	1.0		2.1	1.0		4.6	0.8	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.24	U	<	0.16	U	<	0.41	U	<	0.8	U	<	0.8	U
RDX	14	15 / 16	7.9	0.48		9	0.48		9.2	0.24		8.3	0.8		10	0.59		11	0.8		14	0.8	
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.31	U	<	0.97	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-38
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0075-EXPLOSIVES

FIELD ID			G0075			G0075		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/1/1999			6/29/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	5.8	8 / 16	3.6	0.8		3.68	1.00	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	12	10 / 16	11	0.8		6.33	1.00	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	5.3	11 / 16	4.7	0.8		2.36	0.500	
2-Nitrotoluene	0.63 J	1 / 16	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	4.2	11 / 16	3.4	0.8		2.58	1.00	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
MNX	1.6	4 / 10		NA			NA	
HMX	4.6	13 / 16	3.5	0.8		2.34	0.500	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
RDX	14	15 / 16	14	0.8		8.06	1.00	
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-39
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0076-EXPLOSIVES

FIELD ID			G0076			G0076			G0076			G0076			G0076			G0076			G0076		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/12/2012			3/15/2011			3/15/2010			3/16/2009			3/12/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-39
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0076-EXPLOSIVES

FIELD ID			G0076			G0076			G0076			G0076			G0076			G0076			G0076		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/15/2005			3/17/2004			3/18/2003			3/20/2002			3/22/2001			3/23/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.21	U	<	0.54	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.21	U	<	0.36	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.21	U	<	0.45	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.41	U	<	0.36	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.41	U	<	1.4	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.41	U	<	0.57	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.41	U	<	1.1	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.41	U	<	0.70	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.41	U	<	0.95	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.78	U	<	0.67	U	<	2.3	U	<	0.8	U	<	1.1	U
HMX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.61	U	<	0.52	U	<	1.5	U	<	1.0	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.25	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.21	U	<	0.63	U	<	0.8	U	<	0.8	U
RDX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.21	U	<	0.91	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.41	U	<	1.5	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-39
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0076-EXPLOSIVES

FIELD ID			G0076			G0076		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/1/1999			6/29/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
HMX	-	0 / 16	<	0.8	U	<	0.500	U
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
RDX	-	0 / 16	<	0.8	U	<	1.00	U
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-40
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0077-EXPLOSIVES

FIELD ID			G0077			G0077			G0077			G0077			G0077			G0077			G0077		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/12/2012			3/15/2011			3/16/2010			3/13/2009			3/12/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	250	15 / 16	10.5	0.8	J	11.3	0.8		12.9	0.8		17	1	J	19	0.5		24	0.48		31	0.48	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.5	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	800	16 / 16	7.1	0.8	J	7.3	0.8		9.6	0.8		13	0.4		15	0.5		18	0.48		21	0.48	
2,4-Dinitrotoluene	8.8	6 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.5	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.5	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	61	16 / 16	3.6	0.8	J	3.3	0.8		4.2	0.8		5.6	0.2	J	5.2	0.5		5.4	0.48		6.3	0.48	
2-Nitrotoluene	2.7	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.5	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.5	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	94 J	14 / 16	4.3	1.4	J	3.2	1.4		3.4	0.8		3.5	0.2	J	4.5	0.5		4.3	0.48		3.7	0.48	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.5	U	<	0.48	U	<	0.48	U
HMX	6.5	16 / 16	1.3	0.8	J	1.3	0.8		1.3	0.8		1.4	0.4	J	1.5	0.5		2	0.48		2.9	0.48	
MNX	0.35 J	3 / 10	<	0.8	U	<	0.8	U	<	0.8	U	0.35	2	J	<	0.5	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.5	U	<	0.48	U	<	0.48	U
RDX	55	16 / 16	2.4	0.8	J	3	0.8		3.5	0.8		2.6	0.2	J	4.8	0.5		4.7	0.48		5.7	0.48	
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.5	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-40
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0077-EXPLOSIVES

FIELD ID			G0077			G0077			G0077			G0077			G0077			G0077			G0077		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/15/2005			3/15/2004			3/18/2003			3/20/2002			3/23/2001			3/23/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	250	15 / 16	27	0.49		31	0.48		22	1.9		<	0.21	U	9.5	0.36		23	16.0		140	80	
1,3-Dinitrobenzene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.19	U	<	0.21	U	<	0.24	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	800	16 / 16	23	0.49		27	0.48		45	1.9		55	2.1	J	60	3.0		130	16.0		540	150	
2,4-Dinitrotoluene	8.8	6 / 16	<	0.49	U	<	0.48	U	0.18	0.36	J	<	0.47	UJ	0.28	0.24		0.51	0.8	J	6.5	1.1	
2,6-Dinitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.36	U	<	0.4	U	<	0.94	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	61	16 / 16	5.2	0.49		5.4	0.48	P	7.3	0.36		11	0.4	J	13	0.38		12	16.0	J	52	1	JE
2-Nitrotoluene	2.7	1 / 16	<	0.49	U	<	0.48	U	<	0.36	U	<	0.4	U	<	0.74	U	2.7	0.8		<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.36	U	<	0.4	U	<	0.47	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	94 J	14 / 16	3.8	0.49		3.7	0.48		5.1	0.36		7.5	0.4	J	9.4	0.64		<	0.8	U	94	100	J
4-Nitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.58	U	<	0.64	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	6.5	16 / 16	2.3	0.49		2.4	0.48		3	0.46		3	0.5	J	3.4	1.0		2.5	1.0		6.5	0.8	
MNX	0.35 J	3 / 10	<	0.49	U	0.32	0.48	J	0.26	0.19			NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.19	U	<	0.21	U	<	0.42	U	<	0.8	U	<	0.8	U
RDX	55	16 / 16	7.5	0.49		15	0.48		13	1.9		9.9	0.21	J	12	3.0		14	0.8		40	80	J
Tetryl	-	0 / 16	<	0.49	U	<	0.48	U	<	0.36	U	<	0.4	U	<	1.0	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-40
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0077-EXPLOSIVES

FIELD ID	G0077			G0077				
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/1/1999			6/30/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	250	15 / 16	250	160.0		116	1.00	
1,3-Dinitrobenzene	-	0 / 16	<	4.0	U	<	0.500	U
2,4,6-Trinitrotoluene	800	16 / 16	800	160.0		418	1.00	
2,4-Dinitrotoluene	8.8	6 / 16	8.8	4.0		8.74	0.500	
2,6-Dinitrotoluene	-	0 / 16	<	4.0	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	61	16 / 16	61	4.0		49.5	0.500	
2-Nitrotoluene	2.7	1 / 16	<	4.0	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	4.0	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	94 J	14 / 16	<	4.0	U	14.7	1.00	
4-Nitrotoluene	-	0 / 16	<	4.0	U	<	1.00	U
HMX	6.5	16 / 16	4.6	4.0		4.53	0.500	
MNX	0.35 J	3 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	4.0	U	<	0.500	U
RDX	55	16 / 16	55	4.0		13.9	1.00	
Tetryl	-	0 / 16	<	4.0	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-41
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0078-EXPLOSIVES

FIELD ID			G0078			G0078			G0078			G0078			G0078			G0078			G0078		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/12/2012			3/14/2011			3/16/2010			3/13/2009			3/13/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	1.6	2 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.064	0.2	J	<	0.48	U	<	0.49	U	<	0.48	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	0.5 J	1 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.48	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
RDX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-41
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0078-EXPLOSIVES

FIELD ID			G0078			G0078			G0078			G0078			G0078			G0078			G0078		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/15/2005			3/15/2004			3/18/2003			3/20/2002			3/22/2001			3/23/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.2	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.2	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.2	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.39	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.39	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	1.6	2 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.39	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.39	U	<	0.86	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.39	U	<	0.54	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	0.5 J	1 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.39	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.67	U	<	0.63	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.52	U	<	0.49	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.2	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.2	U	<	0.70	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.39	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-41
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0078-EXPLOSIVES

FIELD ID	G0078			G0078				
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/1/1999			6/30/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	1.6	2 / 16	1.6	0.8		<	0.500	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	0.5 J	1 / 16	0.5	0.8	J	<	1.00	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
HMX	-	0 / 16	<	0.8	U	<	0.500	U
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
RDX	-	0 / 16	<	0.8	U	<	1.00	U
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-42
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0079-EXPLOSIVES

FIELD ID			G0079			G0079			G0079			G0079			G0079			G0079			G0079		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/12/2012			3/15/2011			3/15/2010			3/16/2009			None			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 7				<	0.8	U	<	0.8	U	<	1	U	<	0.48	U						
1,3-Dinitrobenzene	-	0 / 7				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
2,4,6-Trinitrotoluene	-	0 / 7				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
2,4-Dinitrotoluene	-	0 / 7				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
2,6-Dinitrotoluene	-	0 / 7	No 2013 Sample Well Dry			<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	No 2008 Sample Well Dry			No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	0.49 J	2 / 7				<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U						
2-Nitrotoluene	-	0 / 7				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
3-Nitrotoluene	-	0 / 7				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
4-Amino-2,6-dinitrotoluene	1.4	2 / 7				<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U						
4-Nitrotoluene	-	0 / 7				<	0.8	U	<	0.8	U	<	1	U	<	0.48	U						
HMX	2	2 / 7				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
MNX		0 / 4				<	0.8	U	<	0.8	U	<	2	U	<	0.48	U						
Nitrobenzene	-	0 / 7				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U						
RDX	15	3 / 7				<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U						
Tetryl	-	0 / 7				<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U						

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-42
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0079-EXPLOSIVES

FIELD ID			G0079			G0079			G0079			G0079			G0079			G0079			G0079		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			None			3/21/2002			3/22/2001			3/23/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 7													<	0.39	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 7													<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 7													<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 7													<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 7	No 2006 Sample			No 2005 Sample			No 2004 Sample			No 2003 Sample			<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.49 J	2 / 7	Well Dry			Well Dry			Well Dry			Well Dry			0.17	0.41	J	0.49	0.8	J	<	1	U
2-Nitrotoluene	-	0 / 7													<	0.80	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 7													<	0.51	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	1.4	2 / 7													0.23	0.69	J	1.4	0.8		<	1	U
4-Nitrotoluene	-	0 / 7													<	1.6	U	<	0.8	U	<	1.1	U
HMX	2	2 / 7													0.85	1.1	J	2	1.0		<	0.8	U
MNX		0 / 4														NA			NA			NA	
Nitrobenzene	-	0 / 7													<	0.46	U	<	0.8	U	<	0.8	U
RDX	15	3 / 7													1.5	0.65		15	0.8		1.4	0.8	
Tetryl	-	0 / 7													<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-43
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0080-EXPLOSIVES

FIELD ID	G0080			G0080			G0080			G0080			G0080				
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/12/2012			3/15/2011			3/15/2010			3/17/2009		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	1.5	5 / 5	0.86	0.8	J	0.94	0.8		1.3	0.8		1.5	0.2		1.4	0.48	
2-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U
3-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	0.88	2 / 5	<	1.4	U	<	1.4	U	<	0.8	U	0.55	0.2		0.88	0.48	
4-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U
HMX	1.6	5 / 5	1.1	0.8	J	1.1	0.8		1.2	0.8		1.6	0.39		1.4	0.48	
MNX	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U
Nitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U
RDX	2.2	5 / 5	1	0.8	J	1.6	0.8	J	1.9	0.8		1.6	0.2		2.2	0.48	
Tetryl	-	0 / 5	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-44
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0080-EXPLOSIVES

FIELD ID			G0081			G0081			G0081			G0081			G0081		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/12/2012			3/15/2011			3/15/2010			3/17/2009		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	110 J	5 / 5	72.3	0.8	J	72.4	1.6		76.9	0.8		110	10	J	91	2.4	
1,3-Dinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
2,4,6-Trinitrotoluene	43	5 / 5	12.7	0.8	J	16.9	0.8	J	20.7	0.8		36	4	J	43	0.48	
2,4-Dinitrotoluene	0.18 J	1 / 5	<	0.8	U	<	0.8	U	<	0.8	U	0.18	0.4	J	<	0.48	U
2,6-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	3.9	5 / 5	2.8	0.8	J	2.3	0.8		2.1	0.8		3.9	0.2	J	3.9	0.48	
2-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
3-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	2.8	5 / 5	2.5	1.4	J	2.5	1.4		1.7	0.8		2.4	0.2	J	2.8	0.48	
4-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U
HMX	1.8	5 / 5	0.79	0.8	J	0.71	0.8	J	0.61	0.8	J	1.4	0.4	J	1.8	0.48	
MNX	0.35	1 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	0.35	2		<	0.48	U
Nitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
RDX	3.3	5 / 5	0.94	0.8	J	1.2	0.8		1.4	0.8		1.3	0.2	J	3.3	0.48	
Tetryl	-	0 / 5	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-45
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0082-EXPLOSIVES

FIELD ID	G0082					G0082			G0082			G0082			G0082		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/12/2012			3/15/2011			3/15/2010			3/17/2009		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	0.39	2 / 5	0.3	0.8	J	<	0.8	U	0.39	0.8	J	<	1	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
2,4,6-Trinitrotoluene	1.4	5 / 5	0.64	0.8	J	1.1	0.8	J	1.4	0.8		1.1	0.4	J	0.58	0.48	
2,4-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	1.3	5 / 5	1.1	0.8	J	0.94	0.8		1	0.8		1.3	0.2	J	1.3	0.48	
2-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
3-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	2	5 / 5	1.5	1.4	J	1.2	1.4	J	1.4	0.8		1.2	0.2	J	2	0.48	
4-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U
HMX	4	5 / 5	2.4	0.8	J	1.1	0.8		1	0.8		2	0.4	J	4	0.48	
MNX	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	2	U	<	0.48	U
Nitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
RDX	16	5 / 5	7.6	0.8	J	3.3	0.8		3.1	0.8		6	0.2	J	16	0.48	
Tetryl	-	0 / 5	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-46
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0083-EXPLOSIVES

FIELD ID	G0083			G0083			G0083			G0083			G0083				
METHOD	Maximum	Detection	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013	3/13/2012	3/15/2011	3/17/2010	3/18/2009										
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
2,4,6-Trinitrotoluene	0.12 J	1 / 5	<	0.8	U	<	0.8	U	<	0.8	U	0.12	0.4	J	<	0.48	U
2,4-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	0.24	1 / 5	<	0.8	U	<	0.8	U	<	0.8	U	0.24	0.2		<	0.48	U
2-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
3-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	0.098 J	1 / 5	<	1.4	U	<	1.4	U	<	0.8	U	0.098	0.2	J	<	0.48	U
4-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U
MXN	0.66	3 / 5	<	0.8	J	0.41	0.8	J	0.33	0.8	J	0.66	0.4		<	0.48	U
HMX	0.99	2 / 5	0.2	0.8	U	<	0.8	U	<	0.8	U	<	2	U	0.99	0.48	
Nitrobenzene	-	0 / 5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U
RDX	0.91	2 / 5	<	0.8	U	<	0.8	U	<	0.8	U	0.18	0.2	J	0.91	0.48	
Tetryl	-	0 / 5	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-47
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0084-EXPLOSIVES

FIELD ID	G0084					G0084			G0084			G0084			G0084		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/14/2012			3/14/2011			3/17/2010			3/12/2009		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	1	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.2	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	2.7	5 / 5	1.8	0.8	J	1.2	0.8	J	2.4	0.8		2.7	0.2		2.3	0.48	
2-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
3-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	1.9	5 / 5	0.97	1.4	J	0.78	1.4	J	1.3	0.8		1.4	0.2		1.9	0.48	
4-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	1	U	<	0.48	U
HMX	12	5 / 5	8.6	0.8	J	7.8	0.8	J	11.4	0.8		11	0.4		12	0.48	
MNX	0.67 J	5 / 5	0.42	0.8	J	0.25	0.8	J	0.67	0.8	J	0.59	2	J	0.51	0.48	
Nitrobenzene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
RDX	47	5 / 5	24.1	0.8	J	25.7	0.8	J	38.2	0.8		36	0.4		47	0.48	
Tetryl	-	0 / 5	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-48
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0085-EXPLOSIVES

FIELD ID			G0085			G0085			G0085			G0085			G0085		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/21/2013			3/14/2012			3/11/2011			3/17/2010			3/12/2009		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.99	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.2	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	2	5 / 5	1.2	0.8	J	1	0.8	J	0.98	0.8		2	0.2		1.1	0.48	
2-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
3-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	1.1 J	4 / 5	1.1	1.4	J	0.77	1.4	J	<	0.8	U	0.73	0.2		0.93	0.48	
4-Nitrotoluene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.99	U	<	0.48	U
HMX	48	5 / 5	14.2	0.8	J	9.8	0.8	J	5.2	0.8		9	0.4		48	0.48	
MNX	0.69 J	4 / 5	0.69	0.8	J	0.48	0.8	J	0.5	0.8	J	0.64	2	J	<	0.48	U
Nitrobenzene	-	0 / 5	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U
RDX	37	5 / 5	36.4	0.8	J	29.2	0.8	J	9.7	0.8		25	0.2		37	0.48	
Tetryl	-	0 / 5	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-49
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0086-EXPLOSIVES

FIELD ID	G0086					G0086			G0086			G0086		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/13/2012			3/16/2011			3/17/2010		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	21 J	4 / 4	12.8	0.8	J	16.1	0.8		11.8	0.8		21	1	J
1,3-Dinitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,4,6-Trinitrotoluene	10 J	4 / 4	4.2	0.8	J	6.2	0.8		6.6	0.8		10	0.4	J
2,4-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,6-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U
2-Amino-4,6-dinitrotoluene	3.8 J	4 / 4	2.3	0.8	J	2.5	0.8		3	0.8		3.8	0.2	J
2-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
3-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
4-Amino-2,6-dinitrotoluene	2.5	4 / 4	2	1.4	J	2	1.4		2.5	0.8		2.3	0.2	J
4-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U
HMX	3 J	4 / 4	1.9	0.8	J	1.9	0.8		2	0.8		3	0.4	J
MNX	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U
Nitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
RDX	6.3 J	4 / 4	2.5	0.8	J	4	0.8	J	4.6	0.8		6.3	0.2	J
Tetryl	-	0 / 4	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-50
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0087-EXPLOSIVES

FIELD ID	G0087					G0087			G0087			G0087		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/13/2012			3/16/2011			3/17/2010		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U
1,3-Dinitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,4,6-Trinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,4-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,6-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U
2-Amino-4,6-dinitrotoluene	0.71	1 / 4	<	0.8	U	<	0.8	U	<	0.8	U	0.71	0.2	
2-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
3-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
4-Amino-2,6-dinitrotoluene	0.57 J	1 / 4	<	1.4	U	<	1.4	U	<	0.8	U	0.57	0.2	J
4-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U
HMX	1.3	4 / 4	0.76	0.8	J	0.71	0.8	J	0.65	0.8	J	1.3	0.4	
MNX	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U
Nitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
RDX	1.1	2 / 4	<	0.8	U	0.83	0.8	J	<	0.8	U	1.1	0.2	
Tetryl	-	0 / 4	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-51
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0088-EXPLOSIVES

FIELD ID	G0088					G0088			G0088			G0088		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/13/2012			3/14/2011			3/18/2010		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	13.8	4 / 4	10.4	0.8	J	11.5	0.8		13.8	0.8		13	0.99	
1,3-Dinitrobenzene	0.18 J	1 / 4	<	0.8	U	<	0.8	U	<	0.8	U	0.18	0.4	J
2,4,6-Trinitrotoluene	4.1	4 / 4	1.7	0.8	J	1.8	0.8		2.8	0.8		4.1	0.4	
2,4-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,6-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U
2-Amino-4,6-dinitrotoluene	3.5	4 / 4	1.4	0.8	J	1.4	0.8		1.6	0.8		3.5	0.2	
2-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
3-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
4-Amino-2,6-dinitrotoluene	2.3	4 / 4	1.4	1.4	J	1.2	1.4	J	1.5	0.8		2.3	0.2	
4-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U
HMX	3.7	4 / 4	1	0.8	J	1	0.8		1.8	0.8		3.7	0.4	
MNX	0.43 J	1 / 4	<	0.8	U	<	0.8	U	<	0.8	U	0.43	2	J
Nitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
RDX	7	4 / 4	1.3	0.8	J	1.5	0.8	J	3.1	0.8		7	0.2	
Tetryl	-	0 / 4	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-52
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0089-EXPLOSIVES

FIELD ID	G0089					G0089			G0089			G0089		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/13/2012			3/14/2011			3/19/2010		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	42 J	4 / 4	29	0.8	J	29.7	0.8		40.1	0.8		42	2	J
1,3-Dinitrobenzene	0.2 J	1 / 4	<	0.8	U	<	0.8	U	<	0.8	U	0.2	0.4	J
2,4,6-Trinitrotoluene	30 J	4 / 4	18.2	0.8	J	17.9	0.8	J	25.8	0.8		30	0.79	J
2,4-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,6-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U
2-Amino-4,6-dinitrotoluene	3.3	4 / 4	3.1	0.8	J	2.4	0.8		3	0.8		3.3	0.2	
2-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
3-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
4-Amino-2,6-dinitrotoluene	4.6 J	4 / 4	4.6	1.4	J	3.3	1.4		3	0.8		3.4	0.2	
4-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U
HMX	2	4 / 4	0.93	0.8	J	1.3	0.8	J	1.5	0.8		2	0.4	
MNX	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U
Nitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
RDX	3	4 / 4	1.4	0.8	J	2.6	0.8	J	3	0.8		2.7	0.2	
Tetryl	-	0 / 4	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-53
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0090-EXPLOSIVES

FIELD ID	G0090					G0090			G0090			G0090		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/13/2012			3/14/2011			3/19/2010		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	2.7	4 / 4	2	0.8	J	1.2	0.8		2.7	0.8		1.1	1	
1,3-Dinitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,4,6-Trinitrotoluene	3	4 / 4	2.4	0.8	J	1.4	0.8		3	0.8		1.8	0.4	
2,4-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
2,6-Dinitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U
2-Amino-4,6-dinitrotoluene	0.8 J	4 / 4	0.8	0.8	J	0.35	0.8	J	0.67	0.8	J	0.78	0.2	
2-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
3-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
4-Amino-2,6-dinitrotoluene	0.92 J	2 / 4	0.92	1.4	J	<	1.4	U	<	0.8	U	0.63	0.2	
4-Nitrotoluene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U
HMX	2.9	4 / 4	2.9	0.8	J	1	0.8		1.4	0.8		2.9	0.4	
MNX	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U
Nitrobenzene	-	0 / 4	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U
RDX	12.1 J	4 / 4	12.1	0.8	J	5.4	0.8		6	0.8		8.9	0.2	
Tetryl	-	0 / 4	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-54
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0091-EXPLOSIVES

FIELD ID	G0091					G0091			G0091		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/7/2012			3/9/2011		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	0.51 J	3 / 3	0.38	0.8	J	0.4	0.8	J	0.51	0.8	J
2,4-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,6-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	0.55 J	3 / 3	0.55	0.8	J	0.51	0.8	J	0.52	0.8	J
2-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
3-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 3	<	1.4	U	<	1.4	U	<	0.8	U
4-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
HMX	1.1	3 / 3	0.7	0.8	J	0.97	0.8		1.1	0.8	
MNX	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
Nitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
RDX	2.8	3 / 3	1.5	0.8	J	2.5	0.8	J	2.8	0.8	
Tetryl	-	0 / 3	<	1.6	U	<	0.8	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-55
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0092-EXPLOSIVES

FIELD ID	G0092					G0092			G0092		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/7/2012			3/9/2011		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,4-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,6-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
3-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 3	<	1.4	U	<	1.4	U	<	0.8	U
4-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
HMX	0.19 J	2 / 3	0.19	0.8	J	0.18	0.8	J	<	0.8	U
MNX	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
Nitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
RDX	0.72 J	1 / 3	<	0.8	U	0.72	0.8	J	<	0.8	U
Tetryl	-	0 / 3	<	1.6	U	<	0.8	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-56
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0093-EXPLOSIVES

FIELD ID	G0093					G0093			G0093		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/13/2012			3/14/2011		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	73.6 J	3 / 3	73.6	0.8	J	64.2	0.8		47.1	0.8	
1,3-Dinitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	11.9	3 / 3	11.3	0.8	J	11.9	0.8		6.8	0.8	
2,4-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,6-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	4.7 J	3 / 3	4.7	0.8	J	4.4	0.8		2.2	0.8	
2-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
3-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	7.4 J	3 / 3	7.4	1.4	J	6.2	1.4		2.4	0.8	
4-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
HMX	3.1	3 / 3	2.5	0.8	J	2.5	0.8		3.1	0.8	
MNX	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
Nitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
RDX	8.7	3 / 3	5.2	0.8	J	6.5	0.8		8.7	0.8	
Tetryl	-	0 / 3	<	1.6	U	<	0.8	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-57
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0094-EXPLOSIVES

FIELD ID			G0094			G0094			G0094		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/11/2011			3/11/2011		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	15.1	1 / 3	<	0.8	U	<	0.8	U	15.1	0.8	
1,3-Dinitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	156	1 / 3	<	0.8	U	<	0.8	U	156	4	
2,4-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2,6-Dinitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	62.2	1 / 3	<	0.8	U	<	0.8	U	62.2	0.8	
2-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
3-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	73.7	1 / 3	<	1.4	U	<	1.4	U	73.7	4	
4-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
HMX	3 J	1 / 3	<	0.8	U	<	0.8	U	3	0.8	J
MNX	0.6 J	1 / 3	<	0.8	U	<	0.8	U	0.6	0.8	J
Nitrobenzene	-	0 / 3	<	0.8	U	<	0.8	U	<	0.8	U
RDX	3.1	1 / 3	<	0.8	U	<	0.8	U	3.1	0.8	
Tetryl	-	0 / 3	<	1.6	U	<	0.8	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-58
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0095-EXPLOSIVES

FIELD ID	G0095					G0095			G0095		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/15/2012			3/10/2011		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	673 J	3 / 3	5.2	0.8	J	673	16	J	329	8	
1,3-Dinitrobenzene	-	0 / 3	<	0.8	U	<	0.8	UJ	<	0.8	U
2,4,6-Trinitrotoluene	235 J	3 / 3	5.2	0.8	J	235	16	J	487	8	
2,4-Dinitrotoluene	1.2 J	2 / 3	1.2	0.8	J	<	0.8	UJ	0.61	0.8	J
2,6-Dinitrotoluene	0.82	1 / 3	<	0.8	U	<	0.8	UJ	0.82	0.8	
2-Amino-4,6-dinitrotoluene	69.2 J	3 / 3	8.2	0.8	J	69.2	16	J	34	0.8	
2-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	UJ	<	0.8	U
3-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	UJ	<	0.8	U
4-Amino-2,6-dinitrotoluene	403 J	3 / 3	13.6	1.4	J	403	28.8	J	218	8	
4-Nitrotoluene	-	0 / 3	<	0.8	U	<	0.8	UJ	<	0.8	U
HMX	25.9 J	2 / 3	<	0.8	U	25.9	0.8	J	9	0.8	
MNX	0.95 J	1 / 3	<	0.8	U	<	0.8	UJ	0.95	0.8	J
Nitrobenzene	-	0 / 3	<	0.8	U	<	0.8	UJ	<	0.8	U
RDX	23.9 J	3 / 3	0.7	0.8	J	23.9	16	J	10.3	0.8	
Tetryl	-	0 / 3	<	1.6	U	<	0.8	UJ	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-59
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0096-EXPLOSIVES

FIELD ID	G0096					G0096		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/14/2012		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	60.3 J	2 / 2	17.1	0.8	J	60.3	0.8	J
1,3-Dinitrobenzene	-	0 / 2	<	0.8	U	<	0.8	UJ
2,4,6-Trinitrotoluene	8.1 J	2 / 2	4.7	0.8	J	8.1	0.8	J
2,4-Dinitrotoluene	-	0 / 2	<	0.8	U	<	0.8	UJ
2,6-Dinitrotoluene	-	0 / 2	<	0.8	U	<	0.8	UJ
2-Amino-4,6-dinitrotoluene	2.4 J	2 / 2	1.5	0.8	J	2.4	0.8	J
2-Nitrotoluene	-	0 / 2	<	0.8	U	<	0.8	UJ
3-Nitrotoluene	-	0 / 2	<	0.8	U	<	0.8	UJ
4-Amino-2,6-dinitrotoluene	3.6 J	2 / 2	3	1.4	J	3.6	1.4	J
4-Nitrotoluene	-	0 / 2	<	0.8	U	<	0.8	UJ
HMX	21 J	2 / 2	3	0.8	J	21	0.8	J
MNX	1.4 J	2 / 2	1.3	0.8	J	1.4	0.8	J
Nitrobenzene	-	0 / 2	<	0.8	U	<	0.8	UJ
RDX	78.2 J	2 / 2	13	0.8	J	78.2	0.8	J
Tetryl	-	0 / 2	<	1.6	U	<	0.8	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-60
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0097-EXPLOSIVES

FIELD ID			G0097			G0097		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/14/2012		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	70.8 J	1 / 1	70.8	0.8	J	9.1	0.8	
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	69.7 J	1 / 1	69.7	0.8	J	31.3	0.8	
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	16.1 J	1 / 1	16.1	0.8	J	11	0.8	
2-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	22.9 J	1 / 1	22.9	1.4	J	22.4	1.4	
4-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
HMX	13.8 J	1 / 1	13.8	0.8	J	5.2	0.8	
MNX	4.5 J	1 / 1	4.5	0.8	J	0.64	0.8	J
Nitrobenzene	-	0 / 1	<	0.8	U	<	0.8	U
RDX	26.7	1 / 1	21.4	0.8	J	26.7	0.8	
Tetryl	-	0 / 1	<	1.6	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-61
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0098-EXPLOSIVES

FIELD ID	G0098					G0098		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/14/2012		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	0.97	1 / 1	<	0.8	U	0.97	0.8	
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	25.4	1 / 1	<	0.8	U	25.4	0.8	
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
2,6-Dinitrotoluene	1.6 J	1 / 1	<	0.8	U	1.6	0.8	J
2-Amino-4,6-dinitrotoluene	15.7	1 / 1	1.4	0.8	J	15.7	0.8	
2-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	75.2	1 / 1	2.6	1.4	J	75.2	7.2	
4-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	U
HMX	95.6 J	1 / 1	24.7	0.8	J	95.6	4	J
MNX	14.9	1 / 1	3.7	0.8	J	14.9	0.8	
Nitrobenzene	-	0 / 1	<	0.8	U	<	0.8	U
RDX	302	1 / 1	32.2	0.8	J	302	4	
Tetryl	-	0 / 1	<	1.6	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-62
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0099-EXPLOSIVES

FIELD ID	G0099			G0099				
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/21/2013			3/14/2012		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U	<	0.8	UJ
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U	<	0.8	UJ
2,4,6-Trinitrotoluene	17.6 J	1 / 1	<	0.8	U	17.6	0.8	J
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
2-Amino-4,6-dinitrotoluene	0.78 J	1 / 1	<	0.8	U	0.78	0.8	J
2-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
3-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
4-Amino-2,6-dinitrotoluene	2.1 J	1 / 1	<	1.4	U	2.1	1.4	J
4-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
HMX	27 J	1 / 1	<	0.8	U	27	0.8	J
MNX	-	0 / 1	<	0.8	U	<	0.8	UJ
Nitrobenzene	-	0 / 1	<	0.8	U	<	0.8	UJ
RDX	183 J	1 / 1	2.2	0.8	J	183	8	J
Tetryl	-	0 / 1	<	1.6	U	<	0.8	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-63
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0100-EXPLOSIVES

FIELD ID			G0100			G0100		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/15/2012		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	121 J	1 / 1	65.6	0.8		121	8	J
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U	<	0.8	UJ
2,4,6-Trinitrotoluene	35.9 J	1 / 1	23.6	0.8		35.9	8	J
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
2-Amino-4,6-dinitrotoluene	10.7	1 / 1	10.7	0.8		8.8	0.8	J
2-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
3-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
4-Amino-2,6-dinitrotoluene	18.3 J	1 / 1	12.4	1.4		18.3	1.4	J
4-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
HMX	12.1	1 / 1	12.1	0.8		2.7	0.8	J
MNX	0.5 J	1 / 1	<	0.8	U	0.5	0.8	J
Nitrobenzene	-	0 / 1	<	0.8	U	<	0.8	UJ
RDX	7.2 J	1 / 1	3.2	0.8		7.2	0.8	J
Tetryl	-	0 / 1	<	1.6	U	<	0.8	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-64
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0101-EXPLOSIVES

FIELD ID			G0101			G0101		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/15/2012		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	28 J	1 / 1	1.9	0.8	J	28	0.8	J
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U	<	0.8	UJ
2,4,6-Trinitrotoluene	42.2 J	1 / 1	5.6	0.8	J	42.2	0.8	J
2,4-Dinitrotoluene	0.22 J	1 / 1	<	0.8	U	0.22	0.8	J
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
2-Amino-4,6-dinitrotoluene	15.1 J	1 / 1	7.9	0.8	J	15.1	0.8	J
2-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
3-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
4-Amino-2,6-dinitrotoluene	16.2 J	1 / 1	10.4	1.4	J	16.2	1.4	J
4-Nitrotoluene	-	0 / 1	<	0.8	U	<	0.8	UJ
HMX	9.3 J	1 / 1	<	0.8	U	9.3	0.8	J
MNX	0.28 J	1 / 1	<	0.8	U	0.28	0.8	J
Nitrobenzene	-	0 / 1	<	0.8	U	<	0.8	UJ
RDX	7.6 J	1 / 1	2.4	0.8	J	7.6	0.8	J
Tetryl	-	0 / 1	<	1.6	U	<	0.8	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-65
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0102-EXPLOSIVES

FIELD ID	G0102				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	-	0 / 1	<	0.8	U
MNX	-	0 / 1	<	0.8	U
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	-	0 / 1	<	0.8	U
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-66
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0103-EXPLOSIVES

FIELD ID	G0103				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/21/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	18.3	1 / 1	18.3	0.8	
MNX	-	0 / 1	<	0.8	U
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	1.7	1 / 1	1.7	0.8	
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-67
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0104-EXPLOSIVES

FIELD ID	G0104				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	13.3	1 / 1	13.3	0.8	
MNX	14.1	1 / 1	14.1	0.8	
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	45.9	1 / 1	45.9	0.8	
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-68
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0105-EXPLOSIVES

FIELD ID	G0105				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	0.14 J	1 / 1	0.14	0.8	J
MNX	-	0 / 1	<	0.8	U
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	-	0 / 1	<	0.8	U
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-69
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0106-EXPLOSIVES

FIELD ID	G0106				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	-	0 / 1	<	0.8	U
MNX	-	0 / 1	<	0.8	U
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	-	0 / 1	<	0.8	U
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-70
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0107-EXPLOSIVES

FIELD ID	G0107				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	-	0 / 1	<	0.8	U
MNX	-	0 / 1	<	0.8	U
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	-	0 / 1	<	0.8	U
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-71
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0108-EXPLOSIVES

FIELD ID			G0108		
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	25.2 J	1 / 1	25.2	0.8	J
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	182 J	1 / 1	182	4	J
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	20.8 J	1 / 1	20.8	0.8	J
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	47.6 J	1 / 1	47.6	1.4	J
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	4.8 J	1 / 1	4.8	0.8	J
MNX	-	1 / 1	2	0.8	J
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	35.9 J	1 / 1	35.9	0.8	J
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-72
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0109-EXPLOSIVES

FIELD ID	G0109				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/21/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	-	0 / 1	<	0.8	U
MNX	-	0 / 1	<	0.8	U
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	1.9	1 / 1	1.9	0.8	
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-73
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0110-EXPLOSIVES

FIELD ID	G0110				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	2.6 J	1 / 1	2.6	0.8	J
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	1.4	1 / 1	1.4	0.8	
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	2.2	1 / 1	2.2	0.8	
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	2.8	1 / 1	2.8	1.4	
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	17.7	1 / 1	17.7	0.8	
MNX	5.1 J	1 / 1	5.1	0.8	J
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	69.6	1 / 1	69.6	0.8	
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.1-74
CORNHUSKER ARMY AMMUNITION PLANT
WELL G0111-EXPLOSIVES

FIELD ID	G0111				
METHOD	Maximum	Detection	SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 1	<	0.8	U
1,3-Dinitrobenzene	-	0 / 1	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 1	<	0.8	U
2,4-Dinitrotoluene	-	0 / 1	<	0.8	U
2,6-Dinitrotoluene	-	0 / 1	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 1	<	0.8	U
2-Nitrotoluene	-	0 / 1	<	0.8	U
3-Nitrotoluene	-	0 / 1	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 1	<	1.4	U
4-Nitrotoluene	-	0 / 1	<	0.8	U
HMX	-	0 / 1	<	0.8	U
MNX	-	0 / 1	<	0.8	U
Nitrobenzene	-	0 / 1	<	0.8	U
RDX	2.0	1 / 1	2	0.8	
Tetryl	-	0 / 1	<	1.6	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

C.1 Explosives**C.1.2 OU1 ON-POST PZ WELLS**

WELL	TABLE
PZ001	C.1.2-1
PZ004	C.1.2-2
PZ005	C.1.2-3
PZ006	C.1.2-4
PZ007	C.1.2-5
PZ008	C.1.2-6
PZ009	C.1.2-7
PZ010	C.1.2-8
PZ011	C.1.2-9
PZ012	C.1.2-10
PZ013	C.1.2-11
PZ014	C.1.2-12
PZ015	C.1.2-13
PZ016	C.1.2-14
PZ017/PZ017R	C.1.2-15
PZ018	C.1.2-16
PZ019	C.1.2-17
PZ020	C.1.2-18

TABLE C.1.2-1
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ001-EXPLOSIVES

FIELD ID			PZ001			PZ001			PZ001			PZ001			PZ001			PZ001			PZ001		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			3/7/2011			3/2/2010			3/9/2009			3/17/2008			3/14/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.49	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4-Dinitrotoluene	0.772 J	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.49	U	<	0.49	U
HMX	0.49 J	7 / 16	0.2	0.8	J	0.28	0.8	J	0.2	0.8	J	0.3	0.4	J	<	0.48	U	<	0.49	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
RDX	1.4	6 / 16	<	0.8	U	0.55	0.8	J	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-1
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ001-EXPLOSIVES

FIELD ID			PZ001			PZ001			PZ001			PZ001			PZ001			PZ001			PZ001		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/27/2006			3/22/2005			3/23/2004			3/20/2003			3/22/2002			3/28/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.28	U	<	0.24	U	<	0.44	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.28	U	<	0.24	U	<	0.29	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.28	U	<	0.24	U	<	0.37	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	0.772 J	1 / 16	<	0.48	U	<	0.48	U	<	0.55	U	<	0.46	U	<	0.29	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.55	U	<	0.46	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.55	U	<	0.46	U	<	0.46	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.55	U	<	0.46	U	<	0.90	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.55	U	<	0.46	U	<	0.57	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.55	U	<	0.46	U	<	0.77	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.88	U	<	0.75	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	0.49 J	7 / 16	<	0.48	U	0.32	0.48	J	0.49	0.69	J	0.4	0.58	J	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.28	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.28	U	<	0.24	U	<	0.51	U	<	0.8	U	<	0.8	U
RDX	1.4	6 / 16	1	0.48		0.64	0.48		1.1	0.28		1.4	0.24		0.79	0.73		<	0.8	U	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.55	U	<	0.46	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-1
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ001-EXPLOSIVES

FIELD ID			PZ001			PZ001		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/29/1999			6/24/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
2,4-Dinitrotoluene	0.772 J	1 / 16	<	0.8	U	0.772	0.500	J
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
HMX	0.49 J	7 / 16	<	0.8	U	<	0.500	UJ
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
RDX	1.4	6 / 16	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 16	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-2
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ004-EXPLOSIVES

FIELD ID			PZ004			PZ004			PZ004			PZ004			PZ004			PZ004			PZ004		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/11/2013			3/5/2012			3/7/2011			3/2/2010			3/9/2009			3/17/2008			3/14/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.5	U	<	0.51	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.51	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.51	U
2,4-Dinitrotoluene	0.854 J	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.51	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.51	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.51	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.51	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.51	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.51	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.5	U	<	0.51	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.51	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.5	U	<	0.51	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.5	U	<	0.51	U
RDX	0.45	3 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.5	U	<	0.51	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.5	U	<	0.51	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-2
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ004-EXPLOSIVES

FIELD ID			PZ004			PZ004			PZ004			PZ004			PZ004			PZ004			PZ004		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/27/2006			3/22/2005			3/23/2004			3/20/2003			3/22/2002			3/30/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.30	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.25	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	0.854 J	1 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.42	U	<	0.20	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.42	U	<	0.78	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.42	U	<	0.31	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.42	U	<	0.61	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.42	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.42	U	<	0.52	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.96	U	<	0.68	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.75	U	<	0.53	U	<	0.85	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.31	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	0.45	3 / 16	<	0.48	U	0.3	0.48	J	0.45	0.31		0.32	0.22		<	0.50	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.42	U	<	0.82	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-2
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ004-EXPLOSIVES

FIELD ID			PZ004			PZ004		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/29/1999			6/24/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
2,4-Dinitrotoluene	0.854 J	1 / 16	<	0.8	U	0.854	0.500	J
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
HMX	-	0 / 16	<	0.8	U	<	0.500	UJ
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
RDX	0.45	3 / 16	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 16	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-3
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ005-EXPLOSIVES

FIELD ID			PZ005			PZ005			PZ005			PZ005			PZ005			PZ005			PZ005		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2013			None			3/13/2008			3/13/2007			3/29/2006			3/18/2005			3/23/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.29	U
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.29	U
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.29	U
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.57	U
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	Not Sampled in 2009, 2010, 2011, 2012			<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.57	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.57	U
2-Nitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.57	U
3-Nitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.57	U
4-Amino-2,6-dinitrotoluene	0.78	5 / 12	<	1.4	U				<	0.48	U	0.71	0.49		0.78	0.48		0.39	0.48	J	<	0.57	U
4-Nitrotoluene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.92	U
HMX	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.72	U
MNX	-	0 / 6	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.29	U
Nitrobenzene	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.29	U
RDX	-	0 / 12	<	0.8	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.29	U
Tetryl	-	0 / 12	<	1.6	U				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.57	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-3
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ005-EXPLOSIVES

FIELD ID	PZ005			PZ005			PZ005			PZ005			PZ005			PZ005				
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/21/2003			3/21/2002			3/28/2001			3/17/2000			3/30/1999			6/24/1998		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 12	<	0.21	U	<	0.24	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 12	<	0.21	U	<	0.16	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 12	<	0.21	U	<	0.20	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	UJ
2,4-Dinitrotoluene	-	0 / 12	<	0.4	U	<	0.16	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2,6-Dinitrotoluene	-	0 / 12	<	0.4	U	<	0.62	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.4	U	<	0.25	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 12	<	0.4	U	<	0.49	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 12	<	0.4	U	<	0.31	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	0.78	5 / 12	0.19	0.4	J	0.22	0.42	J	<	0.8	U	<	1	U	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 12	<	0.64	U	<	1.0	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
HMX	-	0 / 12	<	0.5	U	<	0.68	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	UJ
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.21	U	<	0.28	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
RDX	-	0 / 12	<	0.21	U	<	0.40	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 12	<	0.4	U	<	0.66	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-4
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ006-EXPLOSIVES

FIELD ID			PZ006			PZ006			PZ006			PZ006			PZ006			PZ006			PZ006		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/13/2008			3/13/2007			3/29/2006			3/18/2005			3/23/2004			3/20/2003		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.28	U	<	0.21	U
1,3-Dinitrobenzene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.28	U	<	0.21	U
2,4,6-Trinitrotoluene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.28	U	<	0.21	U
2,4-Dinitrotoluene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.41	U
2,6-Dinitrotoluene	-	0 / 11	Abandoned 2009			<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.41	U
2-Amino-4,6-dinitrotoluene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.41	U
2-Nitrotoluene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.41	U
3-Nitrotoluene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.41	U
4-Amino-2,6-dinitrotoluene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.41	U
4-Nitrotoluene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.87	U	<	0.66	U
HMX	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.68	U	<	0.51	U
MNX	-	0 / 5				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.28	U		NA	
Nitrobenzene	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.28	U	<	0.21	U
RDX	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.28	U	<	0.21	U
Tetryl	-	0 / 11				<	0.48	U	<	0.49	U	<	0.48	U	<	0.48	U	<	0.54	U	<	0.41	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-4
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ006-EXPLOSIVES

FIELD ID			PZ006			PZ006			PZ006			PZ006			PZ006		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/21/2002			3/28/2001			3/17/2000			3/30/1999			6/24/1998		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 11	<	0.34	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 11	<	0.23	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 11	<	0.34	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	UJ
2,4-Dinitrotoluene	-	0 / 11	<	0.23	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2,6-Dinitrotoluene	-	0 / 11	<	0.89	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	-	0 / 11	<	0.36	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 11	<	0.70	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 11	<	0.44	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	-	0 / 11	<	0.60	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 11	<	1.4	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
HMX	-	0 / 11	<	0.97	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	UJ
MNX	-	0 / 5		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 11	<	0.40	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
RDX	-	0 / 11	<	0.57	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 11	<	0.95	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-5
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ007-EXPLOSIVES

FIELD ID			PZ007			PZ007			PZ007			PZ007			PZ007			PZ007			PZ007		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013			3/7/2012			3/9/2011			3/12/2010			3/11/2009			3/14/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	0.12 J	2 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	0.23 J	2 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-5
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ007-EXPLOSIVES

FIELD ID			PZ007			PZ007			PZ007			PZ007			PZ007			PZ007			PZ007		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/28/2006			3/17/2005			3/23/2004			3/19/2003			3/26/2002			3/27/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.35	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.29	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.90	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.12 J	2 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	0.12	0.36	J	0.11	0.8	J	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.71	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.45	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	0.23 J	2 / 16	<	0.48	U	<	0.48	U	<	0.41	U	0.16	0.31	J	<	0.61	U	0.23	0.8	J	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.67	U	<	0.5	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.52	U	<	0.39	U	<	0.99	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.41	U	<	0.8	U	<	0.8	U
RDX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.58	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.96	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-5
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ007-EXPLOSIVES

FIELD ID			PZ007			PZ007		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/30/1999			6/23/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	0.12 J	2 / 16	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	0.23 J	2 / 16	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
HMX	-	0 / 16	<	0.8	U	<	0.500	UJ
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
RDX	-	0 / 16	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 16	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-6
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ008-EXPLOSIVES

FIELD ID			PZ008			PZ008			PZ008			PZ008			PZ008			PZ008			PZ008		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/14/2008			3/15/2007			3/28/2006			3/17/2005			3/23/2004			3/19/2003		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.27	U	<	0.29	U
1,3-Dinitrobenzene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.27	U	<	0.29	U
2,4,6-Trinitrotoluene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.27	U	<	0.29	U
2,4-Dinitrotoluene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.52	U	<	0.56	U
2,6-Dinitrotoluene	-	0 / 11	Abandoned 2009			<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.52	U	<	0.56	U
2-Amino-4,6-dinitrotoluene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.52	U	<	0.56	U
2-Nitrotoluene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.52	U	<	0.56	U
3-Nitrotoluene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.52	U	<	0.56	U
4-Amino-2,6-dinitrotoluene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.52	U	<	0.56	U
4-Nitrotoluene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.84	U	<	0.9	U
HMX	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.66	U	<	0.7	U
MNX	-	0 / 5				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.27	U		NA	
Nitrobenzene	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.27	U	<	0.29	U
RDX	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.27	U	<	0.29	U
Tetryl	-	0 / 11				<	0.49	U	<	0.52	U	<	0.48	U	<	0.48	U	<	0.52	U	<	0.56	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-6
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ008-EXPLOSIVES

FIELD ID			PZ008			PZ008			PZ008			PZ008			PZ008		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/25/2002			3/27/2001			3/20/2000			3/30/1999			6/23/1998		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 11	<	0.30	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 11	<	0.20	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 11	<	0.25	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	UJ
2,4-Dinitrotoluene	-	0 / 11	<	0.20	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2,6-Dinitrotoluene	-	0 / 11	<	0.78	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	-	0 / 11	<	0.31	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 11	<	0.61	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 11	<	0.39	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	-	0 / 11	<	0.52	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 11	<	1.2	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	UJ
HMX	-	0 / 11	<	0.85	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	UJ
MNX	-	0 / 5		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 11	<	0.35	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	UJ
RDX	-	0 / 11	<	0.50	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 11	<	0.82	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-7
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ009-EXPLOSIVES

FIELD ID			PZ009			PZ009			PZ009			PZ009			PZ009			PZ009			PZ009		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2013			3/9/2012			3/10/2011			3/16/2010			3/12/2009			3/17/2008			3/16/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	19.6	15 / 16	2.5	0.8	J	1.8	0.8		1.1	0.8		1.4	1		1.4	0.48		1.7	0.49		2.5	0.49	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	19.9	14 / 16	1.1	0.8	J	0.61	0.8	J	<	0.8	U	0.75	0.4		0.96	0.48		0.93	0.49		<	0.49	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	4.15	16 / 16	1.8	0.8	J	1.1	0.8		0.85	0.8		1.3	0.2		1.3	0.48		1.1	0.49		0.63	0.49	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	3.57	13 / 16	1.3	1.4	J	<	1.4	U	<	0.8	U	0.64	0.2		0.84	0.48		0.74	0.49		<	0.49	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.49	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
RDX	1.07	3 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-7
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ009-EXPLOSIVES

FIELD ID			PZ009			PZ009			PZ009			PZ009			PZ009			PZ009			PZ009		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/28/2006			3/16/2005			3/18/2004			3/20/2003			3/25/2002			3/26/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	19.6	15 / 16	3.5	0.48		4.6	0.48		8.1	0.18		<	0.16	U	8.9	1.4	J	14	0.8		14	0.8	
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.18	UJ	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	19.9	14 / 16	1.1	0.48		1.2	0.48		2.1	0.18		4.5	0.16		4.4	0.23	J	9.3	0.8		11	1.5	
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.18	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.71	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	4.15	16 / 16	2.6	0.48		1.6	0.48	P	2.4	0.35		3.3	0.31		2.8	0.29	J	3	0.8		2.1	1	
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.56	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	3.57	13 / 16	1.1	0.48		0.86	0.48		1.2	0.35		1.9	0.31		1.5	0.48	J	1.8	0.8		1.1	1	
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.57	U	<	0.5	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	0.78	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.18	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.32	U	<	0.8	U	<	0.8	U
RDX	1.07	3 / 16	<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.46	U	0.22	0.8	J	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.76	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-7
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ009-EXPLOSIVES

FIELD ID	PZ009			PZ009				
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	19.6	15 / 16	18.3	1.6		19.6	1.00	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	19.9	14 / 16	19.9	1.6		19.4	1.00	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	4.15	16 / 16	3.67	0.8		4.15	0.500	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	3.57	13 / 16	2.33	0.8		3.57	1.00	J*
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
HMX	-	0 / 16	<	0.8	U	<	0.500	U
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
RDX	1.07	3 / 16	0.594	0.8	J	1.07	1.00	
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-8
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ010-EXPLOSIVES

FIELD ID			PZ010			PZ010			PZ010			PZ010			PZ010			PZ010			PZ010		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/9/2012			3/10/2011			3/16/2010			3/12/2009			3/17/2008			3/16/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	91	11 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	28	0.49		40	0.49		35	0.5	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.5	U
2,4,6-Trinitrotoluene	125	12 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	6	0.49		8	0.49		3.2	0.5	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	9.84	13 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.63	0.2	J	1.5	0.49		1.8	0.49		1.4	0.5	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.5	U
3-Nitrotoluene	0.68 J	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.68	0.4	J	<	0.49	U	<	0.49	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	7.9 J	11 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	1.5	0.49		1.4	0.49		0.78	0.5	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.49	U	<	0.5	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.5	U
MNX	21 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	21	2	J	<	0.49	U	<	0.49	U	<	0.5	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.5	U
RDX	1.4	3 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.5	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.49	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.2-8
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ010-EXPLOSIVES**

FIELD ID			PZ010			PZ010			PZ010			PZ010			PZ010			PZ010			PZ010		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/16/2005			3/18/2004			3/19/2003			3/25/2002			3/26/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	91	11 / 16	52	4.9		54	2.4		59	1.9		<	0.21	U	54	1.9	J	74	8		91	16	
1,3-Dinitrobenzene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.19	U	<	0.21	U	<	0.26	UJ	<	1.6	U	<	0.8	U
2,4,6-Trinitrotoluene	125	12 / 16	9.7	0.49		10	0.48		13	1.9		18	2.1	J	19	1.6	J	32	1.6		38	30	
2,4-Dinitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.37	U	<	0.41	U	<	0.26	U	<	1.6	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.37	U	<	0.41	U	<	0.99	U	<	1.6	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	9.84	13 / 16	3.2	0.49		2.4	0.48	P	2.7	0.37		3.9	0.41	J	3.3	0.40	J	3.6	1.6		4.8	1	
2-Nitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.37	U	<	0.41	U	<	0.78	U	<	1.6	U	<	1.1	U
3-Nitrotoluene	0.68 J	1 / 16	<	0.49	U	<	0.48	U	<	0.37	U	<	0.41	U	<	0.50	U	<	1.6	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	7.9 J	11 / 16	2.1	0.49		1.6	0.48		1.5	0.37		3	0.41	J	7.9	0.67	J	1.7	1.6		3	1	
4-Nitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.6	U	<	0.67	U	<	1.6	U	<	1.6	U	<	1.1	U
HMX	-	0 / 16	<	0.49	U	<	0.48	U	<	0.47	U	<	0.52	U	<	1.1	U	<	2	U	<	0.8	U
MNX	21 J	1 / 10	<	0.49	U	<	0.48	U	<	0.19	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.19	U	<	0.21	U	<	0.45	U	<	1.6	U	<	0.8	U
RDX	1.4	3 / 16	<	0.49	U	<	0.48	U	<	0.19	U	0.64	0.21	J	<	0.64	U	0.9	1.6	J	1.4	0.8	
Tetryl	-	0 / 16	<	0.49	U	<	0.48	U	<	0.37	U	<	0.41	U	<	1.1	U	<	1.6	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-8
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ010-EXPLOSIVES

FIELD ID			PZ010			PZ010		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	91	11 / 16	61.8	8		79.6	10.00	
1,3-Dinitrobenzene	-	0 / 16	<	4	U	<	0.500	U
2,4,6-Trinitrotoluene	125	12 / 16	66.6	8		125	10.00	
2,4-Dinitrotoluene	-	0 / 16	<	4	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	4	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	9.84	13 / 16	7.63	4		9.84	0.500	
2-Nitrotoluene	-	0 / 16	<	4	U	<	1.00	U
3-Nitrotoluene	0.68 J	1 / 16	<	4	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	7.9 J	11 / 16	<	4	U	4.74	1.00	
4-Nitrotoluene	-	0 / 16	<	4	U	<	1.00	U
HMX	-	0 / 16	<	4	U	<	0.500	U
MNX	21 J	1 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	4	U	<	0.500	U
RDX	1.4	3 / 16	<	4	U	<	1.00	U
Tetryl	-	0 / 16	<	4	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-9
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ011-EXPLOSIVES

FIELD ID			PZ011			PZ011			PZ011			PZ011			PZ011			PZ011			PZ011		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/15/2012			3/10/2011			3/16/2010			3/12/2009			3/20/2008			3/16/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	420	15 / 16	38.6	0.8	J	16.1	0.8	J	21.1	0.8		<	1	U	26	0.48		340	4.9		130	2.5	
1,3-Dinitrobenzene	0.53	3 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,4,6-Trinitrotoluene	1200	16 / 16	19	0.8	J	10	0.8	J	11.6	0.8		0.12	0.4	J	21	0.48		130	4.9		34	0.5	
2,4-Dinitrotoluene	4.17 J	7 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	0.72	0.49		<	0.5	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	67.9	16 / 16	4.7	0.8	J	3.2	0.8	J	4.3	0.8		0.25	0.2		7.7	0.48		23	0.49		12	0.5	
2-Nitrotoluene	1.1 J	1 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	100 J	15 / 16	4.5	1.4	J	2.5	1.4	J	2.9	0.8		<	0.2	U	7	0.48		13	0.49		7.1	0.5	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.5	U
HMX	6.6	11 / 16	0.95	0.8	J	0.39	0.8	J	<	0.8	U	<	0.4	U	<	0.48	U	1.1	0.49	J	0.77	0.5	
MNX	0.13 J	1 / 10	<	0.8	U	<	0.8	UJ	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.5	U
Nitrobenzene	24	2 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
RDX	58 J	13 / 16	4.9	0.8	J	1.9	0.8	J	2.1	0.8		<	0.2	U	<	0.48	U	0.86	0.49		0.57	0.5	
Tetryl	0.54 J	1 / 16	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-9
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ011-EXPLOSIVES

FIELD ID			PZ011			PZ011			PZ011			PZ011			PZ011			PZ011			PZ011		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/16/2005			3/18/2004			3/19/2003			3/25/2002			3/26/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	420	15 / 16	130	4.8		350	9.5		420	9.5		0.32	0.22	J	350	34	J	100	8.0		420	80	
1,3-Dinitrobenzene	0.53	3 / 16	<	0.48	U	0.24	0.48	J	0.53	0.19		<	0.22	U	<	0.22	UJ	<	1.6	U	0.44	0.8	J
2,4,6-Trinitrotoluene	1200	16 / 16	16	0.48		130	9.5		110	9.5		390	22	J	250	28	J	520	160.0		1200	150	
2,4-Dinitrotoluene	4.17 J	7 / 16	<	0.48	U	1.2	0.48		0.89	0.37		1.7	0.43	J	1.5	0.22	J	2.3	1.6		<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.37	U	<	0.43	U	<	0.87	U	<	1.6	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	67.9	16 / 16	4.9	0.48		21	0.48	P	14	0.37		34	4.3	J	22	3.5	J	29	1.6		50	100	J
2-Nitrotoluene	1.1 J	1 / 16	<	0.48	U	<	0.48	U	<	0.37	U	<	0.43	U	<	0.69	U	1.1	1.6	J	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.37	U	<	0.43	U	<	0.43	U	<	8.0	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	100 J	15 / 16	2.7	0.48		11	0.48		6.9	0.37		18	0.43	J	42	5.9	J	9.8	1.6		100	1	JE
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.69	U	<	1.4	U	<	8.0	U	<	1.1	U
HMX	6.6	11 / 16	<	0.48	U	1.3	0.48		1.9	0.46		4	0.54	J	3.4	0.95	J	<	2.0	U	6.6	0.8	
MNX	0.13 J	1 / 10	<	0.48	U	<	0.48	U	0.13	0.19	J		NA			NA			NA			NA	
Nitrobenzene	24	2 / 16	<	0.48	U	<	0.48	U	<	0.19	U	<	0.22	U	<	0.39	U	9.2	8.0		<	0.8	U
RDX	58 J	13 / 16	<	0.48	U	3.7	0.48		4	0.19		16	2.2	J	10	5.6	J	36	8.0		58	80	J
Tetryl	0.54 J	1 / 16	<	0.48	U	<	0.48	U	<	0.37	U	<	0.43	U	0.54	0.92	J	<	8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-9
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ011-EXPLOSIVES

FIELD ID			PZ011			PZ011		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	420	15 / 16	111	8		37.9	1.00	
1,3-Dinitrobenzene	0.53	3 / 16	<	8	U	<	0.500	U
2,4,6-Trinitrotoluene	1200	16 / 16	955	80		23.7	10.00	
2,4-Dinitrotoluene	4.17 J	7 / 16	4.17	8	J	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	67.9	16 / 16	67.9	8		20.1	0.500	
2-Nitrotoluene	1.1 J	1 / 16	<	8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	100 J	15 / 16	43	8		10.6	1.00	J*
4-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	U
HMX	6.6	11 / 16	4.75	8	J	5.58	0.500	
MNX	0.13 J	1 / 10		NA			NA	
Nitrobenzene	24	2 / 16	24	8		<	0.500	U
RDX	58 J	13 / 16	26.7	8		20.2	1.00	
Tetryl	0.54 J	1 / 16	<	8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-10
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ012-EXPLOSIVES

FIELD ID			PZ012			PZ012			PZ012			PZ012			PZ012			PZ012			PZ012		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/15/2012			3/10/2011			3/16/2010			3/12/2009			3/20/2008			3/16/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	990	13 / 16	126	2.4		2.1	0.8	J	19.6	0.8		<	1	U	<	0.48	U	480	9.5		600	10	
1,3-Dinitrobenzene	1.9 J	2 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	1.9	0.4	J	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	2850	16 / 16	228	2.4		30.4	0.8	J	63.9	0.8		2.4	0.4	J	3.4	0.48		340	9.5		140	10	
2,4-Dinitrotoluene	13 J	12 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	0.56	0.4	J	<	0.48	U	2.4	0.48		1.1	0.5	
2,6-Dinitrotoluene	3 J	1 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	108	16 / 16	33.5	0.8		20.4	0.8	J	30.7	0.8		21	0.2	J	15	0.48		45	0.48		11	0.5	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	90.5	15 / 16	37.7	1.4		26.1	1.4	J	29.1	0.8		31	0.4	J	34	0.48		35	0.48		5.1	0.5	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	34	15 / 16	30.9	0.8		12.1	0.8	J	11.9	0.8	J	3.5	0.4	J	34	0.48		1.4	0.48	J	0.63	0.5	
MNX	0.25	1 / 10	<	0.8	U	<	0.8	UJ	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	21.1	2 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	134	14 / 16	3.1	0.8		2.4	0.8	J	2.6	0.8		<	0.2	U	<	0.48	U	5.1	0.48		2.5	0.5	
Tetryl	0.31 J	1 / 16	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-10
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ012-EXPLOSIVES

FIELD ID			PZ012			PZ012			PZ012			PZ012			PZ012			PZ012			PZ012		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/16/2005			3/18/2004			3/19/2003			3/25/2002			3/26/2001			3/20/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	990	13 / 16	690	24		720	24		990	87		<	0.22	U	790	25	J	780	80.0		550	80	
1,3-Dinitrobenzene	1.9 J	2 / 16	<	0.48	U	<	0.48	U	0.45	0.17		<	0.22	U	<	0.17	UJ	<	1.6	U	<	0.8	U
2,4,6-Trinitrotoluene	2850	16 / 16	170	24		200	24		170	17		320	22	J	250	21	J	690	80.0		1100	150	
2,4-Dinitrotoluene	13 J	12 / 16	1.5	0.48		1.5	0.48		1.2	0.34		2.4	0.43	J	1.3	0.17	J	1.80	1.6		1.70	1.1	
2,6-Dinitrotoluene	3 J	1 / 16	<	0.48	U	<	0.48	U	<	0.34	U	3	0.43	J	<	0.64	U	<	1.6	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	108	16 / 16	11	0.48		18	0.48	P	14	0.34		25	4.3	J	15	2.6	J	1.9	8.0		33	1	JE
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.34	U	<	0.43	U	<	0.51	U	<	1.6	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.34	U	<	0.43	U	<	0.32	U	<	8.0	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	90.5	15 / 16	7.2	0.48		13	0.48		8.8	0.34		15	0.43	J	13	4.3	J	12	1.6		<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.54	U	<	0.7	U	<	1.0	U	<	8.0	U	<	1.1	U
HMX	34	15 / 16	1.7	0.48		1.6	0.48		2.6	0.42		4.7	0.55	J	4.2	0.70	J	4.8	2.0		4.8	0.8	
MNX	0.25	1 / 10	<	0.48	U	<	0.48	U	0.25	0.17			NA			NA			NA			NA	
Nitrobenzene	21.1	2 / 16	<	0.48	U	<	0.48	U	<	0.17	U	<	0.22	U	<	0.29	U	7.3	1.6		<	0.8	U
RDX	134	14 / 16	4.4	0.48		3.6	0.48		7.1	0.17		12	2.2	J	18	4.1	J	26	8.0		31	80	J
Tetryl	0.31 J	1 / 16	<	0.48	U	<	0.48	U	<	0.34	U	<	0.43	U	0.31	0.68	J	<	8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-10
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ012-EXPLOSIVES

FIELD ID			PZ012			PZ012		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	990	13 / 16	584	80		268	50.00	J
1,3-Dinitrobenzene	1.9 J	2 / 16	<	8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	2850	16 / 16	2850	80	E	767	50.00	J
2,4-Dinitrotoluene	13 J	12 / 16	4.65	8	J	13.0	0.500	J
2,6-Dinitrotoluene	3 J	1 / 16	<	8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	108	16 / 16	108	8		45.2	0.500	J
2-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	90.5	15 / 16	90.5	8		27.6	1.00	J
4-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	UJ
HMX	34	15 / 16	14.7	8		<	0.500	UJ
MNX	0.25	1 / 10		NA			NA	
Nitrobenzene	21.1	2 / 16	21.1	8		<	0.500	UJ
RDX	134	14 / 16	134	80		6.57	1.00	J
Tetryl	0.31 J	1 / 16	<	8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-11
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ013-EXPLOSIVES

FIELD ID			PZ013			PZ013			PZ013			PZ013			PZ013			PZ013			PZ013		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/14/2012			3/10/2011			3/17/2010			3/12/2009			3/19/2008			3/16/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	570	12 / 16	<	0.8	U	<	0.8	U	<	0.8	U	90	5	J	150	2.4	J	13	0.49		510	11	
1,3-Dinitrobenzene	0.71 J	1 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.54	U
2,4,6-Trinitrotoluene	3300	13 / 16	<	0.8	U	<	0.8	U	<	0.8	U	57	2	J	120	2.4	J	17	0.49		600	11	
2,4-Dinitrotoluene	15.5	9 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	2.3	0.54	
2,6-Dinitrotoluene	2.5 J	2 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.54	U
2-Amino-4,6-dinitrotoluene	170	15 / 16	<	0.8	U	3.6	0.8		0.23	0.8	J	17	0.2	J	22	0.48		3.8	0.49		49	0.54	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.54	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.54	U
4-Amino-2,6-dinitrotoluene	89	13 / 16	<	1.4	U	3.5	1.4		<	0.8	U	10	0.2	J	18	0.48		5	0.49		12	0.54	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.54	U
HMX	27 J	13 / 16	<	0.8	U	8.1	0.8	J	1.7	0.8		5.3	0.4	J	20	0.48		9.2	0.49	J	19	0.54	
MNX	1.1 J	5 / 10	<	0.8	U	<	0.8	U	<	0.8	U	1.1	2	J	<	0.48	U	<	0.49	U	1.3	0.54	
Nitrobenzene	23	2 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.54	U
RDX	195	14 / 16	<	0.8	U	1.8	0.8		1.4	0.8		3	0.2	J	29	0.48		5.3	0.49		29	0.54	
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.54	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.2-11
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ013-EXPLOSIVES**

FIELD ID			PZ013			PZ013			PZ013			PZ013			PZ013			PZ013			PZ013		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/17/2005			3/17/2004			3/24/2003			3/25/2002			3/26/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	570	12 / 16	480	24		440	48		550	44		<	0.2	U	500	17	J	570	40		410	160	
1,3-Dinitrobenzene	0.71 J	1 / 16	<	0.48	U	<	0.48	U	<	0.22	U	<	0.2	U	<	0.23	U	<	4	U	0.71	0.8	J
2,4,6-Trinitrotoluene	3300	13 / 16	840	24		1000	48		1200	44		1600	100	J	1600	57	J	3300	400		2500	300	
2,4-Dinitrotoluene	15.5	9 / 16	2	0.48		2	0.48		2.3	0.43		3.6	0.39	J	3.5	0.23	J	<	4	U	8.7	1.1	
2,6-Dinitrotoluene	2.5 J	2 / 16	<	0.48	U	<	0.48	U	<	0.43	U	1.5	0.39	J	2.5	0.88	J	<	4	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	170	15 / 16	49	0.48		45	0.48	P	44	4.3		43	3.9	J	47	3.5	J	85	40		170	50	
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.39	U	<	0.69	U	<	4	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.39	U	<	0.44	U	<	40	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	89	13 / 16	20	0.48		<	0.48	U	18	0.43		20	3.9	J	30	6.0	J	17	4		89	50	
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.69	U	<	0.63	U	<	1.4	U	<	40	U	<	1.1	U
HMX	27 J	13 / 16	15	0.48		12	0.48		11	0.54		12	4.9	J	9.0	9.6	J	<	5	U	27	40	J
MNX	1.1 J	5 / 10	0.79	0.48		0.72	0.48	P	0.64	0.22			NA			NA			NA			NA	
Nitrobenzene	23	2 / 16	<	0.48	U	<	0.48	U	<	0.22	U	<	0.2	U	<	0.40	U	23	4		<	0.8	U
RDX	195	14 / 16	31	0.48		36	0.48		41	2.2		53	2	J	110	28	J	110	40		130	40	
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.43	U	<	0.39	U	<	0.94	U	<	40	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-11
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ013-EXPLOSIVES

FIELD ID			PZ013			PZ013		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	570	12 / 16	444	80		252	50.00	
1,3-Dinitrobenzene	0.71 J	1 / 16	<	8	U	<	0.500	U
2,4,6-Trinitrotoluene	3300	13 / 16	2610	80	E	758	50.00	
2,4-Dinitrotoluene	15.5	9 / 16	11.5	8		15.5	0.500	
2,6-Dinitrotoluene	2.5 J	2 / 16	<	8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	170	15 / 16	105	8		57.0	0.500	
2-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	89	13 / 16	53.9	8		23.4	1.00	
4-Nitrotoluene	-	0 / 16	<	8	U	<	1.00	U
HMX	27 J	13 / 16	7.62	8		<	0.500	U
MNX	1.1 J	5 / 10		NA			NA	
Nitrobenzene	23	2 / 16	20.3	8		<	0.500	U
RDX	195	14 / 16	195	80		<	1.00	U
Tetryl	-	0 / 16	<	8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-12
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ014-EXPLOSIVES

FIELD ID			PZ014			PZ014			PZ014			PZ014			PZ014			PZ014			PZ014		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/19/2013			3/14/2012			3/10/2011			3/17/2010			3/12/2009			3/19/2008			3/16/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	1.3	0.48	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	4.8	10 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	2.6	0.48	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	1.7	10 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.062	0.2	J	<	0.48	U	<	0.49	U	1.7	0.48	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	2.2	8 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	2.2	0.48	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.48	U
HMX	4	8 / 16	0.13	0.8	J	0.23	0.8	J	0.15	0.8	J	<	0.4	U	<	0.48	U	<	0.49	U	4	0.48	
MNX	0.33 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
RDX	24	8 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	15	0.48	
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-12
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ014-EXPLOSIVES

FIELD ID			PZ014			PZ014			PZ014			PZ014			PZ014			PZ014			PZ014		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/17/2006			3/17/2005			3/17/2004			3/25/2003			3/25/2002			3/26/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.3	7 / 16	1.1	0.49		1	0.48		1.1	0.28		<	0.19	U	0.81	0.28		1.1	0.8		1.0	0.8	
1,3-Dinitrobenzene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.28	U	<	0.19	U	<	0.18	UJ	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	4.8	10 / 16	3.1	0.49		3.9	0.48		4.6	0.28		3.8	0.19		2.8	0.23		4.8	0.8		3.8	1.5	
2,4-Dinitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.55	U	<	0.36	U	<	0.18	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.55	U	<	0.36	U	<	0.71	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	1.7	10 / 16	1.1	0.49		1.1	0.48	P	1.5	0.55		1.7	0.36		1.1	0.29		1.7	0.8		1.3	1	
2-Nitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.55	U	<	0.36	U	<	0.56	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.55	U	<	0.36	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	2.2	8 / 16	1.9	0.49		1.4	0.48		1.2	0.55		<	0.36	U	1.0	0.48		1.3	0.8		0.61	1	J
4-Nitrotoluene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.88	U	<	0.58	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	4	8 / 16	3	0.49		2	0.48		<	0.69	U	0.39	0.46	J	0.32	0.78		<	1	U	<	0.8	U
MNX	0.33 J	1 / 10	<	0.49	U	0.33	0.48	J	<	0.28	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.49	U	<	0.48	U	<	0.28	U	<	0.19	U	<	0.32	U	<	0.8	U	<	0.8	U
RDX	24	8 / 16	20	0.49		24	0.48		5.9	0.28		2.1	0.19		1.3	0.46		3.1	0.8		<	0.8	U
Tetryl	-	0 / 16	<	0.49	U	<	0.48	U	<	0.55	U	<	0.36	U	<	0.76	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-12
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ014-EXPLOSIVES

FIELD ID			PZ014			PZ014		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/31/1999			6/22/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	1.3	7 / 16	<	0.8	U	<	1.00	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	4.8	10 / 16	3.53	0.8		3.66	1.00	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	1.7	10 / 16	1.37	0.8		<	0.500	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	2.2	8 / 16	0.828	0.8		<	1.00	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
HMX	4	8 / 16	<	0.8	U	<	0.500	U
MNX	0.33 J	1 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
RDX	24	8 / 16	0.272	0.8	J	<	1.00	U
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-13
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ015-EXPLOSIVES

FIELD ID			PZ015			PZ015			PZ015			PZ015			PZ015			PZ015			PZ015		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/13/2012			3/15/2011			3/18/2010			3/16/2009			3/18/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	130	11 / 16	<	0.8	U	<	0.8	U	<	0.8	U	6.5	0.99		84	2.4		110	2.4		130	2.5	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	240 J	10 / 16	<	0.8	U	<	0.8	U	<	0.8	U	3.9	0.4		47	0.48		61	2.4		74	2.5	
2,4-Dinitrotoluene	1.3 J	4 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	0.55	0.49	
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	7.5 J	11 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.75	0.2		4.7	0.48		5.1	0.48		4.9	0.49	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	10 J	11 / 16	<	1.4	U	<	1.4	U	<	0.8	U	0.64	0.2		5.7	0.48		5.5	0.48		4.9	0.49	J
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	12 J	15 / 16	1.3	0.8	J	5	0.8		10	0.8	J	3.5	0.4		3.6	0.48		3.8	0.48	J	2.9	0.49	J
MNX	0.61	2 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	1.8 J	1 / 16	<	0.8	U	1.8	0.8	J	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	115	15 / 16	<	0.8	U	4	0.8		2.5	0.8		11	0.2		19	0.48		7.9	0.48		10	0.49	
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-13
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ015-EXPLOSIVES

FIELD ID			PZ015			PZ015			PZ015			PZ015			PZ015			PZ015			PZ015		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/16/2005			3/18/2004			3/18/2003			3/22/2002			3/23/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	130	11 / 16	120	4.8		100	4.8		110	8.7		0.98	0.2	J	110	30	J	<	0.8	U	2.5	0.8	
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.17	U	<	0.2	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	240 J	10 / 16	98	4.8		110	4.8		140	8.7		240	20	J	230	25	J	<	0.8	U	7.6	1.5	
2,4-Dinitrotoluene	1.3 J	4 / 16	<	0.48	U	0.55	0.48		0.94	0.34		<	1.3	UJ	1.3	0.20	J	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.34	U	<	0.38	U	<	0.78	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	7.5 J	11 / 16	5	0.48		4.7	0.48	P	6.7	0.34		7.5	0.38	J	7.3	0.31	J	1	0.8		0.58	1	J
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.34	U	<	0.38	U	<	0.61	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.34	U	<	0.38	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	10 J	11 / 16	4.7	0.48		5.7	0.48		6.4	0.34		8.8	0.38	J	10	0.52	J	0.68	0.8	J	0.77	1	J
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.54	U	<	0.62	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	12 J	15 / 16	3.5	0.48		4.2	0.48		6.9	0.42		12	4.8	J	11	8.5	J	1.8	1		7.4	0.8	
MNX	0.61	2 / 10	<	0.48	U	0.36	0.48	J	0.61	0.17			NA			NA			NA			NA	
Nitrobenzene	1.8 J	1 / 16	<	0.48	U	<	0.48	U	<	0.17	U	<	0.2	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	115	15 / 16	9.8	0.48		27	0.48		33	1.7		72	2	J	71	5.0	J	9.7	0.8		58	8	
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.34	U	<	0.38	U	<	0.82	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-13
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ015-EXPLOSIVES

FIELD ID			PZ015			PZ015		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/2/1999			6/18/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	130	11 / 16	<	0.8	U	1.78	1.00	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	240 J	10 / 16	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	1.3 J	4 / 16	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	7.5 J	11 / 16	<	0.8	U	<	0.500	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	10 J	11 / 16	<	0.8	U	<	1.00	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U
HMX	12 J	15 / 16	<	0.8	U	6.30	0.500	
MNX	0.61	2 / 10		NA			NA	
Nitrobenzene	1.8 J	1 / 16	<	0.8	U	<	0.500	U
RDX	115	15 / 16	5.2	0.8		115	1.00	
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-14
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ016-EXPLOSIVES

FIELD ID			PZ016			PZ016			PZ016			PZ016			PZ016			PZ016			PZ016		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/18/2013			3/14/2012			3/15/2011			3/18/2010			3/18/2009			3/18/2008			3/15/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	99	12 / 16	<	0.8	U	<	0.8	UJ	0.49	0.8	J	<	1	UJ	37	0.48		5.4	0.48		2.8	0.49	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	12	13 / 16	<	0.8	U	<	0.8	UJ	0.34	0.8	J	<	0.4	UJ	8.2	0.48		2.4	0.48		0.89	0.49	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.2	UJ	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	0.65 J	9 / 16	<	0.8	U	0.26	0.8	J	0.44	0.8	J	0.13	0.2	J	0.54	0.48		<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	0.73	1 / 16	<	1.4	U	<	1.4	UJ	<	0.8	U	<	0.2	UJ	0.73	0.48		<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	1	UJ	<	0.48	U	<	0.48	U	<	0.49	U
HMX	1.8	8 / 16	0.5	0.8	J	0.45	0.8	J	0.47	0.8	J	<	0.4	UJ	1.1	0.48		<	0.48	U	<	0.49	U
MNX	2.7 J	1 / 10	<	0.8	U	<	0.8	UJ	<	0.8	U	2.7	2	J	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.48	U	<	0.49	U
RDX	4.2	9 / 16	0.57	0.8	J	0.7	0.8	J	1.2	0.8		<	0.2	UJ	2	0.48		<	0.48	U	<	0.49	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	UJ	<	0.8	U	<	0.24	UJ	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-14
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ016-EXPLOSIVES

FIELD ID			PZ016			PZ016			PZ016			PZ016			PZ016			PZ016			PZ016		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/16/2006			3/16/2005			3/18/2004			3/18/2003			3/22/2002			3/23/2001			3/21/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	99	12 / 16	1.7	0.48		4.7	0.48		7.8	0.23		<	0.16	U	70	2.4		46	4		52	8	
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.23	U	<	0.16	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	12	13 / 16	0.62	0.48		1.7	0.48		3.3	0.23		4.1	0.16	J	9.8	1.0		6.5	0.8		8	1.5	
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.31	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.31	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.65 J	9 / 16	<	0.48	U	<	0.48	U	0.28	0.44	J	0.31	0.31	J	0.45	0.25		0.25	0.8	J	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.31	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	0.73	1 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.31	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.71	U	<	0.5	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	1.8	8 / 16	<	0.48	U	<	0.48	U	<	0.55	U	0.58	0.39	J	1.4	0.68		<	1	U	1.8	0.8	
MNX	2.7 J	1 / 10	<	0.48	U	<	0.48	U	<	0.23	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.23	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	4.2	9 / 16	<	0.48	U	<	0.48	U	0.54	0.23		0.88	0.16	J	3.5	0.40		<	0.8	U	3.6	0.8	
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.44	U	<	0.31	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-14
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ016-EXPLOSIVES

FIELD ID			PZ016			PZ016		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/2/1999			6/18/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	99	12 / 16	99	8		10.2	1.00	
1,3-Dinitrobenzene	-	0 / 16	<	1.6	U	<	0.500	U
2,4,6-Trinitrotoluene	12	13 / 16	12	1.6		2.41	1.00	
2,4-Dinitrotoluene	-	0 / 16	<	1.6	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 16	<	1.6	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	0.65 J	9 / 16	0.65	1.6	J	<	0.500	U
2-Nitrotoluene	-	0 / 16	<	1.6	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	1.6	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	0.73	1 / 16	<	1.6	U	<	1.00	U
4-Nitrotoluene	-	0 / 16	<	1.6	U	<	1.00	U
HMX	1.8	8 / 16	1.4	1.6	J	<	0.500	U
MNX	2.7 J	1 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	1.6	U	<	0.500	U
RDX	4.2	9 / 16	4.2	1.6		<	1.00	U
Tetryl	-	0 / 16	<	1.6	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-15
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ017/PZ017R*-EXPLOSIVES

FIELD ID			PZ017R			PZ017R			PZ017R			PZ017R			PZ017			PZ017			PZ017		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/12/2012			3/14/2011			3/16/2010			None			3/12/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	82	11 / 12	24.1	0.8	J	12.5	0.8		15.1	0.8		16	1	J				56	0.97		72	0.95	
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U				<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	100	12 / 12	30.9	0.8	J	23.5	0.8		33.8	0.8		41	0.8	J				70	0.97		79	0.95	
2,4-Dinitrotoluene	0.56	4 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U				<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	Not Sampled in 2009			<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	13	12 / 12	5.4	0.8	J	4.5	0.8		6.8	0.8		10	0.2	J				10	0.49		13	0.48	
2-Nitrotoluene	2.1	1 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U				<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U				<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	11 J	11 / 12	4.6	1.4	J	2.9	1.4		4.5	0.8		6.6	0.2	J				9.4	0.49		8.2	0.48	
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U				<	0.49	U	<	0.48	U
HMX	24 J	11 / 12	3.1	0.8	J	2.1	0.8		3	0.8		4.2	0.4	J				13	0.49	J	17	0.48	
MNX	0.56	3 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U				<	0.49	U	0.56	0.48	
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U				<	0.49	U	<	0.48	U
RDX	120 J	12 / 12	9.3	0.8	J	8	0.8		10.2	0.8		10	0.2	J				50	0.49		59	0.95	
Tetryl	-	0 / 12	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U				<	0.49	U	<	0.48	U

Notes:

*PZ017 was abandoned and replaced by PZ017R in 2009.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-15
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ017/PZ017R*-EXPLOSIVES

FIELD ID			PZ017			PZ017			PZ017			PZ017			PZ017			PZ017		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/15/2005			3/16/2004			3/19/2003			3/19/2002			3/22/2001		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	82	11 / 12	82	4.8		72	4.8		61	1.6		<	0.16	U	10	2.9	J	13	40.0	J
1,3-Dinitrobenzene	-	0 / 12	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.19	U	<	0.8	U
2,4,6-Trinitrotoluene	100	12 / 12	91	4.8		84	4.8		100	8		100	16	J	78	2.4	J	100	40.0	
2,4-Dinitrotoluene	0.56	4 / 12	<	0.48	U	0.35	0.48	J	0.56	0.31		<	0.8	UJ	0.39	0.19	J	0.25	0.8	J
2,6-Dinitrotoluene	-	0 / 12	<	0.48	U	<	0.48	U	<	0.31	U	<	0.34	UJ	<	0.74	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	13	12 / 12	11	0.48		10	0.48	P	12	0.31		12	0.31	J	12	0.30	J	12	0.8	
2-Nitrotoluene	2.1	1 / 12	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.59	U	2.1	0.8	
3-Nitrotoluene	-	0 / 12	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.37	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	11 J	11 / 12	8.9	0.48		8.1	0.48		8.7	0.31		8.4	0.31	J	11	0.50	J	<	0.8	U
4-Nitrotoluene	-	0 / 12	<	0.48	U	<	0.48	U	<	0.5	U	<	0.5	U	<	1.2	U	<	0.8	U
HMX	24 J	11 / 12	18	0.48		18	0.48		23	3.9		24	3.9	J	20	8.2	J	<	50.0	U
MNX	0.56	3 / 9	<	0.48	U	0.33	0.48	J	0.43	0.16		NA			NA				NA	
Nitrobenzene	-	0 / 12	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.34	U	<	0.8	U
RDX	120 J	12 / 12	71	4.8		85	4.8		110	8		120	16	J	70	4.8	J	93	40.0	
Tetryl	-	0 / 12	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.79	U	<	0.8	U

Notes:

*PZ017 was abandoned and replaced by PZ017R in 2009.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-16
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ018-EXPLOSIVES

FIELD ID			PZ018			PZ018			PZ018			PZ018			PZ018			PZ018			PZ018		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/12/2012			3/14/2011			3/16/2010			3/17/2009			3/11/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	74	11 / 13	25.5	0.8		34.6	0.8		30.3	0.8		39	2		46	0.48		60	0.96		67	0.98	
1,3-Dinitrobenzene	71	1 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	100	13 / 13	14.1	0.8		16.8	0.8		19.3	0.8		25	0.8		32	0.48		32	0.48		40	0.49	
2,4-Dinitrotoluene	0.47 J	3 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	8.3	13 / 13	2	0.8		1.7	0.8		2.4	0.8		4.1	0.2		5.5	0.48		4.9	0.48		6	0.49	
2-Nitrotoluene	1.8	1 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	6.6 J	12 / 13	1.6	1.4		1.1	1.4	J	1.3	0.8		1.7	0.2		4.7	0.48		4	0.48		4.2	0.49	
4-Nitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	13	13 / 13	1.6	0.8		1.8	0.8		2.3	0.8		5.2	0.4		6.7	0.48		8.7	0.48	J	11	0.49	
MNX	0.19	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	69	13 / 13	4.2	0.8		5.5	0.8		6.2	0.8		16	0.2		23	0.48		33	0.48		46	0.49	
Tetryl	-	0 / 13	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-16
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ018-EXPLOSIVES

FIELD ID			PZ018			PZ018			PZ018			PZ018			PZ018			PZ018		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/15/2005			3/15/2004			3/19/2003			3/19/2002			3/22/2001		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	74	11 / 13	64	4.8		73	4.8		74	1.6		<	0.23	U	70	3.6		<	0.8	U
1,3-Dinitrobenzene	71	1 / 13	<	0.48	U	<	0.48	U	<	0.16	U	<	0.23	U	<	0.24	U	71	40.0	
2,4,6-Trinitrotoluene	100	13 / 13	52	4.8		58	4.8		74	1.6		85	2.3	J	66	3.0		100	40.0	
2,4-Dinitrotoluene	0.47 J	3 / 13	<	0.48	U	<	0.48	U	0.29	0.31	J	<	0.52	UJ	0.31	0.24		0.47	0.8	J
2,6-Dinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.31	U	<	0.44	U	<	0.93	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	8.3	13 / 13	5.4	0.48		5.3	0.48	P	6.4	0.31		7.3	0.44	J	5.2	0.38		8.3	0.8	
2-Nitrotoluene	1.8	1 / 13	<	0.48	U	<	0.48	U	<	0.31	U	<	0.44	U	<	0.74	U	1.8	0.8	
3-Nitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.31	U	<	0.44	U	<	0.46	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	6.6 J	12 / 13	4.4	0.48		4.8	0.48		5.1	0.31		6.6	0.44	J	4.0	0.63		<	0.8	U
4-Nitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.5	U	<	0.72	U	<	1.5	U	<	0.8	U
HMX	13	13 / 13	12	0.48		13	0.48		13	3.9		12	5.6	J	10	1.0		9.7	1.0	
MNX	0.19	1 / 10	<	0.48	U	<	0.48	U	0.19	0.16			NA			NA			NA	
Nitrobenzene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.16	U	<	0.23	U	<	0.42	U	<	0.8	U
RDX	69	13 / 13	50	4.8		69	4.8		68	1.6		60	2.3	J	54	6.0		54	40.0	
Tetryl	-	0 / 13	<	0.48	U	<	0.48	U	<	0.31	U	<	0.44	U	<	0.99	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-17
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ019-EXPLOSIVES

FIELD ID			PZ019			PZ019			PZ019			PZ019			PZ019			PZ019			PZ019		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/7/2012			3/14/2011			3/11/2010			3/19/2009			3/11/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Nitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 13	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Nitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.49	U
HMX	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
RDX	0.83	3 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	0.83	0.49	
Tetryl	-	0 / 13	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-17
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ019-EXPLOSIVES

FIELD ID			PZ019			PZ019			PZ019			PZ019			PZ019			PZ019		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/15/2006			3/15/2005			3/15/2004			3/17/2003			3/20/2002			3/22/2001		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.18	U	<	0.21	U	<	0.33	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.18	U	<	0.21	U	<	0.22	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.18	U	<	0.21	U	<	0.28	U	<	0.8	U
2,4-Dinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.34	U	<	0.41	U	<	0.22	U	<	0.8	U
2,6-Dinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.34	U	<	0.41	U	<	0.86	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.34	U	<	0.41	U	<	0.35	U	<	0.8	U
2-Nitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.34	U	<	0.41	U	<	0.68	U	<	0.8	U
3-Nitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.34	U	<	0.41	U	<	0.43	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.34	U	<	0.41	U	<	0.58	U	<	0.8	U
4-Nitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.55	U	<	0.66	U	<	1.4	U	<	0.8	U
HMX	-	0 / 13	<	0.48	U	<	0.48	U	<	0.43	U	<	0.51	U	<	0.94	U	<	1	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.18	U		NA			NA			NA	
Nitrobenzene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.18	U	<	0.21	U	<	0.39	U	<	0.8	U
RDX	0.83	3 / 13	<	0.48	U	0.61	0.48		0.3	0.18		<	0.21	U	<	0.55	U	<	0.8	U
Tetryl	-	0 / 13	<	0.48	U	<	0.48	U	<	0.34	U	<	0.41	U	<	0.91	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-18
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ020-EXPLOSIVES

FIELD ID			PZ020			PZ020			PZ020			PZ020			PZ020			PZ020			PZ020		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2013			3/12/2012			3/15/2011			3/16/2010			3/13/2009			3/13/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	29	12 / 13	6.3	0.8	J	7.1	0.8		6.3	0.8		10	1		7.3	0.48		12	0.49		18	0.49	
1,3-Dinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	85	13 / 13	4.4	0.8	J	4.7	0.8		5.9	0.8		8	0.4		8.6	0.48		10	0.49		13	0.49	
2,4-Dinitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	11	13 / 13	2.4	0.8	J	2.6	0.8		2.8	0.8		4.6	0.2		4.3	0.48		4.5	0.49		5.5	0.49	
2-Nitrotoluene	1.6	1 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	5.6 J	12 / 13	2.6	1.4	J	2.1	1.4		2.1	0.8		2.4	0.2		3.3	0.48		3.5	0.49		3.7	0.49	
4-Nitrotoluene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.49	U
HMX	4.5	13 / 13	0.94	0.8	J	0.93	0.8		0.7	0.8	J	1.2	0.4		1.4	0.48		1.5	0.49		2.1	0.49	
MNX	0.15 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.49	U
RDX	13	11 / 13	<	0.8	U	2.5	0.8	J	2.4	0.8		2.3	0.2		<	0.48	U	4.1	0.49		4.8	0.49	
Tetryl	-	0 / 13	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.2-18
CORNHUSKER ARMY AMMUNITION PLANT
PIEZOMETER PZ020-EXPLOSIVES

FIELD ID			PZ020			PZ020			PZ020			PZ020			PZ020			PZ020		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/15/2005			3/16/2004			3/18/2003			3/20/2002			3/22/2001		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	29	12 / 13	19	0.48		23	0.48		27	1.9		<	0.18	U	27	1.4	J	29	16.0	
1,3-Dinitrobenzene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.19	U	<	0.18	U	<	0.19	U	<	0.8	U
2,4,6-Trinitrotoluene	85	13 / 13	17	0.48		16	0.48		23	1.9		22	1.8	J	42	1.2	J	85	16.0	
2,4-Dinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.36	U	<	0.36	U	<	0.19	U	<	0.8	U
2,6-Dinitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.36	U	<	0.36	U	<	0.74	U	<	0.8	U
2-Amino-4,6-dinitrotoluene	11	13 / 13	4.6	0.48		4.2	0.48	P	4.6	0.36		5.6	0.36	J	8.0	0.30	J	11	0.8	
2-Nitrotoluene	1.6	1 / 13	<	0.48	U	<	0.48	U	<	0.36	U	<	0.36	U	<	0.59	U	1.6	0.8	
3-Nitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.36	U	<	0.36	U	<	0.37	U	<	0.8	U
4-Amino-2,6-dinitrotoluene	5.6 J	12 / 13	3.8	0.48		3.5	0.48		3.2	0.36		3.4	0.36	J	5.6	0.50	J	<	0.8	U
4-Nitrotoluene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.58	U	<	0.58	U	<	1.20	U	<	0.8	U
HMX	4.5	13 / 13	1.9	0.48		2.1	0.48		2.5	0.46		2.4	0.45	J	3.4	0.82	J	4.5	1.0	
MNX	0.15 J	1 / 10	<	0.48	U	<	0.48	U	0.15	0.19	J		NA			NA			NA	
Nitrobenzene	-	0 / 13	<	0.48	U	<	0.48	U	<	0.19	U	<	0.18	U	<	0.34	U	<	0.8	U
RDX	13	11 / 13	4.5	0.48		4.6	0.48		7.7	0.19		8.8	0.18	J	8.9	2.4	J	13	0.8	
Tetryl	-	0 / 13	<	0.48	U	<	0.48	U	<	0.36	U	<	0.36	U	<	0.79	U	<	0.8	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE
SAMPLING RECOMMENDATIONS
OU1 ON-POST MONITORING WELL AND PIEZOMETER LOCATIONS
CORNHUSKER ARMY AMMUNITION PLANT

Well Number	Frequency	Explosives (+MNX) ¹	Field NA Parameters ²	Laboratory NA Parameters ³	Notes
G0011	Abandon				Abandon in November 2013
G0012	Abandon				Abandon in November 2013
G0013	Abandon				Abandon in November 2013
G0014	Abandon				Abandon in November 2013
G0015	Abandon				Abandon in November 2013
G0016	Annual	X	X		
G0017	Annual	X	X		
G0018	Abandon				Abandon 2015
G0019	Annual	X	X		
G0020	Abandon				Abandon 2015
G0021	Annual	X	X		
G0022	Annual	X	X		
G0023	Annual	X	X		
G0024	Annual	X	X		
G0025	Abandon				Abandon in November 2013
G0028	Abandon				Abandon 2015
G0032/74	Abandon				Abandon in November 2013
G0033	Abandon				Abandon in November 2013
G0042	Abandon				Abandon in November 2013
G0044	Annual	X	X		
G0045	Abandon				Abandon 2015
G0046	Abandon				Abandon in November 2013
G0047	Abandon				Abandoned November 2014
G0048	Annual	X	X		
G0049	Abandon				Abandon 2015
G0063	Abandon				Scheduled for Abandonment, but not abandoned yet
G0066R	Annual	X	X		
G0067	Annual	X	X		
G0068	Abandon				Abandon in November 2013
G0070	Annual	X	X		
G0075	Annual	X	X		
G0076	Annual	X	X		
G0077	Annual	X	X		
G0078	Annual	X	X		
G0079	Abandon				Abandon 2015
G0080	Annual	X	X		
G0081	Annual	X	X		
G0082	Annual	X	X		
G0083	Annual	X	X		
G0084	Annual	X	X		
G0085	Annual	X	X		
G0086	Annual	X	X		
G0087	Annual	X	X		
G0088	Annual	X	X		
G0089	Annual	X	X		
G0090	Annual	X	X		
G0091	Abandon				Abandon 2015
G0092	Abandon				Abandon 2015
G0093	Annual	X	X		

TABLE
SAMPLING RECOMMENDATIONS
OU1 ON-POST MONITORING WELL AND PIEZOMETER LOCATIONS
CORNHUSKER ARMY AMMUNITION PLANT

Well Number	Frequency	Explosives (+MNX) ¹	Field NA Parameters ²	Laboratory NA Parameters ³	Notes
G0094	Annual	X	X		
G0095	Annual	X	X		
G0096	Annual	X	X		
G0097	Annual	X	X		
G0098	Annual	X	X		
G0099	Annual	X	X		
G0100	Annual	X	X		
G0101	Annual	X	X		
G0102	Annual	X	X		
G0103	Annual	X	X		
G0104	Annual	X	X		
G0105	Annual	X	X		
G0106	Annual	X	X		
G0107	Annual	X	X		
G0108	Annual	X	X		
G0109	Annual	X	X		
G0110	Annual	X	X		
G0111	Annual	X	X		
G0112*	Annual	X	X		
G0113*	Annual	X	X		
G0114*	Annual	X	X		
G0115*	Annual	X	X		
G0116*	Annual	X	X		
G0117*	Annual	X	X		
PZ001	Abandon				Abandon 2015
PZ004	Annual	X	X		
PZ005	5-year				Sampling scheduled 2018
PZ007	5-year				Sampling scheduled 2018
PZ009	Annual	X	X		
PZ010	Annual	X	X		
PZ011	Annual	X	X		
PZ012	Annual	X	X		
PZ013	Annual	X	X		
PZ014	Annual	X	X		
PZ015	Annual	X	X		
PZ016	Annual	X	X		
PZ017R	Annual	X	X		
PZ018	Annual	X	X		
PZ019	Abandon				Abandon 2015
PZ020	Annual	X	X		

Notes:

*To be installed November 2013.

¹Explosives will include the standard compounds for USEPA Method 8330 plus the addition of MNX.

²Field NA parameters will include: dissolved oxygen, oxidation/reduction potential, ferrous iron, specific conductance, turbidity, pH, and temperature.

³Laboratory NA parameters will not be collected

MNX = mono-nitroso-RDX

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

NA = natural attenuation

USEPA = U.S. Environmental Protection Agency

OU = Operable Unit

C.1 Explosives**C.1.3 OU1 OFF-POST CA WELLS**

WELL	TABLE
CA210	C.1.3-1
CA211	C.1.3-2
CA212	C.1.3-3
CA213	C.1.3-4
CA220	C.1.3-5
CA221	C.1.3-6
CA222	C.1.3-7
CA230	C.1.3-8
CA231	C.1.3-9
CA232	C.1.3-10
CA240	C.1.3-11
CA241	C.1.3-12
CA242	C.1.3-13
CA250	C.1.3-14
CA251	C.1.3-15
CA252	C.1.3-16
CA253	C.1.3-17
CA260	C.1.3-18
CA261	C.1.3-19
CA262	C.1.3-20
CA270	C.1.3-21
CA271	C.1.3-22
CA272	C.1.3-23
CA273	C.1.3-24
CA280	C.1.3-25
CA281	C.1.3-26
CA282	C.1.3-27
CA290/CA290R	C.1.3-28
CA291/CA291R	C.1.3-29
CA292/CA292R	C.1.3-30
CA310	C.1.3-31
CA311	C.1.3-32
CA312	C.1.3-33
CA313	C.1.3-34
CA322	C.1.3-35
CA330	C.1.3-36
CA331	C.1.3-37
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TABLE C.1.3-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA210-EXPLOSIVES

FIELD ID	CA210			CA210			CA210			CA210			CA210			CA210			CA210				
METHOD	Maximum	Detection	SW846 M8330	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330				
COLLECT DATE	Detection	Frequency	None	3/9/2012			3/4/2011			3/11/2010			3/5/2009			3/7/2008			None				
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17				<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.47	U			
1,3-Dinitrobenzene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.47	U			
2,4,6-Trinitrotoluene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.47	U			
2,4-Dinitrotoluene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.47	U			
2,6-Dinitrotoluene	-	0 / 17	No 2013 Sample Well Dry			<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U	No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U			
2-Nitrotoluene	-	0 / 13				<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.47	U			
3-Nitrotoluene	-	0 / 13				<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.47	U			
4-Amino-2,6-dinitrotoluene	-	0 / 14				<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U			
4-Nitrotoluene	-	0 / 13				<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.47	U			
HMX	2.74	6 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.47	U			
MNX	-	0 / 5				<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.47	U			
Nitrobenzene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.47	U			
RDX	2.64	6 / 17				<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U			
Tetryl	-	0 / 15				<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.47	U			

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA210-EXPLOSIVES

FIELD ID			CA210			CA210			CA210			CA210			CA210			CA210			CA210		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			3/14/2003			3/19/2002			3/19/2001			3/10/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17										<	0.27	U	<	0.58	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 17										<	0.18	U	<	0.39	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 17										<	0.22	U	<	0.48	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 17										<	0.18	U	<	0.39	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 17	No 2006 Sample			No 2005 Sample			No 2004 Sample			<	0.69	U	<	1.5	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 17	Well Dry			Well Dry			Well Dry			<	0.28	U	<	0.60	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 13										<	0.55	U	<	1.2	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 13										<	0.35	U	<	0.75	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 14										<	0.47	U	<	1.0	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 13										<	1.1	U	<	2.4	U	<	0.8	U	<	1.1	U
HMX	2.74	6 / 17										<	0.76	U	<	1.6	U	<	1	U	0.51	0.8	J
MNX	-	0 / 5										NA			NA			NA			NA		
Nitrobenzene	-	0 / 17										<	0.31	U	<	0.68	U	<	0.8	U	<	0.8	U
RDX	2.64	6 / 17										0.15	0.45	J	<	0.97	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 15										<	0.74	U	<	1.6	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA210-EXPLOSIVES

FIELD ID			CA210			CA210			CA210			CA210			CA210			CA210			CA210		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/24/1999			6/16/1998			10/2/1997			12/10/1996			7/16/1994			6/13/1994			10/8/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 13	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 13	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA		<	0.414	U		NA	
4-Nitrotoluene	-	0 / 13	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	2.74	6 / 17	1.08	0.8		<	0.500	U	0.466	0.16		0.41	0.16		<	0.563	U	1.48	NRL		<	1.21	U
MNX	-	0 / 5		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.64	6 / 17	0.55	0.8	J	<	1.00	U	<	0.558	U	<	0.558	U	0.903	NRL		1.6	NRL		1.6	NRL	
Tetryl	-	0 / 15	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA210-EXPLOSIVES

FIELD ID			CA210		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/1/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 17	<	0.449	U
1,3-Dinitrobenzene	-	0 / 17	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.635	U
2,4-Dinitrotoluene	-	0 / 17	<	0.064	U
2,6-Dinitrotoluene	-	0 / 17	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 17	<	0.158	U
2-Nitrotoluene	-	0 / 13		NA	
3-Nitrotoluene	-	0 / 13		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 14		NA	
4-Nitrotoluene	-	0 / 13		NA	
HMX	2.74	6 / 17	2.74	NRL	
MNX	-	0 / 5		NA	
Nitrobenzene	-	0 / 17	<	0.645	U
RDX	2.64	6 / 17	2.64	NRL	
Tetryl	-	0 / 15		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA211-EXPLOSIVES

FIELD ID			CA211			CA211			CA211			CA211			CA211			CA211			CA211		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/1/2012			3/4/2011			3/11/2010			3/5/2009			3/7/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.5	U
1,3-Dinitrobenzene	1.03	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.5	U
HMX	2.78	22 / 22	0.23	0.8	J	0.25	0.8	J	0.29	0.8	J	0.48	0.4		0.78	0.48		0.78	0.47		0.97	0.5	
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.5	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
RDX	5.12	12 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA211-EXPLOSIVES

FIELD ID			CA211			CA211			CA211			CA211			CA211			CA211			CA211		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/10/2005			3/12/2004			3/14/2003			3/19/2002			3/19/2001			3/10/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.39	U	<	0.24	U	<	0.28	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	1.03	1 / 22	<	0.48	U	<	0.5	U	<	0.39	U	<	0.16	U	<	0.18	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.39	U	<	0.2	U	<	0.23	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.76	U	<	0.16	U	<	0.18	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.76	U	<	0.62	U	<	0.71	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.76	U	<	0.25	U	<	0.29	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.76	U	<	0.49	U	<	0.56	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.76	U	<	0.31	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.76	U	<	0.42	U	<	0.48	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	1.2	U	<	1	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	2.78	22 / 22	0.9	0.48		0.88	0.5		1.3	0.96		1.3	0.68		1.3	0.78		1.3	1		1	0.8	
MNX	-	0 / 10	<	0.48	U	<	0.5	U	<	0.39	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.39	U	<	0.28	U	<	0.32	U	<	0.8	U	<	0.8	U
RDX	5.12	12 / 22	<	0.48	U	0.32	0.5	J	0.54	0.39		0.74	0.4		0.99	0.46		0.52	0.8	J	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.5	U	<	0.76	U	<	0.66	U	<	0.76	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA211-EXPLOSIVES

FIELD ID			CA211			CA211			CA211			CA211			CA211			CA211			CA211		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/24/1999			6/16/1998			10/2/1997			12/10/1996			7/16/1994			6/13/1994			10/8/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	1.03	1 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	1.03	NRL		<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	2.78	22 / 22	1.68	0.8		1.16	0.500	J*	1.74	0.16		1.8	0.16		2.38	NRL		2.47	NRL		2.78	NRL	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	5.12	12 / 22	1.27	0.8	J	1.66	1.00	J*	1.66	0.558		<	0.558	U	2.88	NRL		3.9	NRL		5.12	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA211-EXPLOSIVES

FIELD ID			CA211		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/4/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	1.03	1 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	2.78	22 / 22	2.45	NRL	
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	5.12	12 / 22	4.21	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA212-EXPLOSIVES

FIELD ID			CA212			CA212			CA212			CA212			CA212			CA212			CA212		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/1/2012			3/4/2011			3/11/2010			3/5/2009			3/7/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	0.63	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	0.952	10 / 22	0.14	0.8	J	0.11	0.8	J	<	0.8	U	0.16	0.4	J	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	1.13	2 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA212-EXPLOSIVES

FIELD ID			CA212			CA212			CA212			CA212			CA212			CA212			CA212		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/10/2005			3/12/2004			3/14/2003			3/19/2002			3/19/2001			3/10/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.52	U	<	0.29	U	<	0.29	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	0.63	1 / 22	<	0.48	U	<	0.52	U	<	0.29	U	<	0.19	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.52	U	<	0.29	U	<	0.24	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.52	U	<	0.56	U	<	0.19	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.52	U	<	0.56	U	<	0.74	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.52	U	<	0.56	U	<	0.3	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.52	U	<	0.56	U	<	0.59	U	<	0.86	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.52	U	<	0.56	U	<	0.37	U	<	0.54	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.52	U	<	0.56	U	<	0.5	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.52	U	<	0.9	U	<	1.2	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	0.952	10 / 22	<	0.48	U	<	0.52	U	0.45	0.7	J	0.39	0.82	J	<	1.2	U	<	1	U	0.4	0.8	J
MNX	-	0 / 10	<	0.48	U	<	0.52	U	<	0.29	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.52	U	<	0.29	U	<	0.34	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	1.13	2 / 22	<	0.48	U	<	0.52	U	<	0.29	U	0.31	0.48	J	<	0.70	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.52	U	<	0.56	U	<	0.79	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA212-EXPLOSIVES

FIELD ID			CA212			CA212			CA212			CA212			CA212			CA212			CA212		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/24/1999			6/16/1998			10/2/1997			12/10/1996			7/17/1994			6/12/1994			10/8/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	0.63	1 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	0.63	NRL		<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	0.952	10 / 22	<	0.8	U	<	0.500	U	0.66	0.16		0.45	0.16		0.952	NRL		0.668	NRL		<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	1.13	2 / 22	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	1.13	NRL		<	0.412	U	<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA212-EXPLOSIVES

FIELD ID			CA212		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/4/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	0.63	1 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	0.952	10 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	1.13	2 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA213-EXPLOSIVES

FIELD ID			CA213			CA213			CA213			CA213			CA213			CA213			CA213		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/1/2012			3/4/2011			3/11/2010			3/5/2009			3/7/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA213-EXPLOSIVES

FIELD ID			CA213			CA213			CA213			CA213			CA213			CA213			CA213		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/10/2005			3/12/2004			3/14/2003			3/19/2002			3/19/2001			3/10/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.51	U	<	0.24	U	<	0.36	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.51	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.51	U	<	0.2	U	<	0.30	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.99	U	<	0.16	U	<	0.24	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.99	U	<	0.62	U	<	0.93	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.99	U	<	0.25	U	<	0.38	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.99	U	<	0.49	U	<	0.74	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.99	U	<	0.31	U	<	0.46	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.99	U	<	0.42	U	<	0.63	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	1.6	U	<	1	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.49	U	<	1.2	U	<	0.68	U	<	1.0	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.49	U	<	0.51	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.51	U	<	0.28	U	<	0.42	U	<	0.8	U	<	0.8	U
RDX	-	0 / 22	<	0.48	U	<	0.49	U	<	0.51	U	<	0.4	U	<	0.60	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.49	U	<	0.99	U	<	0.66	U	<	0.99	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA213-EXPLOSIVES

FIELD ID			CA213			CA213			CA213			CA213			CA213			CA213			CA213		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/24/1999			6/16/1998			10/2/1997			12/10/1996			7/17/1994			6/12/1994			10/7/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 22	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA213-EXPLOSIVES

FIELD ID			CA213		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	-	0 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	-	0 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA220-EXPLOSIVES

FIELD ID			CA220			CA220			CA220			CA220			CA220			CA220			CA220		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			None			None			None			3/18/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 9																			<	0.46	U
1,3-Dinitrobenzene	-	0 / 9																			<	0.31	U
2,4,6-Trinitrotoluene	-	0 / 9																			<	0.38	U
2,4-Dinitrotoluene	-	0 / 9																			<	0.31	U
2,6-Dinitrotoluene	-	0 / 9	Abandoned			No 2007 Sample			No 2006 Sample			No 2005 Sample			No 2004 Sample			No 2003 Sample			<	1.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 9	2008			Well Dry			Well Dry			Well Dry			Well Dry			Well Dry			<	0.48	U
2-Nitrotoluene	-	0 / 5																			<	0.94	U
3-Nitrotoluene	-	0 / 5																			<	0.59	U
4-Amino-2,6-dinitrotoluene	-	0 / 5																			<	0.81	U
4-Nitrotoluene	-	0 / 5																			<	1.9	U
HMX	-	0 / 9																			<	1.3	U
MNX	-	0 / 0																				NA	
Nitrobenzene	-	0 / 9																			<	0.54	U
RDX	-	0 / 9																			<	0.77	U
Tetryl	-	0 / 7																			<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA220-EXPLOSIVES

FIELD ID			CA220			CA220			CA220			CA220			CA220			CA220			CA220		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/20/2001			3/10/2000			3/23/1999			6/13/1998			7/14/1994			6/11/1994			10/10/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 9	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 5	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 5	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 5	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 5	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
HMX	-	0 / 9	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 0		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 7	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA220-EXPLOSIVES

FIELD ID				CA220	
METHOD	Maximum	Detection		UW32	
COLLECT DATE	Detection	Frequency		9/2/1992	
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 9	<	0.449	U
1,3-Dinitrobenzene	-	0 / 9	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 9	<	0.635	U
2,4-Dinitrotoluene	-	0 / 9	<	0.064	U
2,6-Dinitrotoluene	-	0 / 9	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 9	<	0.158	U
2-Nitrotoluene	-	0 / 5		NA	
3-Nitrotoluene	-	0 / 5		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 5		NA	
4-Nitrotoluene	-	0 / 5		NA	
HMX	-	0 / 9	<	1.21	U
MNX	-	0 / 0		NA	
Nitrobenzene	-	0 / 9	<	0.645	U
RDX	-	0 / 9	<	1.17	U
Tetryl	-	0 / 7		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA221-EXPLOSIVES

FIELD ID			CA221			CA221			CA221			CA221			CA221			CA221			CA221		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			3/13/2006			3/14/2005			3/11/2004			3/14/2003			3/18/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.4	U	<	0.26	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.4	U	<	0.18	U	<	0.32	U
2,4,6-Trinitrotoluene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.4	U	<	0.22	U	<	0.40	U
2,4-Dinitrotoluene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.78	U	<	0.18	U	<	0.32	U
2,6-Dinitrotoluene	-	0 / 13	Abandoned 2008			Not Sampled in 2007			<	0.48	U	<	0.48	U	<	0.78	U	<	0.68	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.78	U	<	0.28	U	<	0.50	U
2-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.78	U	<	0.54	U	<	0.98	U
3-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.78	U	<	0.34	U	<	0.62	U
4-Amino-2,6-dinitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.78	U	<	0.46	U	<	0.84	U
4-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	1.3	U	<	1.1	U	<	2.0	U
HMX	-	0 / 13							<	0.48	U	<	0.48	U	<	0.98	U	<	0.75	U	<	1.4	U
MNX	-	0 / 3								0.48	U	<	0.48	U	<	0.4	U		NA			NA	
Nitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.4	U	<	0.31	U	<	0.56	U
RDX	0.543	2 / 13							<	0.48	U	<	0.48	U	<	0.4	U	0.19	0.44	J	<	0.80	U
Tetryl	-	0 / 11							<	0.48	U	<	0.48	U	<	0.78	U	<	0.73	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA221-EXPLOSIVES

FIELD ID			CA221			CA221			CA221			CA221			CA221			CA221			CA221		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/20/2001			3/10/2000			3/23/1999			6/13/1998			7/14/1994			6/11/1994			10/10/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 13	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
HMX	-	0 / 13	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 3		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.543	2 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	0.543	NRL		<	0.412	U	<	1.17	U
Tetryl	-	0 / 11	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA221-EXPLOSIVES

FIELD ID	CA221				
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/2/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 13	<	0.449	U
1,3-Dinitrobenzene	-	0 / 13	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.635	U
2,4-Dinitrotoluene	-	0 / 13	<	0.064	U
2,6-Dinitrotoluene	-	0 / 13	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 13	<	0.158	U
2-Nitrotoluene	-	0 / 9		NA	
3-Nitrotoluene	-	0 / 9		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9		NA	
4-Nitrotoluene	-	0 / 9		NA	
HMX	-	0 / 13	<	1.21	U
MNX	-	0 / 3		NA	
Nitrobenzene	-	0 / 13	<	0.645	U
RDX	0.543	2 / 13	<	1.17	U
Tetryl	-	0 / 11		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA222-EXPLOSIVES

FIELD ID			CA222			CA222			CA222			CA222			CA222			CA222			CA222		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			3/13/2006			3/14/2005			3/11/2004			3/14/2003			3/18/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.28	U	<	0.24	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.28	U	<	0.16	U	<	0.32	U
2,4,6-Trinitrotoluene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.28	U	<	0.2	U	<	0.40	U
2,4-Dinitrotoluene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.54	U	<	0.16	U	<	0.32	U
2,6-Dinitrotoluene	-	0 / 13	Abandoned 2008			Not Sampled in 2007			<	0.48	U	<	0.48	U	<	0.54	U	<	0.62	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.54	U	<	0.25	U	<	0.50	U
2-Nitrotoluene	0.26 J	1 / 9							<	0.48	U	<	0.48	U	<	0.54	U	<	0.49	U	<	0.98	U
3-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.54	U	<	0.31	U	<	0.62	U
4-Amino-2,6-dinitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.54	U	<	0.42	U	<	0.84	U
4-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.87	U	<	1	U	<	2.0	U
HMX	-	0 / 13							<	0.48	U	<	0.48	U	<	0.68	U	<	0.68	U	<	1.4	U
MNX	-	0 / 3							<	0.48	U	<	0.48	U	<	0.28	U		NA			NA	
Nitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.28	U	<	0.28	U	<	0.56	U
RDX	0.17 J	1 / 13							<	0.48	U	<	0.48	U	<	0.28	U	0.17	0.4	J	<	0.80	U
Tetryl	-	0 / 11							<	0.48	U	<	0.48	U	<	0.54	U	<	0.66	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA222-EXPLOSIVES

FIELD ID			CA222			CA222			CA222			CA222			CA222			CA222			CA222		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/20/2001			3/10/2000			3/23/1999			6/13/1998			7/14/1994			6/11/1994			10/9/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 13	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	0.26 J	1 / 9	0.26	0.8	J	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
HMX	-	0 / 13	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 3		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.17 J	1 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 11	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA222-EXPLOSIVES

FIELD ID				CA222	
METHOD	Maximum	Detection		UW32	
COLLECT DATE	Detection	Frequency		9/2/1992	
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 13	<	0.449	U
1,3-Dinitrobenzene	-	0 / 13	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.635	U
2,4-Dinitrotoluene	-	0 / 13	<	0.064	U
2,6-Dinitrotoluene	-	0 / 13	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 13	<	0.158	U
2-Nitrotoluene	0.26 J	1 / 9		NA	
3-Nitrotoluene	-	0 / 9		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9		NA	
4-Nitrotoluene	-	0 / 9		NA	
HMX	-	0 / 13	<	1.21	U
MNX	-	0 / 3		NA	
Nitrobenzene	-	0 / 13	<	0.645	U
RDX	0.17 J	1 / 13	<	1.17	U
Tetryl	-	0 / 11		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA230-EXPLOSIVES

FIELD ID			CA230			CA230			CA230			CA230			CA230			CA230			CA230		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			3/13/2003			3/15/2002			3/19/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 10										<	0.24	U	<	0.28	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 10										<	0.16	U	<	0.19	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 10										<	0.2	U	<	0.23	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 10										<	0.16	U	<	0.19	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 10	Abandoned 2005			No 2005 Sample Well Dry			No 2004 Sample Well Dry			<	0.62	U	<	0.72	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 10										<	0.25	U	<	0.29	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 6										<	0.49	U	<	0.57	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 6										<	0.31	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 6										<	0.42	U	<	0.49	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 6										<	1	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	-	0 / 10										<	0.68	U	<	0.79	U	<	1	U	<	0.8	U
MNX	-	0 / 0											NA			NA			NA			NA	
Nitrobenzene	-	0 / 10										<	0.28	U	<	0.33	U	<	0.8	U	<	0.8	U
RDX	-	0 / 10										<	0.4	U	<	0.47	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 8										<	0.66	U	<	0.77	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA230-EXPLOSIVES

FIELD ID	CA230					CA230			CA230			CA230			CA230			CA230		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/19/1999			6/12/1998			7/14/1994			6/21/1994			10/10/1992			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 10	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 6	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 6	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 6	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 6	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 10	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 0		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 10	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 10	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 8	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA231-EXPLOSIVES

FIELD ID			CA231			CA231			CA231			CA231			CA231			CA231			CA231		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/10/2005			3/12/2004			3/13/2003			3/15/2002			3/19/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12				<	0.52	U	<	0.4	U	<	0.31	U	<	0.66	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 12				<	0.52	U	<	0.4	U	<	0.21	U	<	0.44	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 12				<	0.52	U	<	0.4	U	<	0.26	U	<	0.55	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 12				<	0.52	U	<	0.78	U	<	0.21	U	<	0.44	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 12	Abandoned 2005			<	0.52	U	<	0.78	U	<	0.8	U	<	1.7	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 12				<	0.52	U	<	0.78	U	<	0.32	U	<	0.69	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 8				<	0.52	U	<	0.78	U	<	0.63	U	<	1.3	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 8				<	0.52	U	<	0.78	U	<	0.4	U	<	0.85	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 8				<	0.52	U	<	0.78	U	<	0.54	U	<	1.2	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 8				<	0.52	U	<	1.3	U	<	1.3	U	<	2.8	U	<	0.8	U	<	1.1	U
HMX	-	0 / 12				<	0.52	U	<	0.98	U	<	0.87	U	<	1.9	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.52	U	<	0.4	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 12				<	0.52	U	<	0.4	U	<	0.36	U	<	0.77	U	<	0.8	U	<	0.8	U
RDX	-	0 / 12				<	0.52	U	<	0.4	U	<	0.51	U	<	1.1	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 10				<	0.52	U	<	0.78	U	<	0.85	U	<	1.8	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA231-EXPLOSIVES

FIELD ID	CA231					CA231			CA231			CA231			CA231			CA231		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/19/1999			6/12/1998			7/14/1994			6/21/1994			10/10/1992			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U	<	1.000	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 12	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 2		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 12	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 10	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA232-EXPLOSIVES

FIELD ID	CA232			CA232			CA232			CA232			CA232			CA232			CA232				
METHOD	Maximum	Detection	SW846 M8330	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330				
COLLECT DATE	Detection	Frequency	None	3/10/2005			3/12/2004			3/13/2003			3/15/2002			3/19/2001			3/9/2000				
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual			
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12				<	0.48	U	<	0.39	U	<	0.32	U	<	0.44	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	0.575	2 / 12				<	0.48	U	<	0.39	U	<	0.21	U	<	0.29	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 12				<	0.48	U	<	0.39	U	<	0.26	U	<	0.37	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 12				<	0.48	U	<	0.76	U	<	0.21	U	<	0.29	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 12	Abandoned 2005			<	0.48	U	<	0.76	U	<	0.82	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 12		<	0.48	U	<	0.76	U	<	0.33	U	<	0.46	U	<	0.8	U	<	1	U		
2-Nitrotoluene	-	0 / 8		<	0.48	U	<	0.76	U	<	0.65	U	<	0.90	U	<	0.8	U	<	1.1	U		
3-Nitrotoluene	-	0 / 8		<	0.48	U	<	0.76	U	<	0.41	U	<	0.57	U	<	0.8	U	<	1.1	U		
4-Amino-2,6-dinitrotoluene	-	0 / 8		<	0.48	U	<	0.76	U	<	0.55	U	<	0.77	U	<	0.8	U	<	1	U		
4-Nitrotoluene	-	0 / 8				<	0.48	U	<	1.2	U	<	1.3	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	-	0 / 12				<	0.48	U	<	0.96	U	<	0.9	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.48	U	<	0.39	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 12				<	0.48	U	<	0.39	U	<	0.37	U	<	0.51	U	<	0.8	U	<	0.8	U
RDX	-	0 / 12				<	0.48	U	<	0.39	U	<	0.53	U	<	0.73	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 10				<	0.48	U	<	0.76	U	<	0.87	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA232-EXPLOSIVES

FIELD ID	CA232					CA232			CA232			CA232			CA232			CA232		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/19/1999			6/12/1998			7/14/1994			6/21/1994			10/10/1992			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	0.575	2 / 12	<	0.8	U	<	0.500	U	0.543	NRL		0.575	NRL		<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.63	U
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 12	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 2		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 12	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 10	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA240-EXPLOSIVES

FIELD ID			CA240			CA240			CA240			CA240			CA240			CA240			CA240		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			2/29/2012			3/3/2011			3/12/2010			3/5/2009			3/6/2008			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14				<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U			
1,3-Dinitrobenzene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U			
2,4,6-Trinitrotoluene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U			
2,4-Dinitrotoluene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U			
2,6-Dinitrotoluene	-	0 / 14	No 2013 Sample Well Dry			<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
2-Nitrotoluene	-	0 / 10				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U			
3-Nitrotoluene	-	0 / 10				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U			
4-Amino-2,6-dinitrotoluene	-	0 / 10				<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
4-Nitrotoluene	-	0 / 10				<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U			
HMX	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U			
MNX	-	0 / 5				<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U			
Nitrobenzene	-	0 / 14				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U			
RDX	-	0 / 14				<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
Tetryl	-	0 / 12				<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U			

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA240-EXPLOSIVES

FIELD ID			CA240			CA240			CA240			CA240			CA240			CA240			CA240		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			None			3/18/2002			3/28/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14													<	0.47	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 14													<	0.31	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 14													<	0.39	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 14													<	0.31	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 14	No 2006 Sample			No 2005 Sample			No 2004 Sample			No 2003 Sample			<	1.2	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	Well Dry			Well Dry			Well Dry			Well Dry			<	0.49	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 10													<	0.96	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 10													<	0.61	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 10													<	0.83	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 10													<	2.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 14													<	1.3	U	<	1	U	<	0.8	U
MNX	-	0 / 5														NA			NA			NA	
Nitrobenzene	-	0 / 14													<	0.55	U	<	0.8	U	<	0.8	U
RDX	-	0 / 14													<	0.79	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 12													<	1.3	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA240-EXPLOSIVES

FIELD ID	CA240					CA240			CA240			CA240			CA240			CA240		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/24/1999			6/13/1998			7/14/1994			6/10/1994			10/9/1992			9/4/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 10	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 14	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 5		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 14	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 12	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA241-EXPLOSIVES

FIELD ID			CA241			CA241			CA241			CA241			CA241			CA241			CA241		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			2/29/2012			3/3/2011			3/12/2010			3/5/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.5	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.5	U
HMX	0.098 J	1 / 20	<	0.8	U	0.098	0.8	J	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.47	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.5	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.5	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA241-EXPLOSIVES

FIELD ID			CA241			CA241			CA241			CA241			CA241			CA241			CA241		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/11/2005			3/11/2004			3/13/2003			3/18/2002			3/28/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.26	U	<	0.28	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.18	U	<	0.18	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.23	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.59	U	<	0.18	U	<	0.18	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.59	U	<	0.68	U	<	0.71	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.59	U	<	0.28	U	<	0.29	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.54	U	<	0.56	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.34	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.59	U	<	0.46	U	<	0.48	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.96	U	<	1.1	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	0.098 J	1 / 20	<	0.48	U	<	0.48	U	<	0.75	U	<	0.75	U	<	0.78	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.31	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.32	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.44	U	<	0.46	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.48	U	<	0.59	U	<	0.73	U	<	0.76	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA241-EXPLOSIVES

FIELD ID	CA241					CA241			CA241			CA241			CA241			CA241		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/24/1999			6/13/1998			7/14/1994			6/10/1994			10/9/1992			9/4/1992		
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	0.098 J	1 / 20	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 20	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 18	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA242-EXPLOSIVES

FIELD ID			CA242			CA242			CA242			CA242			CA242			CA242			CA242		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			2/29/2012			3/3/2011			3/12/2010			3/5/2009			3/6/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA242-EXPLOSIVES

FIELD ID			CA242			CA242			CA242			CA242			CA242			CA242			CA242		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/11/2005			3/10/2004			3/13/2003			3/18/2002			3/28/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.63	U	<	0.24	U	<	0.41	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.63	U	<	0.16	U	<	0.27	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.63	U	<	0.2	U	<	0.34	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	1.2	U	<	0.16	U	<	0.27	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	1.2	U	<	0.62	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	1.2	U	<	0.25	U	<	0.43	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	1.2	U	<	0.49	U	<	0.83	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	1.2	U	<	0.31	U	<	0.53	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	1.2	U	<	0.42	U	<	0.71	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	2	U	<	1	U	<	1.7	U	<	0.8	U	<	1.1	U
HMX	-	0 / 20	<	0.48	U	<	0.48	U	<	1.5	U	<	0.68	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.63	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.63	U	<	0.28	U	<	0.48	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.63	U	<	0.4	U	<	0.68	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.48	U	<	1.2	U	<	0.66	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA242-EXPLOSIVES

FIELD ID	CA242					CA242			CA242			CA242			CA242			CA242		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/24/1999			6/13/1998			7/10/1994			6/14/1994			10/9/1992			9/4/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 20	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 20	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 18	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA250-EXPLOSIVES

FIELD ID			CA250			CA250			CA250			CA250			CA250			CA250			CA250		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/28/2012			3/2/2011			3/10/2010			3/4/2009			3/5/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.49	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.49	U	<	0.48	U
HMX	0.89 J	9 / 22	0.11	0.8	J	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.48	U
RDX	2.62	11 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.48	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA250-EXPLOSIVES

FIELD ID			CA250			CA250			CA250			CA250			CA250			CA250			CA250		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/9/2005			3/16/2004			3/12/2003			3/14/2002			3/15/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.40	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.38	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.38	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.38	U	<	0.41	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.38	U	<	0.81	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.38	U	<	0.51	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.38	U	<	0.69	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.5	U	<	0.62	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.89 J	9 / 22	<	0.48	U	<	0.48	U	0.37	0.39	J	0.67	0.48		0.89	1.1	J	0.75	1	J	0.64	0.8	J
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.46	U	<	0.8	U	<	0.8	U
RDX	2.62	11 / 22	<	0.48	U	<	0.48	U	0.35	0.16		0.5	0.2		0.87	0.66		0.69	0.8	J	0.62	0.8	J
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.38	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA250-EXPLOSIVES

FIELD ID			CA250			CA250			CA250			CA250			CA250			CA250			CA250		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/22/1999			6/15/1998			10/3/1997			12/15/1996			7/15/1994			6/11/1994			10/8/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U		NA		<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	0.89 J	9 / 22	<	0.8	U	<	0.500	U	0.542	0.16		0.61	0.16		0.8	NRL		<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.62	11 / 22	0.854	0.8		<	1.00	U	1.09	0.558		<	0.558	U	1.29	NRL		0.681	NRL		2.62	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA250-EXPLOSIVES

FIELD ID			CA250		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 21	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	0.89 J	9 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	2.62	11 / 22	2.2	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA251-EXPLOSIVES

FIELD ID			CA251			CA251			CA251			CA251			CA251			CA251			CA251		
METHOD	Maximum	Detection	SW846 M8329			SW846 M8329			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/28/2012			3/2/2011			3/10/2010			3/4/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.31	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.5	U
HMX	6.27	19 / 22	0.29	0.8	J	<	0.8	U	0.58	0.8	J	0.98	0.4		1	0.48		0.96	0.49		<	0.5	U
MNX	-	1 / 10	<	0.8	U	0.44	0.8	J	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.5	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.5	U
RDX	28	19 / 22	<	0.8	U	0.12	0.8	J	0.91	0.8		0.29	0.2		<	0.48	U	1.2	0.49		<	0.5	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA251-EXPLOSIVES

FIELD ID			CA251			CA251			CA251			CA251			CA251			CA251			CA251		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/9/2005			3/10/2004			3/12/2003			3/14/2002			3/15/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.31	1 / 22	<	0.48	U	<	0.49	U	<	0.38	U	<	0.28	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.38	U	<	0.28	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.38	U	<	0.28	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.73	U	<	0.54	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.73	U	<	0.54	U	<	0.99	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.73	U	<	0.54	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.73	U	<	0.54	U	<	0.78	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.73	U	<	0.54	U	<	0.50	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.73	U	<	0.54	U	<	0.67	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	1.2	U	<	0.87	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	6.27	19 / 22	<	0.48	U	0.89	0.49		1.2	0.92		1.4	0.68		2.0	1.1		1.6	1		3.4	0.8	
MNX	-	1 / 10	<	0.48	U	<	0.49	U	<	0.38	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.38	U	<	0.28	U	<	0.45	U	<	0.8	U	<	0.8	U
RDX	28	19 / 22	0.64	0.48		1.1	0.49		2	0.38		3.3	0.28		3.9	0.64		3.9	0.8		5.6	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.49	U	<	0.73	U	<	0.54	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA251-EXPLOSIVES

FIELD ID				CA251			CA251			CA251			CA251			CA251			CA251			CA251		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32			
COLLECT DATE	Detection	Frequency	3/22/1999			6/15/1998			10/3/1997			12/15/1996			7/15/1994			6/10/1994			10/8/1992			
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)																								
1,3,5-Trinitrobenzene	0.31	1 / 22	<	0.8	U	<	1.00	U	<	0.125	U	0.31	0.125		<	0.425	U	<	0.425	U	<	0.449	U	
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA		
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA		
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA		
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA		
HMX	6.27	19 / 22	3.78	0.8		2.77	0.500		3.75	0.16		3.65	0.16		5.8	NRL		6.27	NRL		2.95	NRL		
MNX	-	1 / 10		NA			NA			NA			NA			NA			NA			NA		
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	
RDX	28	19 / 22	7.97	0.8		7.86	1.00		11.3	0.558		13.6	0.558		28	NRL		25	NRL		19.7	NRL		
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA251-EXPLOSIVES

FIELD ID			CA251		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/4/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	0.31	1 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	6.27	19 / 22	4.49	NRL	
MNX	-	1 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	28	19 / 22	21	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA252-EXPLOSIVES

FIELD ID			CA252			CA252			CA252			CA252			CA252			CA252			CA252		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/28/2012			3/2/2011			3/10/2010			3/4/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 19	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	5.59	22 / 22	0.72	0.8	J	0.52	0.8	J	0.48	0.8	J	0.63	0.4		0.59	0.48		2.5	0.48		2.7	0.48	
MNX	0.32 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	19.4	18 / 22	0.83	0.8	J	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	0.62	0.48		2.2	0.48	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA252-EXPLOSIVES

FIELD ID			CA252			CA252			CA252			CA252			CA252			CA252			CA252		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/9/2005			3/10/2004			3/12/2003			3/14/2002			3/15/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.27	U	<	0.30	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.27	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.27	U	<	0.25	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.8	U	<	0.53	U	<	0.20	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.8	U	<	0.53	U	<	0.79	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.8	U	<	0.53	U	<	0.32	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.8	U	<	0.53	U	<	0.62	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.8	U	<	0.53	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 19	<	0.48	U	<	0.48	U	<	0.8	U	<	0.53	U	<	0.53	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	1.3	U	<	0.85	U	<	1.3	U	<	0.8	U	<	1.1	U
HMX	5.59	22 / 22	3.3	0.48		3.6	0.48		4.1	1		4.3	0.66		4.8	0.86		3.7	1		4.2	0.8	
MNX	0.32 J	1 / 10	<	0.48	U	<	0.48	U	0.32	0.41	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.27	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	19.4	18 / 22	2.9	0.48		4	0.48		5.3	0.41		4.8	0.27		6.1	0.51		7	0.8		5.3	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.8	U	<	0.53	U	<	0.84	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA252-EXPLOSIVES

FIELD ID	CA252					CA252			CA252			CA252			CA252			CA252			CA252		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/22/1999			6/15/1998			10/3/1997			12/15/1996			7/16/1994			6/22/1994			10/8/1992		
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.954	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 19	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U	<	0.704	U		NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	5.59	22 / 22	3.48	0.8		3.17	0.500		3.11	0.16		4.6	0.16		4.81	NRL		2.92	NRL		5.59	NRL	
MNX	0.32 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	19.4	18 / 22	5.23	0.8		4.42	1.00		5.54	0.558		7.2	0.558		6.44	NRL		4.55	NRL		19.4	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA252-EXPLOSIVES

FIELD ID			CA252		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 19		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	5.59	22 / 22	5.42	NRL	
MNX	0.32 J	1 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	19.4	18 / 22	17.1	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA253-EXPLOSIVES

FIELD ID			CA253			CA253			CA253			CA253			CA253			CA253			CA253		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			2/28/2012			3/2/2011			3/8/2010			3/4/2009			3/5/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.49	U	<	0.49	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.49	U	<	0.49	U	<	0.48	U
HMX	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.49	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
RDX	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
Tetryl	-	0 / 19	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.49	U	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA253-EXPLOSIVES

FIELD ID			CA253			CA253			CA253			CA253			CA253			CA253			CA253		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/10/2005			3/10/2004			3/12/2003			3/13/2002			3/20/2001			6/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.3	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.3	U	<	0.16	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.3	U	<	0.16	U	<	0.20	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.58	U	<	0.31	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.58	U	<	0.31	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.58	U	<	0.31	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.58	U	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.58	U	<	0.31	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.58	U	<	0.31	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.93	U	<	0.5	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 21	<	0.48	U	<	0.48	U	<	0.73	U	<	0.39	U	<	0.68	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.3	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.3	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	-	0 / 21	<	0.48	U	<	0.48	U	<	0.3	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 19	<	0.48	U	<	0.48	U	<	0.58	U	<	0.31	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA253-EXPLOSIVES

FIELD ID			CA253			CA253			CA253			CA253			CA253			CA253			CA253		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/12/1998			2/18/1997			7/16/1994			6/9/1994			10/9/1992			9/7/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	1.00	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U		NA			NA			NA			NA	
HMX	-	0 / 21	<	0.8	U	<	0.500	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 21	<	0.8	U	<	1.00	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 19	<	0.8	U	<	0.500	U	<	0.253	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA260-EXPLOSIVES

FIELD ID			CA260			CA260			CA260			CA260			CA260			CA260			CA260		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/28/2012			None			3/6/2007			3/9/2006			3/9/2005			3/10/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 32	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.21	U
1,3-Dinitrobenzene	-	0 / 32	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.21	U
2,4,6-Trinitrotoluene	-	0 / 32	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.21	U
2,4-Dinitrotoluene	-	0 / 32	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.4	U
2,6-Dinitrotoluene	-	0 / 32	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.49	U	<	0.49	U	<	0.48	U	<	0.4	U
2-Amino-4,6-dinitrotoluene	-	0 / 28	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.4	U
2-Nitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.4	U
3-Nitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.4	U
4-Amino-2,6-dinitrotoluene	-	0 / 24	<	1.4	U	<	1.4	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.4	U
4-Nitrotoluene	-	0 / 28	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.64	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.5	U
MNX	-	0 / 22	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.21	U
Nitrobenzene	-	0 / 32	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.21	U
RDX	-	0 / 30	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.21	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.48	U	<	0.4	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA260-EXPLOSIVES

FIELD ID			CA260			CA260			CA260			CA260			CA260			CA260			CA260		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/12/2003			3/13/2002			3/15/2001			3/8/2000			3/18/1999			6/11/1998			7/13/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 32	<	0.21	U	<	0.33	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 32	<	0.21	U	<	0.22	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 32	<	0.21	U	<	0.27	U	<	0.8	U	<	1.5	U	<	0.8	U	<	0.500	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 32	<	0.41	U	<	0.22	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.260	U
2,6-Dinitrotoluene	-	0 / 32	<	0.41	U	<	0.85	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.260	U
2-Amino-4,6-dinitrotoluene	-	0 / 28	<	0.41	U	<	0.34	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U
2-Nitrotoluene	-	0 / 24	<	0.41	U	<	0.67	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
3-Nitrotoluene	-	0 / 24	<	0.41	U	<	0.42	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 24	<	0.41	U	<	0.57	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA	
4-Nitrotoluene	-	0 / 28	<	0.66	U	<	1.4	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
HMX	-	0 / 22	<	0.51	U	<	0.93	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U
MNX	-	0 / 22		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 32	<	0.21	U	<	0.38	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U
RDX	-	0 / 30	<	0.21	U	<	0.55	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U
Tetryl	-	0 / 14	<	0.41	U	<	0.90	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.180	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA260-EXPLOSIVES

FIELD ID			CA260			CA260			CA260		
METHOD	Maximum	Detection	UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	6/9/1994			10/9/1992			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 32	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 32	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 32	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 32	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 32	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 28	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 24		NA			NA			NA	
3-Nitrotoluene	-	0 / 24		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 24		NA			NA			NA	
4-Nitrotoluene	-	0 / 28		NA			NA			NA	
HMX	-	0 / 22	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 22		NA			NA			NA	
Nitrobenzene	-	0 / 32	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 30	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 14	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA261-EXPLOSIVES

FIELD ID			CA261			CA261			CA261			CA261			CA261			CA261			CA261		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/28/2012			None			3/6/2007			3/9/2006			3/9/2005			3/10/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.46	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.46	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.46	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.89	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.50	U	<	0.48	U	<	0.48	U	<	0.89	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.89	U
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.89	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.89	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.89	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	1.4	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	1.1	U
MNX	-	0 / 6	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.46	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.46	U
RDX	-	0 / 16	<	0.8	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.46	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U				<	0.50	U	<	0.48	U	<	0.48	U	<	0.89	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA261-EXPLOSIVES

FIELD ID			CA261			CA261			CA261			CA261			CA261			CA261			CA261		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/11/2003			3/13/2002			3/15/2001			3/8/2000			3/18/1999			6/11/1998			7/13/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.25	U	<	0.24	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 16	<	0.25	U	<	0.16	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.25	U	<	0.20	U	<	0.8	U	<	1.5	U	<	0.8	U	<	0.500	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 16	<	0.49	U	<	0.16	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 16	<	0.49	U	<	0.62	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.49	U	<	0.25	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U
2-Nitrotoluene	-	0 / 12	<	0.49	U	<	0.49	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
3-Nitrotoluene	-	0 / 12	<	0.49	U	<	0.31	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.49	U	<	0.42	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA	
4-Nitrotoluene	-	0 / 12	<	0.78	U	<	1.0	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
HMX	-	0 / 16	<	0.61	U	<	0.68	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.25	U	<	0.28	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U
RDX	-	0 / 16	<	0.25	U	<	0.40	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U
Tetryl	-	0 / 14	<	0.49	U	<	0.66	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA261-EXPLOSIVES

FIELD ID			CA261			CA261			CA261		
METHOD	Maximum	Detection	UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	6/9/1994			10/9/1992			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 16	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 16	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 16	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 16	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 12		NA			NA			NA	
3-Nitrotoluene	-	0 / 12		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12		NA			NA			NA	
4-Nitrotoluene	-	0 / 12		NA			NA			NA	
HMX	-	0 / 16	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 6		NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 16	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 14	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA262-EXPLOSIVES

FIELD ID			CA262			CA262			CA262			CA262			CA262			CA262			CA262		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			2/28/2012			None			3/6/2007			3/9/2006			3/9/2005			3/10/2004		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.34	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.34	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.34	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.66	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	Not Sampled in 2008, 2009, 2010, 2011			<	0.49	U	<	0.49	U	<	0.52	U	<	0.66	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.66	U
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.66	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.66	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.66	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	1.1	U
HMX	0.51 J	1 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	0.51	0.52	J	<	0.83	U
MNX	-	0 / 6	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.34	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.34	U
RDX	-	0 / 16	<	0.8	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.34	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U				<	0.49	U	<	0.49	U	<	0.52	U	<	0.66	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA262-EXPLOSIVES

FIELD ID			CA262			CA262			CA262			CA262			CA262			CA262			CA262		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/11/2003			3/13/2002			3/15/2001			3/8/2000			3/18/1999			6/11/1998			7/22/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.2	U	<	0.37	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 16	<	0.2	U	<	0.25	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.2	U	<	0.31	U	<	0.8	U	<	1.5	U	<	0.8	U	<	0.500	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 16	<	0.39	U	<	0.25	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 16	<	0.39	U	<	0.95	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.39	U	<	0.38	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U
2-Nitrotoluene	-	0 / 12	<	0.39	U	<	0.75	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
3-Nitrotoluene	-	0 / 12	<	0.39	U	<	0.48	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.39	U	<	0.64	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA	
4-Nitrotoluene	-	0 / 12	<	0.62	U	<	1.5	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA	
HMX	0.51 J	1 / 16	<	0.49	U	<	1.0	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.2	U	<	0.43	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U
RDX	-	0 / 16	<	0.2	U	<	0.61	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U
Tetryl	-	0 / 14	<	0.39	U	<	1.0	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA262-EXPLOSIVES

FIELD ID				CA262			CA262			CA262		
METHOD	Maximum	Detection	UW33			UW32			UW32			
COLLECT DATE	Detection	Frequency	6/22/1994			10/9/1992			9/3/1992			
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)												
1,3,5-Trinitrobenzene	-	0 / 16	<	0.425	U	<	0.449	U	<	0.449	U	
1,3-Dinitrobenzene	-	0 / 16	<	0.549	U	<	0.611	U	<	0.611	U	
2,4,6-Trinitrotoluene	-	0 / 16	<	0.451	U	<	0.635	U	<	0.635	U	
2,4-Dinitrotoluene	-	0 / 16	<	0.26	U	<	0.064	U	<	0.064	U	
2,6-Dinitrotoluene	-	0 / 16	<	0.26	U	<	0.074	U	<	0.074	U	
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.244	U	<	0.158	U	<	0.158	U	
2-Nitrotoluene	-	0 / 12		NA			NA			NA		
3-Nitrotoluene	-	0 / 12		NA			NA			NA		
4-Amino-2,6-dinitrotoluene	-	0 / 12		NA			NA			NA		
4-Nitrotoluene	-	0 / 12		NA			NA			NA		
HMX	0.51 J	1 / 16	<	0.563	U	<	1.21	U	<	1.21	U	
MNX	-	0 / 6		NA			NA			NA		
Nitrobenzene	-	0 / 16	<	0.817	U	<	0.645	U	<	0.645	U	
RDX	-	0 / 16	<	0.412	U	<	1.17	U	<	1.17	U	
Tetryl	-	0 / 14	<	1.18	U		NA			NA		

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA270-EXPLOSIVES

FIELD ID			CA270			CA270			CA270			CA270			CA270			CA270			CA270		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	2/29/2012			2/29/2012			3/2/2011			3/10/2010			3/3/2009			3/5/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.52	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.52	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.52	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
RDX	2.79	2 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
Tetryl	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.52	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA270-EXPLOSIVES

FIELD ID			CA270			CA270			CA270			CA270			CA270			CA270			CA270		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/8/2005			3/16/2004			3/12/2003			3/14/2002			3/14/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.2	U	<	0.24	U	<	0.35	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.2	U	<	0.24	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.2	U	<	0.24	U	<	0.29	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.46	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.46	U	<	0.91	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.46	U	<	0.37	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.39	U	<	0.46	U	<	0.72	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.39	U	<	0.46	U	<	0.45	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.39	U	<	0.46	U	<	0.62	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.62	U	<	0.75	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.49	U	<	0.58	U	<	1.0	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.2	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.2	U	<	0.24	U	<	0.41	U	<	0.8	U	<	0.8	U
RDX	2.79	2 / 22	<	0.48	U	<	0.48	U	<	0.2	U	<	0.24	U	<	0.59	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.39	U	<	0.46	U	<	0.97	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA270-EXPLOSIVES

FIELD ID			CA270			CA270			CA270			CA270			CA270			CA270			CA270		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/10/1998			10/1/1997			2/18/1997			7/14/1994			6/21/1994			10/6/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.79	2 / 22	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	2.62	NRL		2.79	NRL		<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA270-EXPLOSIVES

FIELD ID			CA270		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/4/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	-	0 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	2.79	2 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA271-EXPLOSIVES

FIELD ID			CA271			CA271			CA271			CA271			CA271			CA271			CA271		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/29/2012			3/2/2011			3/10/2010			3/3/2009			3/5/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.5	U
HMX	1.32	13 / 22	0.2	0.8	J	0.32	0.8	J	0.23	0.8	J	0.58	0.4		<	0.48	U	<	0.47	U	<	0.5	U
MNX	0.097 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.5	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.5	U
RDX	8.12	22 / 22	0.33	0.8	J	0.95	0.8	J	0.94	0.8		0.71	0.2		0.64	0.48		0.96	0.47		1.8	0.5	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA271-EXPLOSIVES

FIELD ID			CA271			CA271			CA271			CA271			CA271			CA271			CA271		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/8/2005			3/9/2004			3/12/2003			3/13/2002			3/14/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.18	U	<	0.22	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.18	U	<	0.22	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.18	U	<	0.22	U	<	0.20	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.34	U	<	0.42	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.34	U	<	0.42	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.34	U	<	0.42	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.34	U	<	0.42	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.34	U	<	0.42	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.34	U	<	0.42	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.55	U	<	0.68	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	1.32	13 / 22	<	0.48	U	0.69	0.48		0.71	0.43		0.62	0.53		0.78	0.68		<	1	U	0.54	0.8	J
MNX	0.097 J	1 / 10	<	0.48	U	<	0.48	U	0.097	0.18	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.18	U	<	0.22	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	8.12	22 / 22	1.4	0.48		2.5	0.48		2.6	0.18		2.4	0.22		2.8	0.40		2.8	0.8		2.9	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.34	U	<	0.42	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA271-EXPLOSIVES

FIELD ID			CA271			CA271			CA271			CA271			CA271			CA271			CA271		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/10/1998			10/1/1997			2/18/1997			7/14/1994			6/21/1994			10/6/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	1.32	13 / 22	0.879	0.8		0.636	0.500		1.06	0.16		1.32	0.16		<	0.563	U	<	0.563	U	<	1.21	U
MNX	0.097 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	8.12	22 / 22	3.04	0.8		2.39	1.00		5.49	0.558		8.12	0.558		3.44	NRL		3.02	NRL		1.94	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA271-EXPLOSIVES

FIELD ID				CA271	
METHOD	Maximum	Detection		UW32	
COLLECT DATE	Detection	Frequency		9/4/1992	
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	1.32	13 / 22	<	1.21	U
MNX	0.097 J	1 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	8.12	22 / 22	2.29	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA272-EXPLOSIVES

FIELD ID			CA272			CA272			CA272			CA272			CA272			CA272			CA272		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/29/2012			3/2/2011			3/10/2010			3/3/2009			3/5/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.52	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
2-Amino-4,6-dinitrotoluene	0.06 J	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	0.06	0.2	J	<	0.48	U	<	0.48	U	<	0.52	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Amino-2,6-dinitrotoluene	-	0 / 19	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.52	U
HMX	3.5	19 / 22	0.88	0.8	J	1	0.8		1.1	0.8		1.7	0.4		2.2	0.48		2.4	0.48		2.3	0.52	
MNX	0.37	2 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.52	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
RDX	15	22 / 22	1.5	0.8	J	2	0.8	J	2.3	0.8		2.5	0.2		4.2	0.48		4.9	0.48		6.6	0.52	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.52	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA272-EXPLOSIVES

FIELD ID			CA272			CA272			CA272			CA272			CA272			CA272			CA272		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/8/2005			3/9/2004			3/12/2003			3/13/2002			3/14/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.42	U	<	0.31	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.42	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.06 J	1 / 22	<	0.48	U	<	0.48	U	<	0.42	U	<	0.31	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.42	U	<	0.31	U	<	0.86	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.42	U	<	0.31	U	<	0.54	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 19	<	0.48	U	<	0.48	U	<	0.42	U	<	0.31	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.68	U	<	0.5	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	3.5	19 / 22	2.6	0.48		3.4	0.48		3.5	0.53		2.6	0.39		2.3	1.2		<	1	U	1.7	0.8	
MNX	0.37	2 / 10	<	0.48	U	0.29	0.48	J	0.37	0.22			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.22	U	<	0.16	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	15	22 / 22	6.4	0.48		8.3	0.48		11	0.22		9.4	1.6		11	0.70		5.9	0.8		4.3	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.42	U	<	0.31	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA272-EXPLOSIVES

FIELD ID			CA272			CA272			CA272			CA272			CA272			CA272			CA272		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/10/1998			10/1/1997			2/18/1997			7/15/1994			6/21/1994			10/6/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	1.00	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	0.06 J	1 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 19	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U	<	0.704	U		NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	3.5	19 / 22	1.39	0.8		3.44	0.500	J*	1.84	0.16		1.57	0.16		0.791	NRL		0.72	NRL		<	1.21	U
MNX	0.37	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	15	22 / 22	3.28	0.8		4.38	1.00		5.77	0.558		6.29	0.558		15	NRL		13	NRL		7.41	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA272-EXPLOSIVES

FIELD ID			CA272		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/4/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	0.06 J	1 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 19		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	3.5	19 / 22	<	1.21	U
MNX	0.37	2 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	15	22 / 22	6.95	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA273-EXPLOSIVES

FIELD ID			CA273			CA273			CA273			CA273			CA273			CA273			CA273		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/29/2012			3/2/2011			3/10/2010			3/3/2009			3/5/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA273-EXPLOSIVES

FIELD ID			CA273			CA273			CA273			CA273			CA273			CA273			CA273		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/8/2005			3/9/2004			3/12/2003			3/13/2002			3/14/2001			3/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.22	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.22	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.22	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.22	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.87	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.69	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.43	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.59	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.5	U	<	0.68	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.53	U	<	0.95	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.22	U	<	0.39	U	<	0.8	U	<	0.8	U
RDX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.22	U	<	0.56	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.92	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA273-EXPLOSIVES

FIELD ID			CA273			CA273			CA273			CA273			CA273			CA273			CA273		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/10/1998			10/1/1997			2/18/1997			7/15/1994			6/9/1994			10/6/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 22	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA273-EXPLOSIVES

FIELD ID			CA273		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	-	0 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	-	0 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA280-EXPLOSIVES

FIELD ID			CA280			CA280			CA280			CA280			CA280			CA280			CA280		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/9/2012			3/2/2011			3/8/2010			3/3/2009			3/4/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17				<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.50	U
1,3-Dinitrobenzene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U
2,4,6-Trinitrotoluene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U
2,4-Dinitrotoluene	-	1 / 17				7	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U
2,6-Dinitrotoluene	-	0 / 17	No 2013 Sample Well Dry			<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U
2-Amino-4,6-dinitrotoluene	-	0 / 17				<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U
2-Nitrotoluene	-	0 / 13				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U
3-Nitrotoluene	-	0 / 13				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U
4-Amino-2,6-dinitrotoluene	-	0 / 13				<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U
4-Nitrotoluene	-	0 / 13				<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.50	U
HMX	-	0 / 17				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U
MNX	-	0 / 7				<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.50	U
Nitrobenzene	-	0 / 16				<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.50	U
RDX	-	0 / 17				<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.50	U
Tetryl	-	0 / 15				<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.50	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA280-EXPLOSIVES

FIELD ID			CA280			CA280			CA280			CA280			CA280			CA280			CA280		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			None			None			3/11/2003			3/13/2002			3/13/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 17	<	0.48	U							<	0.21	U	<	0.32	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 17	<	0.48	U							<	0.21	U	<	0.21	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.48	U							<	0.21	U	<	0.27	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	1 / 17	<	0.48	U							<	0.4	U	<	0.21	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 17	<	0.48	U	No 2005 Sample Well Dry			No 2004 Sample Well Dry			<	0.4	U	<	0.83	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 17	<	0.48	U							<	0.4	U	<	0.33	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 13	<	0.48	U							<	0.4	U	<	0.65	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 13	<	0.48	U							<	0.4	U	<	0.41	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 13	<	0.48	U							<	0.4	U	<	0.56	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 13	<	0.48	U							<	0.64	U	<	1.3	U	<	0.8	U	<	1.1	U
HMX	-	0 / 17	<	0.48	U							<	0.5	U	<	0.91	U	<	1	U	<	0.8	U
MNX	-	0 / 7	<	0.48	U								NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U							<	0.21	U	<	0.37	U	<	0.8	U	<	0.8	U
RDX	-	0 / 17	<	0.48	U							<	0.21	U	<	0.53	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 15	<	0.48	U							<	0.4	U	<	0.88	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA280-EXPLOSIVES

FIELD ID	CA280			CA280			CA280			CA280			CA280			CA280				
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/18/1999			6/11/1998			7/12/1994			6/9/1994			10/6/1992			9/6/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	1 / 17	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 13	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 13	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 13	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 13	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 17	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 7		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U		NA	
RDX	-	0 / 17	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 15	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA281-EXPLOSIVES

FIELD ID			CA281			CA281			CA281			CA281			CA281			CA281			CA281		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/27/2012			3/2/2011			3/8/2010			3/3/2009			3/4/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.53	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.53	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.53	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.53	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.53	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.53	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.53	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.53	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.53	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.53	U
HMX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.53	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.53	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.53	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.53	U
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.53	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA281-EXPLOSIVES

FIELD ID			CA281			CA281			CA281			CA281			CA281			CA281			CA281		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/8/2005			3/9/2004			3/11/2003			3/13/2002			3/13/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.21	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.21	U	<	0.16	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.21	U	<	0.16	U	<	0.20	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.41	U	<	0.31	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.41	U	<	0.31	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.41	U	<	0.31	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.41	U	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.41	U	<	0.31	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.41	U	<	0.31	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.67	U	<	0.5	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 20	<	0.48	U	<	0.52	U	<	0.52	U	<	0.39	U	<	0.68	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.52	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.21	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.48	U	<	0.52	U	<	0.21	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.52	U	<	0.41	U	<	0.31	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA281-EXPLOSIVES

FIELD ID			CA281			CA281			CA281			CA281			CA281			CA281		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32		
COLLECT DATE	Detection	Frequency	3/18/1999			6/11/1998			7/12/1994			6/9/1994			10/6/1992			9/6/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA	
HMX	-	0 / 20	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.645	U
RDX	-	0 / 20	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U
Tetryl	-	0 / 18	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA282-EXPLOSIVES

FIELD ID			CA282			CA282			CA282			CA282			CA282			CA282			CA282		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/27/2012			3/2/2011			3/8/2010			3/3/2009			3/4/2008			3/7/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.52	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.52	U
HMX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.52	U
Nitrobenzene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
RDX	0.23 J	2 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
Tetryl	-	0 / 18	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.52	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA282-EXPLOSIVES

FIELD ID			CA282			CA282			CA282			CA282			CA282			CA282			CA282		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/8/2005			3/9/2004			3/11/2003			3/13/2002			3/13/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.26	U	<	0.16	U	<	0.36	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.26	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.26	U	<	0.16	U	<	0.30	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.51	U	<	0.31	U	<	0.24	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.51	U	<	0.31	U	<	0.93	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.52	U	<	0.51	U	<	0.31	U	<	0.38	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.51	U	<	0.31	U	<	0.74	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.51	U	<	0.31	U	<	0.46	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.51	U	<	0.31	U	<	0.63	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.82	U	<	0.5	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 20	<	0.48	U	<	0.52	U	<	0.64	U	<	0.39	U	<	1.0	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.52	U	<	0.26	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 19	<	0.48	U	<	0.52	U	<	0.26	U	<	0.16	U	<	0.42	U	<	0.8	U	<	0.8	U
RDX	0.23 J	2 / 20	<	0.48	U	<	0.52	U	0.23	0.26	J	0.14	0.16	J	<	0.60	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 18	<	0.48	U	<	0.52	U	<	0.51	U	<	0.31	U	<	0.99	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA282-EXPLOSIVES

FIELD ID				CA282			CA282			CA282			CA282			CA282			CA282		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW33			UW33			UW32			UW32			
COLLECT DATE	Detection	Frequency	3/18/1999			6/11/1998			7/12/1994			6/9/1994			10/6/1992			9/6/1992			
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)																					
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.449	U	
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.611	U	
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.635	U	
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.064	U	
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.074	U	
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.158	U	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA		
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA		
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA		
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U		NA			NA			NA			NA		
HMX	-	0 / 20	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U	<	1.21	U	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA		
Nitrobenzene	-	0 / 19	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U		NA		
RDX	0.23 J	2 / 20	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U	<	1.17	U	
Tetryl	-	0 / 18	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA			NA		

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA290/CA290R*-EXPLOSIVES

FIELD ID			CA290R			CA290R			CA290R			CA290R			CA290R			CA290R			CA290R		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/28/2012			3/1/2011			3/8/2010			3/2/2009			3/3/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.48	U	<	0.47	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.48	U	<	0.47	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.48	U	<	0.47	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.48	U	<	0.47	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.22	U	<	0.48	U	<	0.47	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.22	U	<	0.48	U	<	0.47	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.48	U	<	0.47	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.48	U	<	0.47	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.22	U	<	0.48	U	<	0.47	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.48	U	<	0.47	U	<	0.48	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.48	U	<	0.47	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.2	U	<	0.48	U	<	0.47	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.48	U	<	0.47	U	<	0.48	U
RDX	0.22	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.22	U	<	0.48	U	<	0.47	U	<	0.48	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.26	U	<	0.48	U	<	0.47	U	<	0.48	U

Notes:

*CA290 was abandoned and replaced by CA290R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA290/CA290R*-EXPLOSIVES

FIELD ID			CA290R			CA290R			CA290R			CA290			CA290			CA290			CA290		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/7/2005			3/9/2004			3/11/2003			3/12/2002			3/14/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.25	U	<	0.19	U	<	0.41	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.25	U	<	0.19	U	<	0.27	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.25	U	<	0.19	U	<	0.34	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.49	U	<	0.38	U	<	0.27	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.49	U	<	0.38	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.49	U	<	0.38	U	<	0.43	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.49	U	<	0.38	U	<	0.83	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.49	U	<	0.38	U	<	0.53	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.49	U	<	0.38	U	<	0.71	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.78	U	<	0.61	U	<	1.7	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.51	U	<	0.61	U	<	0.47	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.51	U	<	0.25	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.25	U	<	0.19	U	<	0.48	U	<	0.8	U	<	0.8	U
RDX	0.22	1 / 22	<	0.48	U	<	0.51	U	<	0.25	U	0.22	0.19		<	0.68	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.51	U	<	0.49	U	<	0.38	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

*CA290 was abandoned and replaced by CA290R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA290/CA290R*-EXPLOSIVES

FIELD ID			CA290			CA290			CA290			CA290			CA290			CA290			CA290		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/10/1998			8/30/1997			2/19/1997			7/12/1994			6/8/1994			10/5/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U	<	NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U	<	NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U	<	NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U	<	NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.22	1 / 22	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

*CA290 was abandoned and replaced by CA290R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA290/CA290R*-EXPLOSIVES

FIELD ID			CA290		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/6/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	-	0 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	0.22	1 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

*CA290 was abandoned and replaced by CA290R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA291/CA291R*-EXPLOSIVES

FIELD ID			CA291R			CA291R			CA291R			CA291R			CA291R			CA291R			CA291R		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/28/2012			4/12/2011			3/8/2010			3/2/2009			3/3/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.49	U	<	0.49	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.49	U	<	0.49	U	<	0.48	U
HMX	0.76 J	4 / 22	0.52	0.8	J	0.76	0.8	J	0.51	0.8	J	0.21	0.42	J	<	0.49	U	<	0.49	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.49	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.49	U	<	0.49	U	<	0.48	U
RDX	2.1 J	6 / 22	1.1	0.8	J	2.1	0.8	J	2	0.8		0.6	0.21		<	0.49	U	<	0.49	U	<	0.48	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.49	U	<	0.49	U	<	0.48	U

Notes:

*CA291 was abandoned and replaced by CA291R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA291/CA291R*-EXPLOSIVES

FIELD ID			CA291R			CA291R			CA291R			CA291			CA291			CA291			CA291		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/8/2005			3/9/2004			3/11/2003			3/12/2002			3/14/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.28	U	<	0.26	U	<	0.37	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.28	U	<	0.26	U	<	0.25	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.28	U	<	0.26	U	<	0.31	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.55	U	<	0.51	U	<	0.25	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.55	U	<	0.51	U	<	0.96	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.55	U	<	0.51	U	<	0.39	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.55	U	<	0.51	U	<	0.76	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.55	U	<	0.51	U	<	0.48	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.55	U	<	0.51	U	<	0.65	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.88	U	<	0.82	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.76 J	4 / 22	<	0.48	U	<	0.51	U	<	0.69	U	<	0.64	U	<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.51	U	<	0.28	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.51	U	<	0.28	U	<	0.26	U	<	0.43	U	<	0.8	U	<	0.8	U
RDX	2.1 J	6 / 22	<	0.48	U	<	0.51	U	<	0.28	U	0.52	0.26		<	0.62	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.51	U	<	0.55	U	<	0.51	U	<	1.0	U	<	0.8	U	<	1.3	U

Notes:

*CA291 was abandoned and replaced by CA291R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA291/CA291R*-EXPLOSIVES

FIELD ID			CA291			CA291			CA291			CA291			CA291			CA291			CA291		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/10/1998			9/30/1997			2/19/1997			7/12/1994			6/8/1994			10/5/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	0.76 J	4 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.1 J	6 / 22	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	0.737	NRL		<	0.412	U	<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

*CA291 was abandoned and replaced by CA291R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA291/CA291R*-EXPLOSIVES

FIELD ID			CA291		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/6/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	0.76 J	4 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	2.1 J	6 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

*CA291 was abandoned and replaced by CA291R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA292/CA292R*-EXPLOSIVES

FIELD ID			CA292R			CA292R			CA292R			CA292R			CA292R			CA292R			CA292R		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/28/2012			4/12/2011			3/8/2010			3/3/2009			3/3/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.48	U
HMX	0.67	6 / 22	0.54	0.8	J	0.14	0.8	J	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	0.69	0.48	
MNX	0.11 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
RDX	5.85	14 / 22	1	0.8	J	0.6	0.8	J	<	0.8	U	0.13	0.2	J	<	0.49	U	1.3	0.48		1.8	0.48	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.49	U	<	0.48	U	<	0.48	U

Notes:

*CA292 was abandoned and replaced by CA292R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA292/CA292R*-EXPLOSIVES

FIELD ID			CA292R			CA292R			CA292R			CA292			CA292			CA292			CA292		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/8/2005			3/9/2004			3/11/2003			3/12/2002			3/14/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.54	U	<	0.22	U	<	0.16	U	<	0.39	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.54	U	<	0.22	U	<	0.16	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.54	U	<	0.22	U	<	0.16	U	<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.54	U	<	0.42	U	<	0.31	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.54	U	<	0.42	U	<	0.31	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.54	U	<	0.42	U	<	0.31	U	<	0.41	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.54	U	<	0.42	U	<	0.31	U	<	0.80	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.54	U	<	0.42	U	<	0.31	U	<	0.51	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.54	U	<	0.42	U	<	0.31	U	<	0.69	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.54	U	<	0.68	U	<	0.5	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.67	6 / 22	<	0.48	U	0.3	0.54	J	0.67	0.53		0.32	0.39	J	<	1.1	U	<	1	U	<	0.8	U
MNX	0.11 J	1 / 10	<	0.48	U	<	0.54	U	0.11	0.22	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.54	U	<	0.22	U	<	0.16	U	<	0.46	U	<	0.8	U	<	0.8	U
RDX	5.85	14 / 22	0.95	0.48		0.91	0.54		2	0.22		1.8	0.16		1.2	0.65		1.1	0.8		0.59	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.54	U	<	0.42	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

*CA292 was abandoned and replaced by CA292R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA292/CA292R*-EXPLOSIVES

FIELD ID			CA292			CA292			CA292			CA292			CA292			CA292			CA292		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/17/1999			6/10/1998			9/30/1997			2/19/1997			7/12/1994			6/8/1994			10/5/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	0.67	6 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	0.11 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	5.85	14 / 22	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	5.85	NRL		5.48	NRL		<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

*CA292 was abandoned and replaced by CA292R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA292/CA292R*-EXPLOSIVES

FIELD ID			CA292		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/6/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	0.67	6 / 22	<	1.21	U
MNX	0.11 J	1 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	5.85	14 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

*CA292 was abandoned and replaced by CA292R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA310-EXPLOSIVES

FIELD ID			CA310			CA310			CA310			CA310			CA310			CA310			CA310		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/27/2012			2/28/2011			3/8/2010			3/2/2009			3/4/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.48	U
HMX	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
MNX	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
RDX	1.1	1 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA310-EXPLOSIVES

FIELD ID			CA310			CA310			CA310			CA310			CA310			CA310			CA310		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2006			None			3/8/2004			3/10/2003			3/12/2002			3/13/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.48	U				<	0.25	U	<	0.23	U	<	0.33	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 21	<	0.48	U				<	0.25	U	<	0.23	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.48	U				<	0.25	U	<	0.23	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 21	<	0.48	U				<	0.48	U	<	0.45	U	<	0.22	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 21	<	0.48	U	No 2005 Sample Well Dry			<	0.48	U	<	0.45	U	<	0.86	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.48	U				<	0.48	U	<	0.45	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U				<	0.48	U	<	0.45	U	<	0.68	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U				<	0.48	U	<	0.45	U	<	0.43	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U				<	0.48	U	<	0.45	U	<	0.58	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U				<	0.78	U	<	0.73	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 21	<	0.48	U				<	0.6	U	<	0.57	U	<	0.94	U	<	1	U	<	0.8	U
MNX	-	0 / 9	<	0.48	U				<	0.25	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U				<	0.25	U	<	0.23	U	<	0.39	U	<	0.8	U	<	0.8	U
RDX	1.1	1 / 21	<	0.48	U				<	0.25	U	<	0.23	U	<	0.55	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 19	<	0.48	U				<	0.48	U	<	0.45	U	<	0.91	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA310-EXPLOSIVES

FIELD ID			CA310			CA310			CA310			CA310			CA310			CA310			CA310		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/15/1999			6/9/1998			9/30/1997			2/18/1997			7/12/1994			6/8/1994			10/7/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 21	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 9		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	1.1	1 / 21	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	1.1	NRL		<	1.17	U
Tetryl	-	0 / 19	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA310-EXPLOSIVES

FIELD ID			CA310		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 21	<	0.449	U
1,3-Dinitrobenzene	-	0 / 21	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 21	<	0.635	U
2,4-Dinitrotoluene	-	0 / 21	<	0.064	U
2,6-Dinitrotoluene	-	0 / 21	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.158	U
2-Nitrotoluene	-	0 / 17		NA	
3-Nitrotoluene	-	0 / 17		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17		NA	
4-Nitrotoluene	-	0 / 17		NA	
HMX	-	0 / 21	<	1.21	U
MNX	-	0 / 9		NA	
Nitrobenzene	-	0 / 21	<	0.645	U
RDX	1.1	1 / 21	<	1.17	U
Tetryl	-	0 / 19		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA311-EXPLOSIVES

FIELD ID			CA311			CA311			CA311			CA311			CA311			CA311			CA311		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/27/2012			2/28/2011			3/8/2010			3/2/2009			3/4/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.49	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.49	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.49	U	<	0.49	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.49	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.49	U	<	0.49	U
RDX	2.21	17 / 22	0.84	0.8	J	0.61	0.8	J	0.9	0.8		0.21	0.2		<	0.48	U	1.1	0.49		1.1	0.49	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA311-EXPLOSIVES

FIELD ID			CA311			CA311			CA311			CA311			CA311			CA311			CA311		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			3/12/2002			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/7/2005			3/8/2004			3/10/2003			3/12/2002			3/13/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.21	U	<	0.18	U	<	0.44	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.21	U	<	0.18	U	<	0.29	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.21	U	<	0.18	U	<	0.37	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.36	U	<	0.29	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.36	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.41	U	<	0.36	U	<	0.46	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.41	U	<	0.36	U	<	0.90	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.41	U	<	0.36	U	<	0.57	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.41	U	<	0.36	U	<	0.77	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.67	U	<	0.58	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.52	U	<	0.45	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.21	U	<	0.18	U	<	0.51	U	<	0.8	U	<	0.8	U
RDX	2.21	17 / 22	1.2	0.48		1.4	0.48		1.6	0.21		1.5	0.18		1.6	0.73		1.2	0.8		1.1	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.41	U	<	0.36	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA311-EXPLOSIVES

FIELD ID			CA311			CA311			CA311			CA311			CA311			CA311			CA311		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/16/1999			6/9/1998			9/30/1997			2/18/1997			7/12/1994			6/8/1994			10/9/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.21	17 / 22	2.21	0.8		1.04	1.00		2.06	0.558		<	0.558	U	1.14	NRL		<	0.412	U	<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA311-EXPLOSIVES

FIELD ID			CA311		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	-	0 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	2.21	17 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-33
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA312-EXPLOSIVES

FIELD ID			CA312			CA312			CA312			CA312			CA312			CA312			CA312		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/28/2012			2/28/2011			3/8/2010			3/2/2009			3/4/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.127	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 20	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	0.68 J	7 / 22	0.68	0.8	J	0.45	0.8	J	0.38	0.8	J	0.4	0.4		<	0.48	U	<	0.48	U	<	0.5	U
MNX	0.17 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	5.2	22 / 22	2.1	0.8	J	2.1	0.8		2.1	0.8		1.5	0.2		1.8	0.48		3.5	0.48		4.1	0.5	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-33
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA312-EXPLOSIVES

FIELD ID			CA312			CA312			CA312			CA312			CA312			CA312			CA312		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2006			3/7/2005			3/8/2004			3/10/2003			3/11/2002			3/13/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.127	1 / 22	<	0.48	U	<	0.48	U	<	0.27	U	<	0.16	U	<	0.39	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.27	U	<	0.16	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.27	U	<	0.16	U	<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.52	U	<	0.31	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.52	U	<	0.31	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.52	U	<	0.31	U	<	0.41	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.52	U	<	0.31	U	<	0.80	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.52	U	<	0.31	U	<	0.51	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.52	U	<	0.31	U	<	0.69	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.83	U	<	0.5	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.68 J	7 / 22	<	0.48	U	0.39	0.48	J	0.5	0.65	J	0.34	0.39	J	<	1.1	U	<	1	U	<	0.8	U
MNX	0.17 J	1 / 10	<	0.48	U	<	0.48	U	0.17	0.27	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.27	U	<	0.16	U	<	0.46	U	<	0.8	U	<	0.8	U
RDX	5.2	22 / 22	3.4	0.48		4	0.48		5.2	0.27		4.3	0.16		4.7	0.65		3.6	0.8		3	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.52	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-33
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA312-EXPLOSIVES

FIELD ID			CA312			CA312			CA312			CA312			CA312			CA312			CA312		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/16/1999			6/9/1998			9/30/1997			2/18/1997			7/12/1994			6/8/1994			10/7/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.127	1 / 22	<	0.8	U	<	1.00	U	<	0.125	U	0.127	0.125		<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.954	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U	<	0.414	U	<	0.704	U		NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	0.68 J	7 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	0.17 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	5.2	22 / 22	2.93	0.8		2.85	1.00		3.42	0.558		4.09	0.558		4.41	NRL		3.76	NRL		2.06	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-33
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA312-EXPLOSIVES

FIELD ID			CA312		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	0.127	1 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 20		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	0.68 J	7 / 22	<	1.21	U
MNX	0.17 J	1 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	5.2	22 / 22	2.06	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C1.3-34
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA313-EXPLOSIVES

FIELD ID			CA313			CA313			CA313			CA313			CA313			CA313			CA313		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/28/2012			2/28/2011			3/8/2010			3/2/2009			3/4/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.50	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.50	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.50	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.50	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.50	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.50	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.50	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.50	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.50	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.50	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.50	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.48	U	<	0.50	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.50	U
RDX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.50	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.48	U	<	0.50	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C1.3-34
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA313-EXPLOSIVES

FIELD ID			CA313			CA313			CA313			CA313			CA313			CA313			CA313		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/7/2005			3/8/2004			3/10/2003			3/11/2002			3/13/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.33	U	<	0.24	U	<	0.56	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.33	U	<	0.24	U	<	0.37	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.33	U	<	0.24	U	<	0.47	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.64	U	<	0.46	U	<	0.37	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.64	U	<	0.46	U	<	1.4	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.64	U	<	0.46	U	<	0.58	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.64	U	<	0.46	U	<	1.1	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.64	U	<	0.46	U	<	0.72	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.64	U	<	0.46	U	<	0.98	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	1	U	<	0.74	U	<	2.3	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.8	U	<	0.58	U	<	1.6	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.33	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.33	U	<	0.24	U	<	0.65	U	<	0.8	U	<	0.8	U
RDX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.33	U	<	0.24	U	<	0.93	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.64	U	<	0.46	U	<	1.5	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C1.3-34
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA313-EXPLOSIVES

FIELD ID			CA313			CA313			CA313			CA313			CA313			CA313			CA313		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/16/1999			6/9/1998			9/30/1997			12/12/1996			7/14/1994			6/9/1994			10/7/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.4	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	1	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	1	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.6	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	1	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	1	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	1	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	1	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	1	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	1	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	1	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 22	<	1	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 20	<	1	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C1.3-34
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA313-EXPLOSIVES

FIELD ID			CA313		
METHOD	Maximum	Detection	UW32		
COLLECT DATE	Detection	Frequency	9/7/1992		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.158	U
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	-	0 / 22	<	1.21	U
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 22	<	0.645	U
RDX	-	0 / 22	<	1.17	U
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-35
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA322-EXPLOSIVES

FIELD ID			CA322			CA322			CA322			CA322			CA322			CA322			CA322		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/5/2013			2/28/2012			3/1/2011			3/5/2010			3/3/2009			3/4/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.52	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.52	U
HMX	0.14 J	1 / 20	<	0.8	U	0.14	0.8	J	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.52	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.52	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.52	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.52	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-35
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA322-EXPLOSIVES

FIELD ID			CA322			CA322			CA322			CA322			CA322			CA322			CA322		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2006			3/8/2005			3/9/2004			3/11/2003			3/12/2002			3/13/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.3	U	<	0.24	U	<	0.39	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.3	U	<	0.24	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.3	U	<	0.24	U	<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.57	U	<	0.46	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.57	U	<	0.46	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.57	U	<	0.46	U	<	0.41	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.57	U	<	0.46	U	<	0.80	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.57	U	<	0.46	U	<	0.51	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.57	U	<	0.46	U	<	0.69	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.93	U	<	0.75	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.14 J	1 / 20	<	0.48	U	<	0.48	U	<	0.72	U	<	0.58	U	<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.3	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.3	U	<	0.24	U	<	0.46	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.48	U	<	0.48	U	<	0.3	U	<	0.24	U	<	0.65	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.57	U	<	0.46	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-35
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA322-EXPLOSIVES

FIELD ID	CA322					CA322			CA322			CA322			CA322			CA322		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33		
COLLECT DATE	Detection	Frequency	3/16/1999			6/10/1998			9/30/1997			12/12/1996			8/24/1994			7/13/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA	
HMX	0.14 J	1 / 20	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U
RDX	-	0 / 20	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-36
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA330-EXPLOSIVES

FIELD ID			CA330			CA330			CA330			CA330			CA330			CA330			CA330		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/27/2012			2/28/2011			3/5/2010			3/2/2009			3/3/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.49	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Nitrotoluene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.49	U	<	0.48	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.49	UJ	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 16	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
RDX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
Tetryl	-	0 / 16	<	1.6	UJ	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	UJ	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-36
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA330-EXPLOSIVES

FIELD ID			CA330			CA330			CA330			CA330			CA330			CA330			CA330		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2006			3/7/2005			3/8/2004			3/10/2003			3/12/2002			3/12/2001			6/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.22	U	<	0.30	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.22	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.22	U	<	0.25	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.89	U	<	0.43	U	<	0.20	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.89	U	<	0.43	U	<	0.78	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.89	U	<	0.43	U	<	0.31	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.89	U	<	0.43	U	<	0.61	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.89	U	<	0.43	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.89	U	<	0.43	U	<	0.52	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	1.4	U	<	0.69	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	-	0 / 16	<	0.48	U	<	0.48	U	<	1.1	U	<	0.54	U	<	0.85	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.46	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.22	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	-	0 / 16	<	0.48	U	<	0.48	U	<	0.46	U	<	0.22	U	<	0.50	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.89	U	<	0.43	U	<	0.82	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-36
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA330-EXPLOSIVES

FIELD ID				CA330			CA330		
METHOD	Maximum	Detection	SW846 M8330			UW51			
COLLECT DATE	Detection	Frequency	3/15/1999			6/9/1998			
			Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)									
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	U	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U	
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U	
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U	
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
HMX	-	0 / 16	<	0.8	U	<	0.500	U	
MNX	-	0 / 10		NA			NA		
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U	
RDX	-	0 / 16	<	0.8	U	<	1.00	U	
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-37
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA331-EXPLOSIVES

FIELD ID			CA331			CA331			CA331			CA331			CA331			CA331			CA331		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/28/2012			2/28/2011			3/5/2010			3/2/2009			3/3/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	UJ	<	0.48	U	<	0.49	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.49	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	UJ	<	0.48	U	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	UJ	<	0.48	U	<	0.49	U	<	0.49	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	UJ	<	0.48	U	<	0.49	U	<	0.49	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	UJ	<	0.48	U	<	0.49	U	<	0.49	U
HMX	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.48	UJ	<	0.49	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	UJ	<	0.48	U	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	UJ	<	0.48	U	<	0.49	U	<	0.49	U
RDX	0.99	6 / 16	0.23	0.8	J	0.6	0.8	J	<	0.8	U	<	0.2	UJ	<	0.48	U	<	0.49	U	0.96	0.49	
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	UJ	<	0.48	U	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-37
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA331-EXPLOSIVES

FIELD ID			CA331			CA331			CA331			CA331			CA331			CA331			CA331		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2006			3/7/2005			3/8/2004			3/10/2003			3/12/2002			3/12/2001			6/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.16	U	<	0.19	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.16	U	<	0.19	U	<	0.25	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.16	U	<	0.19	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.31	U	<	0.36	U	<	0.25	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.31	U	<	0.36	U	<	0.98	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.31	U	<	0.36	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.31	U	<	0.36	U	<	0.78	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.31	U	<	0.36	U	<	0.49	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.31	U	<	0.36	U	<	0.67	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.5	U	<	0.58	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	-	0 / 16	<	0.48	U	<	0.52	U	<	0.39	U	<	0.46	U	<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.52	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.52	U	<	0.16	U	<	0.19	U	<	0.44	U	<	0.8	U	<	0.8	U
RDX	0.99	6 / 16	0.9	0.48		0.99	0.52		0.38	0.16	J	<	0.19	U	<	0.63	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 16	<	0.48	U	<	0.52	U	<	0.31	U	<	0.36	U	<	1.0	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-37
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA331-EXPLOSIVES

FIELD ID			CA331			CA331		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/15/1999			6/9/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	UJ
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2-Amino-4,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ
HMX	-	0 / 16	<	0.8	U	<	0.500	UJ
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ
RDX	0.99	6 / 16	<	0.8	U	<	1.00	UJ
Tetryl	-	0 / 16	<	0.8	U	<	0.500	UJ

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-38
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA332-EXPLOSIVES

FIELD ID			CA332			CA332			CA332			CA332			CA332			CA332			CA332		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/27/2012			2/28/2011			3/5/2010			3/2/2009			3/3/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	2.3	11 / 19	0.35	0.8	J	0.64	0.8	J	1	0.8		0.8	0.2		1.3	0.48		2.1	0.48		1.8	0.5	
Tetryl	-	0 / 19	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-38
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA332-EXPLOSIVES

FIELD ID			CA332			CA332			CA332			CA332			CA332			CA332			CA332		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2006			3/7/2005			3/8/2004			3/10/2003			3/12/2002			3/12/2001			6/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 19	<	0.48	U	<	0.5	U	<	0.36	U	<	0.16	U	<	0.36	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 19	<	0.48	U	<	0.5	U	<	0.36	U	<	0.16	U	<	0.24	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 19	<	0.48	U	<	0.5	U	<	0.36	U	<	0.16	U	<	0.30	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 19	<	0.48	U	<	0.5	U	<	0.7	U	<	0.31	U	<	0.24	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 19	<	0.48	U	<	0.5	U	<	0.7	U	<	0.31	U	<	0.93	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.48	U	<	0.5	U	<	0.7	U	<	0.31	U	<	0.38	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.5	U	<	0.7	U	<	0.31	U	<	0.74	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.5	U	<	0.7	U	<	0.31	U	<	0.46	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.5	U	<	0.7	U	<	0.31	U	<	0.63	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.5	U	<	1.1	U	<	0.5	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 19	<	0.48	U	<	0.5	U	<	0.88	U	<	0.39	U	<	1.0	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.5	U	<	0.36	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 19	<	0.48	U	<	0.5	U	<	0.36	U	<	0.16	U	<	0.42	U	<	0.8	U	<	0.8	U
RDX	2.3	11 / 19	2.3	0.48		1.8	0.5		0.88	0.36		0.19	0.16		<	0.60	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 19	<	0.48	U	<	0.5	U	<	0.7	U	<	0.31	U	<	0.99	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-38
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA332-EXPLOSIVES

FIELD ID			CA332			CA332			CA332			CA332			CA332		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33		
COLLECT DATE	Detection	Frequency	6/9/1998			9/30/1997			12/12/1996			7/16/1994			6/23/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 19	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 19	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 19	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 19	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 19	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 19	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U
2-Nitrotoluene	-	0 / 17	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA	
3-Nitrotoluene	-	0 / 17	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA	
4-Nitrotoluene	-	0 / 17	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA	
HMX	-	0 / 19	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 19	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U
RDX	2.3	11 / 19	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U
Tetryl	-	0 / 19	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-39
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA342-EXPLOSIVES

FIELD ID			CA342			CA342			CA342			CA342			CA342			CA342			CA342		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/27/2012			3/1/2011			3/5/2010			3/2/2009			3/4/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	0.12 J	1 / 20	<	0.8	U	0.12	0.8	J	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	2 J	11 / 20	0.62	0.8	J	2	0.8	J	1.7	0.8		1.4	0.2		<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-39
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA342-EXPLOSIVES

FIELD ID			CA342			CA342			CA342			CA342			CA342			CA342			CA342		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2006			3/7/2005			3/8/2004			3/10/2003			3/11/2002			3/12/2001			6/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.27	U	<	0.21	U	<	0.44	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.27	U	<	0.21	U	<	0.29	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.27	U	<	0.21	U	<	0.37	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.52	U	<	0.4	U	<	0.29	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.52	U	<	0.4	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.52	U	<	0.4	U	<	0.46	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.52	U	<	0.4	U	<	0.90	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.52	U	<	0.4	U	<	0.57	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.52	U	<	0.4	U	<	0.77	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.83	U	<	0.65	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	0.12 J	1 / 20	<	0.48	U	<	0.48	U	<	0.65	U	<	0.51	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.27	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.27	U	<	0.21	U	<	0.51	U	<	0.8	U	<	0.8	U
RDX	2 J	11 / 20	<	0.48	U	<	0.48	U	<	0.27	U	0.27	0.21		1.7	0.73		0.46	0.8	J	1.3	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.52	U	<	0.4	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-39
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA342-EXPLOSIVES

FIELD ID			CA342			CA342			CA342			CA342			CA342			CA342		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33		
COLLECT DATE	Detection	Frequency	3/15/1999			6/9/1998			9/29/1997			12/12/1996			7/15/1994			6/24/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA	
HMX	0.12 J	1 / 20	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U
RDX	2 J	11 / 20	0.472	0.8	J	<	1.00	U	<	0.558	U	<	0.558	U	1.07	NRL		0.603	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-40
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA343-EXPLOSIVES

FIELD ID			CA343			CA343			CA343			CA343			CA343			CA343			CA343		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/4/2013			2/27/2012			3/1/2011			3/5/2010			3/3/2009			3/5/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.49	U	<	0.48	U
HMX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.49	U	<	0.48	U
Nitrobenzene	0.56 J	1 / 20	<	0.8	U	<	0.8	J	0.56	0.8	J	<	0.4	U	<	0.48	U	<	0.49	U	<	0.48	U
RDX	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.49	U	<	0.48	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-40
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA343-EXPLOSIVES

FIELD ID			CA343			CA343			CA343			CA343			CA343			CA343			CA343		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2006			3/7/2005			3/15/2004			3/10/2003			3/11/2002			3/12/2001			6/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 20	<	0.49	U	<	0.48	U	<	0.16	U	<	0.21	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 20	<	0.49	U	<	0.48	U	<	0.16	U	<	0.21	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.49	U	<	0.48	U	<	0.16	U	<	0.21	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 20	<	0.49	U	<	0.48	U	<	0.31	U	<	0.4	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 20	<	0.49	U	<	0.48	U	<	0.31	U	<	0.4	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.49	U	<	0.48	U	<	0.31	U	<	0.4	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.49	U	<	0.48	U	<	0.31	U	<	0.4	U	<	0.86	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.49	U	<	0.48	U	<	0.31	U	<	0.4	U	<	0.54	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.49	U	<	0.48	U	<	0.31	U	<	0.4	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.49	U	<	0.48	U	<	0.5	U	<	0.64	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	-	0 / 20	<	0.49	U	<	0.48	U	<	0.39	U	<	0.5	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.49	U	<	0.48	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	0.56 J	1 / 20	<	0.49	U	<	0.48	U	<	0.16	U	<	0.21	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	-	0 / 20	<	0.49	U	<	0.48	U	<	0.16	U	<	0.21	U	<	0.70	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 20	<	0.49	U	<	0.48	U	<	0.31	U	<	0.4	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.3-40
CORNHUSKER ARMY AMMUNITION PLANT
WELL CA343-EXPLOSIVES

FIELD ID			CA343			CA343			CA343			CA343			CA343			CA343		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33		
COLLECT DATE	Detection	Frequency	3/15/1999			6/9/1998			9/29/1997			12/12/1996			8/24/1994			7/15/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA	
HMX	-	0 / 20	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	0.56 J	1 / 20	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U
RDX	-	0 / 20	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

C.1 Explosives**C.1.4 OU1 OFF-POST NW WELLS**

WELL	TABLE
NW010	C.1.4-1
NW011	C.1.4-2
NW020	C.1.4-3
NW021	C.1.4-4
NW022	C.1.4-5
NW030	C.1.4-6
NW031	C.1.4-7
NW032	C.1.4-8
NW040	C.1.4-9
NW041	C.1.4-10
NW050	C.1.4-11
NW051	C.1.4-12
NW052	C.1.4-13
NW060	C.1.4-14
NW061	C.1.4-15
NW062	C.1.4-16
NW070	C.1.4-17
NW071	C.1.4-18
NW080	C.1.4-19
NW081/NW081R	C.1.4-20
NW082/NW082R	C.1.4-21
NW090	C.1.4-22
NW091	C.1.4-23
NW100	C.1.4-24
NW101	C.1.4-25
NW102	C.1.4-26
NW120	C.1.4-27
NW121	C.1.4-28
NW122	C.1.4-29
NW130/NW130R	C.1.4-30
NW131/NW131R	C.1.4-31
NW132/NW132R	C.1.4-32

TABLE C.1.4-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW010-EXPLOSIVES

FIELD ID			NW010			NW010			NW010			NW010			NW010			NW010			NW010		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			3/15/2006			3/15/2005			3/15/2004			3/17/2003			3/19/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13							<	0.49	U	<	0.48	U	<	0.25	U	<	0.2	U	<	0.38	U
1,3-Dinitrobenzene	-	0 / 12							<	0.49	U	<	0.48	U	<	0.25	U	<	0.2	U	<	0.25	U
2,4,6-Trinitrotoluene	-	0 / 13							<	0.49	U	<	0.48	U	<	0.25	U	<	0.2	U	<	0.32	U
2,4-Dinitrotoluene	-	0 / 13							<	0.49	U	<	0.48	U	<	0.49	U	<	0.38	U	<	0.25	U
2,6-Dinitrotoluene	-	0 / 13	Abandoned 2008			Not Sampled in 2007			<	0.49	U	<	0.48	U	<	0.49	U	<	0.38	U	<	0.98	U
2-Amino-4,6-dinitrotoluene	0.203	1 / 12							<	0.49	U	<	0.48	U	<	0.49	U	<	0.38	U	<	0.40	U
2-Nitrotoluene	-	0 / 9							<	0.49	U	<	0.48	U	<	0.49	U	<	0.38	U	<	0.78	U
3-Nitrotoluene	-	0 / 9							<	0.49	U	<	0.48	U	<	0.49	U	<	0.38	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 9							<	0.49	U	<	0.48	U	<	0.49	U	<	0.38	U	<	0.67	U
4-Nitrotoluene	-	0 / 9							<	0.49	U	<	0.48	U	<	0.78	U	<	0.62	U	<	1.6	U
HMX	-	0 / 12							<	0.49	U	<	0.48	U	<	0.61	U	<	0.48	U	<	1.1	U
MNX	-	0 / 3							<	0.49	U	<	0.48	U	<	0.25	U		NA			NA	
Nitrobenzene	-	0 / 12							<	0.49	U	<	0.48	U	<	0.25	U	<	0.2	U	<	0.44	U
RDX	-	0 / 13							<	0.49	U	<	0.48	U	<	0.25	U	<	0.2	U	<	0.63	U
Tetryl	-	0 / 11							<	0.49	U	<	0.48	U	<	0.49	U	<	0.38	U	<	1.0	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW010-EXPLOSIVES

FIELD ID			NW010			NW010			NW010			NW010			NW010			NW010			NW010		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/21/2001			3/14/2000			3/24/1999			6/14/1998			7/14/1994			6/11/1994			9/1/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U		NA		<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.637	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.738	U
2-Amino-4,6-dinitrotoluene	0.203	1 / 12	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	0.203	NRL	
2-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
HMX	-	0 / 12	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 3		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 11	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.180	U	<	1.180	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-1
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW010-EXPLOSIVES

FIELD ID	NW010				
METHOD	Maximum	Detection	99		
COLLECT DATE	Detection	Frequency	11/29/1984		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 13	<	0.1	U
1,3-Dinitrobenzene	-	0 / 12	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.1	U
2,4-Dinitrotoluene	-	0 / 13	<	0.1	U
2,6-Dinitrotoluene	-	0 / 13	<	0.1	U
2-Amino-4,6-dinitrotoluene	0.203	1 / 12		NA	
2-Nitrotoluene	-	0 / 9		NA	
3-Nitrotoluene	-	0 / 9		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9		NA	
4-Nitrotoluene	-	0 / 9		NA	
HMX	-	0 / 12		NA	
MNX	-	0 / 3		NA	
Nitrobenzene	-	0 / 12		NA	
RDX	-	0 / 13	<	0.2	U
Tetryl	-	0 / 11		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW011-EXPLOSIVES

FIELD ID			NW011			NW011			NW011			NW011			NW011			NW011			NW011		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			3/15/2006			3/15/2005			3/15/2004			3/17/2003			3/18/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.47	U
1,3-Dinitrobenzene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.31	U
2,4,6-Trinitrotoluene	-	0 / 13							<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.39	U
2,4-Dinitrotoluene	14	1 / 13							<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.31	U
2,6-Dinitrotoluene	-	0 / 13	Abandoned 2008			Not Sampled in 2007			<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 12							<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.49	U
2-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.96	U
3-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.60	U
4-Amino-2,6-dinitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	0.82	U
4-Nitrotoluene	-	0 / 9							<	0.48	U	<	0.48	U	<	0.56	U	<	0.5	U	<	2.0	U
HMX	-	0 / 12							<	0.48	U	<	0.48	U	<	0.44	U	<	0.39	U	<	1.3	U
MNX	-	0 / 3							<	0.48	U	<	0.48	U	<	0.18	U		NA			NA	
Nitrobenzene	-	0 / 12							<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.55	U
RDX	7.91	1 / 13							<	0.48	U	<	0.48	U	<	0.18	U	<	0.16	U	<	0.78	U
Tetryl	-	0 / 11							<	0.48	U	<	0.48	U	<	0.35	U	<	0.31	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW011-EXPLOSIVES

FIELD ID			NW011			NW011			NW011			NW011			NW011			NW011			NW011		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/21/2001			3/14/2000			3/24/1999			6/14/1998			7/14/1994			6/11/1994			9/1/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	14	1 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	14	0.064	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U		NA			NA			NA	
HMX	-	0 / 12	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 3		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	7.91	1 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 11	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-2
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW011-EXPLOSIVES

FIELD ID	NW011				
METHOD	Maximum	Detection	99		
COLLECT DATE	Detection	Frequency	11/29/1984		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 13	<	0.1	U
1,3-Dinitrobenzene	-	0 / 13	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.1	U
2,4-Dinitrotoluene	14	1 / 13	<	0.1	U
2,6-Dinitrotoluene	-	0 / 13	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 12		NA	
2-Nitrotoluene	-	0 / 9		NA	
3-Nitrotoluene	-	0 / 9		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 9		NA	
4-Nitrotoluene	-	0 / 9		NA	
HMX	-	0 / 12		NA	
MNX	-	0 / 3		NA	
Nitrobenzene	-	0 / 12		NA	
RDX	7.91	1 / 13	7.91	0.1	
Tetryl	-	0 / 11		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW020-EXPLOSIVES

FIELD ID			NW020			NW020			NW020			NW020			NW020			NW020			NW020		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/8/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	2.3	21 / 26	0.5	0.8	J	0.38	0.8	J	0.37	0.8	J	0.28	1	J	<	0.49	U	0.74	0.49		1	0.48	
1,3-Dinitrobenzene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.49	U	<	0.48	U
2,4,6-Trinitrotoluene	53	26 / 26	0.7	0.8	J	0.88	0.8		1.1	0.8		1.7	0.41		3.1	0.49		4.1	0.49		3.3	0.48	
2,4-Dinitrotoluene	2.4	7 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.49	U	<	0.48	U
2,6-Dinitrotoluene	17.7	1 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.49	U	<	0.49	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	13	20 / 22	1	0.8	J	1.2	0.8		1.4	0.8		3.2	0.21		2.9	0.49		2.7	0.49		3.6	0.48	
2-Nitrotoluene	1.1	1 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.49	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.49	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	10.8	19 / 19	1.5	1.4	J	1.7	1.4		1.1	0.8		1.3	0.21	J	3.2	0.49		2.8	0.49		3.1	0.48	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.49	U	<	0.48	U
HMX	9.54	22 / 22	0.42	0.8	J	0.78	0.8	J	0.65	0.8	J	0.93	0.41		1.5	0.49		1.9	0.49		2.3	0.48	
MNX	0.15 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.49	U	<	0.49	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.49	U	<	0.48	U
RDX	43	26 / 26	1.6	0.8	J	2.2	0.8		2.4	0.8		1.7	0.21		3.3	0.49		3.2	0.49		2.9	0.48	
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.49	U	<	0.49	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW020-EXPLOSIVES

FIELD ID			NW020			NW020			NW020			NW020			NW020			NW020			NW020		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/14/2005			3/15/2004			3/17/2003			3/19/2002			3/21/2001			3/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	2.3	21 / 26	1.1	0.48		0.86	0.48		1.4	0.2		<	0.18	U	1.2	0.38		0.63	0.8	J	0.77	0.8	J
1,3-Dinitrobenzene	-	0 / 25	<	0.48	U	<	0.48	U	<	0.2	U	<	0.18	U	<	0.25	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	53	26 / 26	5	0.48		5.8	0.48		6.8	0.2		11	1.8		13	1.6		19	1.6		25	30	J
2,4-Dinitrotoluene	2.4	7 / 26	<	0.48	U	<	0.48	U	0.17	0.39	J	<	0.35	U	<	0.25	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	17.7	1 / 26	<	0.48	U	<	0.48	U	<	0.39	U	<	0.35	U	<	0.97	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	13	20 / 22	2.9	0.48		2	0.48	P	2.4	0.39		2.6	0.35		4.5	0.39		5.5	0.8		8.9	1	
2-Nitrotoluene	1.1	1 / 18	<	0.48	U	<	0.48	U	<	0.39	U	<	0.35	U	<	0.77	U	1.1	0.8		<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.39	U	<	0.35	U	<	0.49	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	10.8	19 / 19	3.6	0.48		2.3	0.48		2.2	0.39		3	0.35		3.1	0.66		4.2	0.8		6.4	1	
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.62	U	<	0.56	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	9.54	22 / 22	3.8	0.48	J	2.9	0.48		2.3	0.49		2.1	0.44		2.8	1.1		2.3	1		3.6	0.8	
MNX	0.15 J	1 / 10	<	0.48	U	<	0.48	U	0.15	0.2	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.2	U	<	0.18	U	<	0.44	U	<	0.8	U	<	0.8	U
RDX	43	26 / 26	4.3	0.48		6.2	0.48		7.1	0.2		7.1	0.18		9.5	0.63		8.3	0.8		12	0.8	
Tetryl	-	0 / 21	<	0.48	U	<	0.48	U	<	0.39	U	<	0.35	U	<	1.0	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW020-EXPLOSIVES

FIELD ID	NW020			NW020			NW020			NW020			NW020			NW020			NW020				
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/16/1998			10/2/1997			12/9/1996			7/17/1994			6/14/1994			8/26/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	2.3	21 / 26	0.793	0.8	J	<	1.00	U	1.21	0.125		1.20	0.125		1.54	NRL		1.23	NRL		0.839	NRL	
1,3-Dinitrobenzene	-	0 / 25	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	53	26 / 26	34.9	4.0		22.3	1.00		22.8	0.29		30.0	0.29		23.0	NRL		25.0	NRL		25.5	NRL	
2,4-Dinitrotoluene	2.4	7 / 26	<	0.8	U	<	0.500	U	0.753	0.233		0.78	0.233		0.311	NRL		<	0.26	U	0.106	NRL	
2,6-Dinitrotoluene	17.7	1 / 26	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	13	20 / 22	9.15	0.8	J	7.96	0.500		10.4	0.173		13.0	0.173		12	NRL		<	0.954	U	10.5	NRL	
2-Nitrotoluene	1.1	1 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	10.8	19 / 19	6.26	0.8		5.85	1.00		7.15	0.309		8.00	0.309			NA		10.8	NRL			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	9.54	22 / 22	3.8	0.8		4.25	0.500		4.07	0.16		4.80	0.16		9.54	NRL		7.63	NRL		6.74	NRL	
MNX	0.15 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	43	26 / 26	12.4	0.8		10.7	1.00		10.1	0.558		12.0	0.558		26.0	NRL		24.0	NRL		25.4	NRL	
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	12	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-3
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW020-EXPLOSIVES

FIELD ID			NW020			NW020			NW020			NW020			NW020		
METHOD	Maximum	Detection	UW25			D1			99			99			99		
COLLECT DATE	Detection	Frequency	5/31/1991			9/10/1985			4/16/1985			3/15/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	2.3	21 / 26	0.382	NRL		<	1.4	U	2.3	NRL		1.2	NRL		<	0.1	U
1,3-Dinitrobenzene	-	0 / 25	<	0.458	U		NA		<	0.1	U	<	0.1	U	<	0.1	U
2,4,6-Trinitrotoluene	53	26 / 26	10.1	NRL		53	NRL		44	NRL		32	NRL		13	NRL	
2,4-Dinitrotoluene	2.4	7 / 26	<	4	U	<	0.56	U	2.4	NRL		1.5	NRL		<	0.1	U
2,6-Dinitrotoluene	17.7	1 / 26	17.7	NRL		<	1.2	U	<	0.1	U	<	0.1	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	13	20 / 22	<	9.9	U		NA			NA			NA			NA	
2-Nitrotoluene	1.1	1 / 18		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	10.8	19 / 19		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
HMX	9.54	22 / 22	5.97	NRL			NA			NA			NA			NA	
MNX	0.15 J	1 / 10		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.682	U		NA			NA			NA			NA	
RDX	43	26 / 26	28	NRL		41.7	NRL		43	NRL		30	NRL		17	NRL	
Tetryl	-	0 / 21	<	0.631	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW021-EXPLOSIVES

FIELD ID			NW021			NW021			NW021			NW021			NW021			NW021			NW021		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	2.5	15 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	27.4	16 / 26	<	0.8	U	<	0.8	U	<	0.8	U	0.19	0.41	J	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	2.5	15 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	9.5	20 / 22	6.5	0.8		5.9	0.8		7.3	0.8		8.9	0.21		7.6	0.48		9.3	0.48		9.5	0.5	
2-Nitrotoluene	0.34 J	1 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	6.2	10 / 18	3.6	1.4		3	1.4		3.2	0.8		3.4	0.21		4.2	0.48		6.2	0.48		4.6	0.5	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	10.2	14 / 22	1.3	0.8		2	0.8	J	1.3	0.8		1.5	0.41		3.1	0.48		2.1	0.48		2.1	0.5	
MNX	0.26 J	2 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	0.64 J	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	30	19 / 26	0.95	0.8		1.3	0.8	J	1.5	0.8		1.9	0.21		2.6	0.48		4.3	0.48		4.3	0.5	
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW021-EXPLOSIVES

FIELD ID			NW021			NW021			NW021			NW021			NW021			NW021			NW021		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/14/2005			3/15/2004			3/17/2003			3/19/2002			3/21/2001			3/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	2.5	15 / 26	<	0.48	U	<	0.48	U	<	0.18	U	<	0.19	U	<	0.24	U	<	0.8	U	0.38	0.8	J
1,3-Dinitrobenzene	-	0 / 25	<	0.48	U	<	0.48	U	<	0.18	U	<	0.19	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	27.4	16 / 26	<	0.48	U	<	0.48	U	<	0.18	U	0.11	0.19	J	0.31	0.20		2.8	0.8		3.1	1.5	
2,4-Dinitrotoluene	2.5	15 / 26	<	0.48	U	<	0.48	U	<	0.35	U	<	0.36	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 26	<	0.48	U	<	0.48	U	<	0.35	U	<	0.36	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	9.5	20 / 22	8.6	0.48		3.8	0.48	P	4.6	0.35		1.3	0.36		1.1	0.25		1.7	0.8		1.9	1	
2-Nitrotoluene	0.34 J	1 / 18	<	0.48	U	<	0.48	U	<	0.35	U	<	0.36	U	<	0.49	U	0.34	0.8	J	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.35	U	<	0.36	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	6.2	10 / 18	6.2	0.48		3.5	0.48		3.6	0.35		1.7	0.36		1.6	0.42		1.4	0.8		1.1	1	
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.56	U	<	0.58	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	10.2	14 / 22	2.9	0.48	J	2	0.48		2	0.44		1.5	0.46		1.9	0.68		2.2	1		2.7	0.8	
MNX	0.26 J	2 / 10	<	0.48	U	0.26	0.48	J	0.23	0.18			NA			NA			NA			NA	
Nitrobenzene	0.64 J	1 / 22	<	0.48	U	<	0.48	U	<	0.18	U	<	0.19	U	<	0.28	U	<	0.8	U	0.64	0.8	J
RDX	30	19 / 26	6.3	0.48		5.7	0.48		4.6	0.18		2	0.19		3.7	0.40		7.1	0.8		5	0.8	
Tetryl	-	0 / 21	<	0.48	U	<	0.48	U	<	0.35	U	<	0.36	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW021-EXPLOSIVES

FIELD ID			NW021			NW021			NW021			NW021			NW021			NW021			NW021		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/16/1998			10/2/1997			12/9/1996			7/17/1994			6/14/1994			8/26/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	2.5	15 / 26	<	0.8	U	<	1.00	U	0.606	0.125		0.41	0.125		0.436	NRL		0.673	NRL		<	0.449	U
1,3-Dinitrobenzene	-	0 / 25	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	27.4	16 / 26	4.78	0.8		1.71	1.00		3.21	0.29		3.8	0.29		3.09	NRL		3.04	NRL		3.82	NRL	
2,4-Dinitrotoluene	2.5	15 / 26	<	0.8	U	<	0.500	U	0.33	0.233		0.24	0.233		<	0.26	U	0.345	NRL		0.34	NRL	
2,6-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	9.5	20 / 22	4.6	0.8	J	1.80	0.500	U	3.28	0.173		<	0.173	U	4.25	NRL		3.71	NRL		6.87	NRL	
2-Nitrotoluene	0.34 J	1 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	6.2	10 / 18	1.65	0.8		<	1.00	U	1.92	0.309		1.6	0.309			NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	10.2	14 / 22	3.02	0.8		2.91	0.500		2.41	0.16		<	0.16	U	5.36	NRL		4.26	NRL		10.2	NRL	
MNX	0.26 J	2 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	0.64 J	1 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	30	19 / 26	6.09	0.8		3.44	1.00		4.02	0.558		4.6	0.558		5.66	NRL		4.34	NRL		5.43	NRL	
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-4
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW021-EXPLOSIVES

FIELD ID			NW021			NW021			NW021			NW021			NW021		
METHOD	Maximum	Detection	UW25			D1			99			99			99		
COLLECT DATE	Detection	Frequency	6/2/1991			9/10/1985			4/16/1985			3/15/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	2.5	15 / 26	<	0.21	U	<	1.4	U	2.5	NRL		0.9	NRL		0.6	NRL	
1,3-Dinitrobenzene	-	0 / 25	<	0.458	U		NA		<	0.1	U	<	0.1	U	<	0.1	U
2,4,6-Trinitrotoluene	27.4	16 / 26	1.6	NRL		27.4	NRL		19	NRL		10	NRL		11	NRL	
2,4-Dinitrotoluene	2.5	15 / 26	<	0.397	U	0.722	NRL		2.5	NRL		1.3	NRL		0.5	NRL	
2,6-Dinitrotoluene	-	0 / 26	<	3.18	U	<	1.2	U	<	0.1	U	<	0.1	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	9.5	20 / 22	<	4.21	U		NA			NA			NA			NA	
2-Nitrotoluene	0.34 J	1 / 18		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	6.2	10 / 18		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
HMX	10.2	14 / 22	4.07	NRL			NA			NA			NA			NA	
MNX	0.26 J	2 / 10		NA			NA			NA			NA			NA	
Nitrobenzene	0.64 J	1 / 22	<	1.29	U		NA			NA			NA			NA	
RDX	30	19 / 26	4.01	NRL		26	NRL		30	NRL		19	NRL		21	NRL	
Tetryl	-	0 / 21	<	0.631	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW022-EXPLOSIVES

FIELD ID			NW022			NW022			NW022			NW022			NW022			NW022			NW022		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	6.1	1 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	9.4	2 / 23	<	0.8	U	<	0.8	U	<	0.8	U	0.066	0.2	J	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	6.4	1 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	1.8 J	1 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	8.4	1 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	1.77	1 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW022-EXPLOSIVES

FIELD ID			NW022			NW022			NW022			NW022			NW022			NW022			NW022		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/14/2005			3/15/2004			3/17/2003			3/19/2002			3/21/2001			3/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 25	<	0.48	U	<	0.48	U	<	0.19	U	<	0.16	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.19	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	6.1	1 / 25	6.1	0.48		<	0.48	U	<	0.19	U	<	0.16	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 25	<	0.48	U	<	0.48	U	<	0.36	U	<	0.31	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 25	<	0.48	U	<	0.48	U	<	0.36	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	9.4	2 / 23	9.4	0.48		<	0.48	U	<	0.36	U	<	0.31	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.36	U	<	0.31	U	<	0.86	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.36	U	<	0.31	U	<	0.54	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	6.4	1 / 18	6.4	0.48		<	0.48	U	<	0.36	U	<	0.31	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.58	U	<	0.5	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	1.8 J	1 / 23	1.8	0.48	J	<	0.48	U	<	0.46	U	<	0.39	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.19	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.19	U	<	0.16	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	8.4	1 / 24	8.4	0.48		<	0.48	U	<	0.19	U	<	0.16	U	<	0.70	U	<	0.8	U	<	0.8	U
Tetryl	1.77	1 / 22	<	0.48	U	<	0.48	U	<	0.36	U	<	0.31	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW022-EXPLOSIVES

FIELD ID			NW022			NW022			NW022			NW022			NW022			NW022			NW022		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/16/1998			10/2/1997			12/9/1996			7/17/1994			6/13/1994			8/26/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 25	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	6.1	1 / 25	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 25	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 25	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	9.4	2 / 23	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	6.4	1 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	1.8 J	1 / 23	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	8.4	1 / 24	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	1.77	1 / 22	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-5
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW022-EXPLOSIVES

FIELD ID			NW022			NW022			NW022			NW022		
METHOD	Maximum	Detection	UW33			UW25			D1			99		
COLLECT DATE	Detection	Frequency	7/25/1991			6/2/1991			9/10/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 25	<	0.425	U	<	0.21	U	<	1.4	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 24	<	0.549	U	<	0.458	U		NA		<	0.1	U
2,4,6-Trinitrotoluene	6.1	1 / 25	<	0.451	U	<	0.426	U	<	1.9	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 25	<	0.26	U	<	0.397	U	<	0.56	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 25	<	0.26	U	<	0.6	U	<	1.2	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	9.4	2 / 23	<	0.5	U	<	0.8	U		NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	6.4	1 / 18		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA	
HMX	1.8 J	1 / 23	<	0.563	U	<	5.3	U		NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.817	U	<	0.682	U		NA			NA	
RDX	8.4	1 / 24	<	0.412	U		NA		<	7	U	<	0.1	U
Tetryl	1.77	1 / 22	<	1.18	U	1.77	NRL			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW030-EXPLOSIVES

FIELD ID			NW030			NW030			NW030			NW030			NW030			NW030			NW030		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	0.739	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	0.13 J	1 / 21	<	0.8	U	<	0.8	U	0.13	0.8	J	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	0.29 J	4 / 21	<	0.8	U	0.19	0.8	J	0.22	0.8	J	0.29	0.41	J	<	0.48	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	1.5	16 / 22	0.67	0.8	J	1	0.8	J	1.4	0.8		1.2	0.2		1.5	0.48		1.5	0.48		1.2	0.48	
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW030-EXPLOSIVES

FIELD ID			NW030			NW030			NW030			NW030			NW030			NW030			NW030		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/14/2005			3/12/2004			3/17/2003			3/19/2002			3/21/2001			3/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.16	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	0.739	1 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.16	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.16	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.75	U	<	0.31	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.75	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.13 J	1 / 21	<	0.48	U	<	0.48	U	<	0.75	U	<	0.31	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.75	U	<	0.31	U	<	0.86	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.75	U	<	0.31	U	<	0.54	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.75	U	<	0.31	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	1.2	U	<	0.5	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	0.29 J	4 / 21	<	0.48	U	0.28	0.48	J	<	0.94	U	<	0.39	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.39	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.39	U	<	0.16	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	1.5	16 / 22	1	0.48		1.1	0.48		1.2	0.39		0.8	0.16		0.55	0.70	J	0.2	0.8	J	<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.75	U	<	0.31	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW030-EXPLOSIVES

FIELD ID			NW030			NW030			NW030			NW030			NW030			NW030			NW030		
METHOD	Maximum	Detection	UW51			UW51			UW51			UW33			UW33			UW32			UW25		
COLLECT DATE	Detection	Frequency	6/14/1998			10/2/1997			2/17/1997			7/15/1994			6/13/1994			8/25/1992			5/31/1991		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.21	U
1,3-Dinitrobenzene	0.739	1 / 22	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	0.739	NRL		<	0.611	U	<	0.458	U
2,4,6-Trinitrotoluene	-	0 / 22	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.426	U
2,4-Dinitrotoluene	-	0 / 22	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.397	U
2,6-Dinitrotoluene	-	0 / 22	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.6	U
2-Amino-4,6-dinitrotoluene	0.13 J	1 / 21	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.8	U
2-Nitrotoluene	-	0 / 17	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA			NA	
HMX	0.29 J	4 / 21	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U	<	5.3	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.682	U
RDX	1.5	16 / 22	<	1.00	U	<	0.558	U	<	0.558	U	1.03	NRL		1.01	NRL		<	1.17	U	<	0.416	U
Tetryl	-	0 / 20	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		<	0.631	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-6
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW030-EXPLOSIVES

FIELD ID			NW030		
METHOD	Maximum	Detection	99		
COLLECT DATE	Detection	Frequency	11/29/1984		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 22	<	0.1	U
1,3-Dinitrobenzene	0.739	1 / 22	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.1	U
2,4-Dinitrotoluene	-	0 / 22	<	0.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.1	U
2-Amino-4,6-dinitrotoluene	0.13 J	1 / 21		NA	
2-Nitrotoluene	-	0 / 17		NA	
3-Nitrotoluene	-	0 / 17		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17		NA	
4-Nitrotoluene	-	0 / 17		NA	
HMX	0.29 J	4 / 21		NA	
MNX	-	0 / 10		NA	
Nitrobenzene	-	0 / 21		NA	
RDX	1.5	16 / 22	0.6	NRL	
Tetryl	-	0 / 20		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW031-EXPLOSIVES

FIELD ID			NW031			NW031			NW031			NW031			NW031			NW031			NW031		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	0.058 J	1 / 23	<	0.8	U	<	0.8	U	<	0.8	U	0.058	0.2	J	<	0.49	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.5	U
HMX	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
RDX	0.4	2 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.5	U
Tetryl	1.15	1 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW031-EXPLOSIVES

FIELD ID			NW031			NW031			NW031			NW031			NW031			NW031			NW031		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/14/2005			3/12/2004			3/17/2003			3/19/2002			3/21/2001			3/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.47	U	<	0.16	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.47	U	<	0.16	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.47	U	<	0.16	U	<	0.29	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.92	U	<	0.31	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.92	U	<	0.31	U	<	0.89	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.058 J	1 / 23	<	0.48	U	<	0.48	U	<	0.92	U	<	0.31	U	<	0.36	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.92	U	<	0.31	U	<	0.70	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.92	U	<	0.31	U	<	0.44	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.92	U	<	0.31	U	<	0.60	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	1.5	U	<	0.5	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 23	<	0.48	U	<	0.48	U	<	1.2	U	<	0.39	U	<	0.97	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.47	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.47	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
RDX	0.4	2 / 23	<	0.48	U	<	0.48	U	<	0.47	U	0.14	0.16	J	<	0.57	U	<	0.8	U	<	0.8	U
Tetryl	1.15	1 / 22	<	0.48	U	<	0.48	U	<	0.92	U	<	0.31	U	<	0.95	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.4-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW031-EXPLOSIVES**

FIELD ID			NW031			NW031			NW031			NW031			NW031			NW031			NW031		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/14/1998			10/2/1997			2/17/1997			7/15/1994			6/13/1994			8/25/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	0.058 J	1 / 23	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 23	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.4	2 / 23	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	1.15	1 / 22	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-7
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW031-EXPLOSIVES

FIELD ID			NW031			NW031			NW031		
METHOD	Maximum	Detection	UW33			UW25			99		
COLLECT DATE	Detection	Frequency	7/25/1991			6/2/1991			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 24	<	0.425	U	<	0.21	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 24	<	0.549	U	<	0.458	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.451	U	<	0.426	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.397	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.6	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	0.058 J	1 / 23	<	0.5	U	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA	
HMX	-	0 / 23	<	0.563	U	<	5.3	U		NA	
MXN	-	0 / 10		NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.817	U	<	0.682	U		NA	
RDX	0.4	2 / 23	<	0.412	U		NA		0.4	NRL	
Tetryl	1.15	1 / 22	<	1.18	U	1.15	NRL			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MXN = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW032-EXPLOSIVES

FIELD ID			NW032			NW032			NW032			NW032			NW032			NW032			NW032		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/12/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW032-EXPLOSIVES

FIELD ID			NW032			NW032			NW032			NW032			NW032			NW032			NW032		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/14/2006			3/14/2005			3/12/2004			3/17/2003			3/18/2002			3/21/2001			3/14/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.4	U	<	0.2	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.4	U	<	0.2	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.4	U	<	0.2	U	<	0.20	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.78	U	<	0.39	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.78	U	<	0.39	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.78	U	<	0.39	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.78	U	<	0.39	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.78	U	<	0.39	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.78	U	<	0.39	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	1.3	U	<	0.62	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.98	U	<	0.49	U	<	0.68	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.4	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.4	U	<	0.2	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	-	0 / 23	<	0.48	U	<	0.48	U	<	0.4	U	<	0.2	U	<	0.40	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 21	<	0.48	U	<	0.48	U	<	0.78	U	<	0.39	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW032-EXPLOSIVES

FIELD ID			NW032			NW032			NW032			NW032			NW032			NW032			NW032		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/14/1998			10/2/1997			2/17/1997			7/15/1994			6/13/1994			8/25/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 23	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-8
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW032-EXPLOSIVES

FIELD ID			NW032			NW032		
METHOD	Maximum	Detection	UW25			99		
COLLECT DATE	Detection	Frequency	6/2/1991			11/29/1984		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 23	<	0.21	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 23	<	0.458	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.426	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 23	<	0.397	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.6	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 18		NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA	
HMX	-	0 / 22	<	5.3	U		NA	
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 22	<	0.682	U		NA	
RDX	-	0 / 23	<	0.416	U	<	0.1	U
Tetryl	-	0 / 21	<	3.56	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW040-EXPLOSIVES

FIELD ID			NW040			NW040			NW040			NW040			NW040			NW040			NW040		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			None			None			3/14/2003			3/14/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13																<	0.4	U	<	0.47	U
1,3-Dinitrobenzene	-	0 / 13																<	0.26	U	<	0.31	U
2,4,6-Trinitrotoluene	-	0 / 13																<	0.33	U	<	0.39	U
2,4-Dinitrotoluene	-	0 / 13																<	0.26	U	<	0.31	U
2,6-Dinitrotoluene	-	0 / 13	Abandoned			No 2007 Sample			No 2006 Sample			No 2005 Sample			No 2004 Sample			<	1	U	<	1.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	2008			Well Dry			Well Dry			Well Dry			Well Dry			<	0.41	U	<	0.49	U
2-Nitrotoluene	-	0 / 8																<	0.81	U	<	0.96	U
3-Nitrotoluene	-	0 / 8																<	0.51	U	<	0.60	U
4-Amino-2,6-dinitrotoluene	-	0 / 8																<	0.69	U	<	0.82	U
4-Nitrotoluene	-	0 / 8																<	1.6	U	<	2.0	U
HMX	-	0 / 12																<	1.1	U	<	1.3	U
MNX		0 / 0																	NA			NA	
Nitrobenzene	-	0 / 12																<	0.46	U	<	0.55	U
RDX	0.2	1 / 13																<	0.66	U	<	0.78	U
Tetryl	0.753	1 / 11																<	1.1	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW040-EXPLOSIVES

FIELD ID			NW040			NW040			NW040			NW040			NW040			NW040			NW040		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW51			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/13/2001			3/14/2000			3/23/1999			6/14/1998			10/3/1997			12/10/1996			7/13/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 13	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U
2-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA	
3-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA	
4-Nitrotoluene	-	0 / 8	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA	
HMX	-	0 / 12	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U
MNX		0 / 0		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U
RDX	0.2	1 / 13	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U
Tetryl	0.753	1 / 11	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-9
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW040-EXPLOSIVES

FIELD ID	NW040		NW040			NW040			NW040			NW040		
METHOD	Maximum	Detection	UW33			UW32			UW25			99		
COLLECT DATE	Detection	Frequency	6/10/1994			8/25/1992			5/30/1991			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 13	<	0.425	U	<	0.449	U	<	0.21	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 13	<	0.549	U	<	0.611	U	<	0.458	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 13	<	0.451	U	<	0.635	U	<	0.426	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 13	<	0.26	U	<	0.064	U	<	0.397	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 13	<	0.26	U	<	0.074	U	<	0.6	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.244	U	<	0.158	U	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 8		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 8		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 8		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 8		NA			NA			NA			NA	
HMX	-	0 / 12	<	0.563	U	<	1.21	U	<	0.533	U		NA	
MNX		0 / 0		NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.817	U	<	0.645	U	<	0.682	U		NA	
RDX	0.2	1 / 13	<	0.412	U	<	1.17	U	<	0.416	U	0.2	NRL	
Tetryl	0.753	1 / 11	<	1.18	U		NA		0.753	NRL			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW041-EXPLOSIVES

FIELD ID			NW041			NW041			NW041			NW041			NW041			NW041			NW041		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			3/13/2006			3/11/2005			3/12/2004			3/14/2003			3/14/2002		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16							<	0.48	U	<	0.5	U	<	0.38	U	<	0.29	U	<	0.40	U
1,3-Dinitrobenzene	-	0 / 16							<	0.48	U	<	0.5	U	<	0.38	U	<	0.19	U	<	0.27	U
2,4,6-Trinitrotoluene	-	0 / 16							<	0.48	U	<	0.5	U	<	0.38	U	<	0.24	U	<	0.33	U
2,4-Dinitrotoluene	-	0 / 16							<	0.48	U	<	0.5	U	<	0.74	U	<	0.19	U	<	0.27	U
2,6-Dinitrotoluene	-	0 / 16	Abandoned 2008			Not Sampled in 2007			<	0.48	U	<	0.5	U	<	0.74	U	<	0.74	U	<	1.0	U
2-Amino-4,6-dinitrotoluene	-	0 / 15							<	0.48	U	<	0.5	U	<	0.74	U	<	0.3	U	<	0.42	U
2-Nitrotoluene	-	0 / 11							<	0.48	U	<	0.5	U	<	0.74	U	<	0.59	U	<	0.82	U
3-Nitrotoluene	-	0 / 11							<	0.48	U	<	0.5	U	<	0.74	U	<	0.37	U	<	0.52	U
4-Amino-2,6-dinitrotoluene	-	0 / 11							<	0.48	U	<	0.5	U	<	0.74	U	<	0.5	U	<	0.70	U
4-Nitrotoluene	-	0 / 11							<	0.48	U	<	0.5	U	<	1.2	U	<	1.2	U	<	1.7	U
HMX	-	0 / 15							<	0.48	U	<	0.5	U	<	0.93	U	<	0.82	U	<	1.1	U
MNX	-	0 / 3							<	0.48	U	<	0.5	U	<	0.38	U		NA			NA	
Nitrobenzene	-	0 / 15							<	0.48	U	<	0.5	U	<	0.38	U	<	0.34	U	<	0.47	U
RDX	0.676	4 / 16							<	0.48	U	<	0.5	U	<	0.38	U	0.27	0.48	J	<	0.67	U
Tetryl	-	0 / 14							<	0.48	U	<	0.5	U	<	0.74	U	<	0.79	U	<	1.1	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW041-EXPLOSIVES

FIELD ID			NW041			NW041			NW041			NW041			NW041			NW041			NW041		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			UW51			UW51			UW51			UW33		
COLLECT DATE	Detection	Frequency	3/13/2001			3/14/2000			3/23/1999			6/14/1998			10/3/1997			12/10/1996			7/13/1994		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U
2-Nitrotoluene	-	0 / 11	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA	
3-Nitrotoluene	-	0 / 11	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 11	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA	
4-Nitrotoluene	-	0 / 11	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA	
HMX	-	0 / 15	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U
MNX	-	0 / 3		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U
RDX	0.676	4 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	0.62	NRL	
Tetryl	-	0 / 14	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-10
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW041-EXPLOSIVES

FIELD ID	NW041		NW041			NW041			NW041			NW041		
METHOD	Maximum	Detection	UW33			UW32			UW25			99		
COLLECT DATE	Detection	Frequency	6/10/1994			8/31/1992			5/30/1991			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)														
1,3,5-Trinitrobenzene	-	0 / 16	<	0.425	U	<	0.449	U	<	0.21	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 16	<	0.549	U	<	0.611	U	<	0.458	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.451	U	<	0.635	U	<	0.426	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 16	<	0.26	U	<	0.064	U	<	0.397	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.26	U	<	0.074	U	<	0.6	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.244	U	<	0.158	U	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 11		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 11		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 11		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 11		NA			NA			NA			NA	
HMX	-	0 / 15	<	0.563	U	<	1.21	U	<	0.533	U		NA	
MNX	-	0 / 3		NA			NA			NA			NA	
Nitrobenzene	-	0 / 15	<	0.817	U	<	0.645	U	<	0.682	U		NA	
RDX	0.676	4 / 16	0.676	NRL		<	1.17	U	<	0.416	U	0.4	NRL	
Tetryl	-	0 / 14	<	1.18	U		NA		<	0.631	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW050-EXPLOSIVES

FIELD ID			NW050			NW050			NW050			NW050			NW050			NW050			NW050		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/1/2012			3/7/2011			3/11/2010			3/5/2009			3/11/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.48	U
HMX	1.3	2 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.48	U	<	0.48	U
RDX	2.3	4 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 20	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW050-EXPLOSIVES

FIELD ID			NW050			NW050			NW050			NW050			NW050			NW050			NW050		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2006			3/11/2005			3/11/2004			3/17/2003			3/18/2002			3/20/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.46	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.31	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.39	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.6	U	<	0.42	U	<	0.31	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.6	U	<	0.42	U	<	1.2	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.6	U	<	0.42	U	<	0.48	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.6	U	<	0.42	U	<	0.95	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.6	U	<	0.42	U	<	0.60	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.6	U	<	0.42	U	<	0.81	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.48	U	<	0.98	U	<	0.68	U	<	1.9	U	<	0.8	U	<	1.1	U
HMX	1.3	2 / 21	<	0.48	U	<	0.48	U	<	0.76	U	<	0.53	U	<	1.3	U	1.3	1		<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.31	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.54	U	<	0.8	U	<	0.8	U
RDX	2.3	4 / 23	<	0.48	U	<	0.48	U	<	0.31	U	<	0.22	U	<	0.77	U	2.3	0.8		<	0.8	U
Tetryl	-	0 / 20	<	0.48	U	<	0.48	U	<	0.6	U	<	0.42	U	<	1.3	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW050-EXPLOSIVES

FIELD ID			NW050			NW050			NW050			NW050			NW050			NW050			NW050		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW33			UW33			UW32			UW25		
COLLECT DATE	Detection	Frequency	3/23/1999			10/2/1997			12/9/1996			7/16/1994			6/12/1994			8/31/1992			5/30/1991		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.21	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U	<	0.458	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	<	0.426	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.397	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.6	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.8	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.319	U	<	0.319	U		NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.514	U	<	0.514	U		NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	0.309	U	<	0.309	U		NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.368	U	<	0.368	U		NA			NA			NA			NA	
HMX	1.3	2 / 21	<	0.8	U	0.663	0.16		<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U	<	5.3	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.682	U
RDX	2.3	4 / 23	<	0.8	U	1.89	0.558		<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	1.37	NRL	
Tetryl	-	0 / 20	<	0.8	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		<	0.631	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-11
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW050-EXPLOSIVES

FIELD ID	NW050			NW050				
METHOD	Maximum	Detection	3S			99		
COLLECT DATE	Detection	Frequency	9/11/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 22	NA			<	0.1	U
1,3-Dinitrobenzene	-	0 / 22	NA			<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 22	NA			<	0.1	U
2,4-Dinitrotoluene	-	0 / 22	NA			<	0.1	U
2,6-Dinitrotoluene	-	0 / 22	NA			<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	NA				NA	
2-Nitrotoluene	-	0 / 17	NA				NA	
3-Nitrotoluene	-	0 / 17	NA				NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	NA				NA	
4-Nitrotoluene	-	0 / 17	NA				NA	
HMX	1.3	2 / 21	NA				NA	
MNX	-	0 / 10	NA				NA	
Nitrobenzene	-	0 / 21	NA				NA	
RDX	2.3	4 / 23	<	8.61	U	1.8	NRL	
Tetryl	-	0 / 20	NA				NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW051-EXPLOSIVES

FIELD ID			NW051			NW051			NW051			NW051			NW051			NW051			NW051		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/1/2012			3/7/2011			3/11/2010			3/5/2009			3/11/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.146	1 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.52	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.52	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.52	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.52	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.52	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.52	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.52	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.52	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.52	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.52	U
HMX	5.53	17 / 22	0.21	0.8	J	0.42	0.8	J	0.34	0.8	J	0.41	0.4		0.63	0.49		<	0.48	U	0.86	0.52	
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.48	U	<	0.52	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.52	U
RDX	42.2	15 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.52	U
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.48	U	<	0.52	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW051-EXPLOSIVES

FIELD ID			NW051			NW051			NW051			NW051			NW051			NW051			NW051		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2006			3/11/2005			3/12/2004			3/17/2003			3/18/2002			3/20/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.146	1 / 24	<	0.48	U	<	0.48	U	<	0.27	U	<	0.26	U	<	0.33	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.27	U	<	0.26	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.27	U	<	0.26	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.53	U	<	0.5	U	<	0.22	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.53	U	<	0.5	U	<	0.86	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.53	U	<	0.5	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.53	U	<	0.5	U	<	0.68	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.53	U	<	0.5	U	<	0.43	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.53	U	<	0.5	U	<	0.58	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.85	U	<	0.81	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	5.53	17 / 22	<	0.48	U	0.79	0.48		1.6	0.66		1.7	0.63		<	0.94	U	1.3	1		1.6	0.8	
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.27	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.27	U	<	0.26	U	<	0.39	U	<	0.8	U	<	0.8	U
RDX	42.2	15 / 26	<	0.48	U	<	0.48	U	0.47	0.27		0.55	0.26		<	0.55	U	0.98	0.8		3.8	0.8	
Tetryl	-	0 / 21	<	0.48	U	<	0.48	U	<	0.53	U	<	0.5	U	<	0.91	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW051-EXPLOSIVES

FIELD ID			NW051			NW051			NW051			NW051			NW051			NW051			NW051		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/23/1999			6/14/1998			10/2/1997			12/9/1996			7/16/1994			6/12/1994			8/31/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.146	1 / 24	<	0.8	U	<	1.00	U	0.146	0.125		<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	5.53	17 / 22	1.42	0.8		<	0.500	U	1.44	0.16		1.9	0.16		2.49	NRL		2.85	NRL		5.53	NRL	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	42.2	15 / 26	2.83	0.8		<	1.00	U	3.33	0.558		4.12	0.558		3.49	NRL		3.59	NRL		2.48	NRL	
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-12
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW051-EXPLOSIVES

FIELD ID	NW051					NW051			NW051			NW051			NW051		
METHOD	Maximum	Detection	UW25			3S			99			99			99		
COLLECT DATE	Detection	Frequency	5/30/1991			9/12/1985			4/16/1985			3/15/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	0.146	1 / 24	<	0.21	U		NA			NA		<	0.1	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 24	<	0.458	U		NA			NA		<	0.1	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.426	U		NA			NA		<	0.1	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 24	<	0.397	U		NA			NA		<	0.1	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.6	U		NA			NA		<	0.1	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
HMX	5.53	17 / 22	<	5.3	U		NA			NA			NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.682	U		NA			NA			NA			NA	
RDX	42.2	15 / 26	0.618	NRL		42.2	NRL		36	NRL		20	NRL		29	NRL	
Tetryl	-	0 / 21	<	0.631	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW052-EXPLOSIVES

FIELD ID			NW052			NW052			NW052			NW052			NW052			NW052			NW052		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/11/2010			3/5/2009			3/11/2008			3/9/2007			3/13/2006			3/11/2005		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.8	U	<	1	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	0.53	1 / 20	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	1.48	1 / 21	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 21	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	1.4	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
HMX	-	0 / 20	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
MNX	-	0 / 8	<	0.8	U	<	2	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 20	<	0.8	U	<	0.4	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
RDX	-	0 / 22	<	0.8	U	<	0.2	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 19	<	1.6	U	<	0.24	U	<	0.49	U	<	0.49	U	<	0.58	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW052-EXPLOSIVES

FIELD ID			NW052			NW052			NW052			NW052			NW052			NW052			NW052		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	3/11/2004			3/17/2003			3/18/2002			3/20/2001			3/13/2000			3/23/1999			6/16/1998		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.23	U	<	0.2	U	<	0.36	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U
1,3-Dinitrobenzene	0.53	1 / 20	<	0.23	U	<	0.2	U	<	0.24	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	1.48	1 / 21	<	0.23	U	<	0.2	U	<	0.30	U	<	0.8	U	<	1.5	U	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	-	0 / 21	<	0.45	U	<	0.39	U	<	0.24	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 21	<	0.45	U	<	0.39	U	<	0.93	U	<	0.8	U	<	1.1	U	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.45	U	<	0.39	U	<	0.38	U	<	0.8	U	<	1	U	<	0.8	U	<	0.500	U
2-Nitrotoluene	-	0 / 16	<	0.45	U	<	0.39	U	<	0.74	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 16	<	0.45	U	<	0.39	U	<	0.46	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.45	U	<	0.39	U	<	0.63	U	<	0.8	U	<	1	U	<	0.8	U	<	1.00	U
4-Nitrotoluene	-	0 / 16	<	0.73	U	<	0.63	U	<	1.5	U	<	0.8	U	<	1.1	U	<	0.8	U	<	1.00	U
HMX	-	0 / 20	<	0.57	U	<	0.49	U	<	1.0	U	<	1	U	<	0.8	U	<	0.8	U	<	0.500	U
MNX	-	0 / 8	<	0.23	U		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.23	U	<	0.2	U	<	0.42	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.500	U
RDX	-	0 / 22	<	0.23	U	<	0.2	U	<	0.60	U	<	0.8	U	<	0.8	U	<	0.8	U	<	1.00	U
Tetryl	-	0 / 19	<	0.45	U	<	0.39	U	<	0.99	U	<	0.8	U	<	1.3	U	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW052-EXPLOSIVES

FIELD ID			NW052			NW052			NW052			NW052			NW052			NW052			NW052		
METHOD	Maximum	Detection	UW51			UW51			UW33			UW33			UW32			UW25			3S		
COLLECT DATE	Detection	Frequency	10/2/1997			12/9/1996			7/16/1994			6/11/1994			8/31/1992			6/3/1991			9/10/1985		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 21	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U	<	0.21	U		NA	
1,3-Dinitrobenzene	0.53	1 / 20	<	0.989	U	<	0.989	U	0.53	NRL		<	0.549	U		NA		<	0.458	U		NA	
2,4,6-Trinitrotoluene	1.48	1 / 21	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U	1.48	NRL			NA	
2,4-Dinitrotoluene	-	0 / 21	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U	<	0.397	U		NA	
2,6-Dinitrotoluene	-	0 / 21	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U	<	0.6	U		NA	
2-Amino-4,6-dinitrotoluene	-	0 / 20	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 16	<	0.319	U	<	0.319	U		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 16	<	0.514	U	<	0.514	U		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16	<	0.309	U	<	0.309	U		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 16	<	0.368	U	<	0.368	U		NA			NA			NA			NA			NA	
HMX	-	0 / 20	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U	<	5.3	U		NA	
MNX	-	0 / 8		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 20	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U	<	0.682	U		NA	
RDX	-	0 / 22	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U	<	0.416	U	<	8.61	U
Tetryl	-	0 / 19	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA		<	1.33	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-13
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW052-EXPLOSIVES

FIELD ID	NW052				
METHOD	Maximum	Detection	99		
COLLECT DATE	Detection	Frequency	11/29/1984		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0 / 21	<	0.1	U
1,3-Dinitrobenzene	0.53	1 / 20	<	0.1	U
2,4,6-Trinitrotoluene	1.48	1 / 21	<	0.1	U
2,4-Dinitrotoluene	-	0 / 21	<	0.1	U
2,6-Dinitrotoluene	-	0 / 21	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 20		NA	
2-Nitrotoluene	-	0 / 16		NA	
3-Nitrotoluene	-	0 / 16		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 16		NA	
4-Nitrotoluene	-	0 / 16		NA	
HMX	-	0 / 20		NA	
MNX	-	0 / 8		NA	
Nitrobenzene	-	0 / 20		NA	
RDX	-	0 / 22	<	0.1	U
Tetryl	-	0 / 19		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW060-EXPLOSIVES

FIELD ID			NW060			NW060			NW060			NW060			NW060			NW060			NW060		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/2/2012			3/4/2011			3/10/2010			3/6/2009			3/6/2008			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U			
1,3-Dinitrobenzene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
2,4,6-Trinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
2,4-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
2,6-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
3-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U			
HMX	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
MNX	-	0 / 6	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U			
Nitrobenzene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
RDX	-	0 / 19	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
Tetryl	-	0 / 17	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U			

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW060-EXPLOSIVES

FIELD ID			NW060			NW060			NW060			NW060			NW060			NW060			NW060		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			3/14/2003			3/18/2002			3/20/2001			3/10/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 19										<	0.3	U	<	0.46	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 19										<	0.2	U	<	0.31	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 19										<	0.25	U	<	0.38	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 19										<	0.2	U	<	0.31	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 19	No 2006 Sample			No 2005 Sample			No 2004 Sample			<	0.79	U	<	1.2	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 18	Well Dry			Well Dry			Well Dry			<	0.32	U	<	0.48	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 14										<	0.62	U	<	0.94	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 14										<	0.39	U	<	0.59	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 14										<	0.53	U	<	0.81	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 14										<	1.3	U	<	1.9	U	<	0.8	U	<	1.1	U
HMX	-	0 / 18										<	0.86	U	<	1.3	U	<	1	U	<	0.8	U
MNX	-	0 / 6											NA			NA			NA			NA	
Nitrobenzene	-	0 / 18										<	0.35	U	<	0.54	U	<	0.8	U	<	0.8	U
RDX	-	0 / 19										<	0.51	U	<	0.77	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 17										<	0.84	U	<	1.3	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW060-EXPLOSIVES

FIELD ID			NW060			NW060			NW060			NW060			NW060			NW060			NW060		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/23/1999			6/14/1998			10/2/1997			12/9/1996			7/15/1994			6/12/1994			8/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 19	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 19	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 19	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 19	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 18	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 6		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 18	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 19	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 17	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-14
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW060-EXPLOSIVES

FIELD ID			NW060			NW060		
METHOD	Maximum	Detection	UW25			99		
COLLECT DATE	Detection	Frequency	5/30/1991			11/29/1984		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 19	<	0.21	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 19	<	0.458	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 19	<	0.426	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 19	<	0.397	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 19	<	0.6	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 18	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 14		NA			NA	
3-Nitrotoluene	-	0 / 14		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 14		NA			NA	
4-Nitrotoluene	-	0 / 14		NA			NA	
HMX	-	0 / 18	<	0.533	U		NA	
MNX	-	0 / 6		NA			NA	
Nitrobenzene	-	0 / 18	<	0.682	U		NA	
RDX	-	0 / 19	<	0.416	U	<	0.1	U
Tetryl	-	0 / 17	<	0.631	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW061-EXPLOSIVES

FIELD ID			NW061			NW061			NW061			NW061			NW061			NW061			NW061		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/12/2013			3/2/2012			3/4/2011			3/11/2010			3/6/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.55	U
1,3-Dinitrobenzene	0.753	1 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.55	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.55	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.55	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.55	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.55	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.55	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.55	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.55	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.55	U
HMX	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.55	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.55	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.55	U
RDX	0.4	2 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.55	U
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.55	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW061-EXPLOSIVES

FIELD ID			NW061			NW061			NW061			NW061			NW061			NW061			NW061		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2006			3/14/2005			3/11/2004			3/14/2003			3/18/2002			3/20/2001			3/10/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.16	U	<	0.24	U	<	0.44	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	0.753	1 / 23	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.29	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.37	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.31	U	<	0.16	U	<	0.29	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.31	U	<	0.62	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.25	U	<	0.46	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.49	U	<	0.90	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.57	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.77	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.5	U	<	1	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.39	U	<	0.68	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.16	U	<	0.28	U	<	0.51	U	<	0.8	U	<	0.8	U
RDX	0.4	2 / 23	<	0.48	U	<	0.48	U	<	0.16	U	0.28	0.4	J	<	0.73	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 21	<	0.48	U	<	0.48	U	<	0.31	U	<	0.66	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW061-EXPLOSIVES

FIELD ID			NW061			NW061			NW061			NW061			NW061			NW061			NW061		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/23/1999			6/14/1998			10/2/1997			12/9/1996			7/15/1994			6/12/1994			8/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	0.753	1 / 23	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	0.753	NRL		<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.4	2 / 23	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-15
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW061-EXPLOSIVES

FIELD ID			NW061			NW061		
METHOD	Maximum	Detection	UW25			99		
COLLECT DATE	Detection	Frequency	5/30/1991			11/29/1984		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 23	<	0.21	U	<	0.1	U
1,3-Dinitrobenzene	0.753	1 / 23	<	0.458	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.426	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 23	<	0.397	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.6	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 18		NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA	
HMX	-	0 / 22	<	5.3	U		NA	
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 22	<	0.682	U		NA	
RDX	0.4	2 / 23	<	4.2	U	0.4	NRL	
Tetryl	-	0 / 21	<	0.631	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW062-EXPLOSIVES

FIELD ID			NW062			NW062			NW062			NW062			NW062			NW062			NW062		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/2/2012			3/4/2011			3/11/2010			3/6/2009			3/7/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	0.564	1 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	-	0 / 22	<	0.8	UJ	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	UJ	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	0.43 J	1 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	1.34	1 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW062-EXPLOSIVES

FIELD ID			NW062			NW062			NW062			NW062			NW062			NW062			NW062		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/13/2006			3/14/2005			3/11/2004			3/14/2003			3/18/2002			3/20/2001			3/10/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.27	U	<	0.43	U	<	0.40	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	0.564	1 / 23	<	0.48	U	<	0.48	U	<	0.27	U	<	0.29	U	<	0.27	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.27	U	<	0.36	U	<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.53	U	<	0.29	U	<	0.27	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.53	U	<	1.1	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.53	U	<	0.45	U	<	0.42	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.53	U	<	0.87	U	<	0.82	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.53	U	<	0.55	U	<	1.7	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.53	U	<	0.75	U	<	0.70	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.85	U	<	1.8	U	<	0.52	U	<	0.8	U	<	1.1	U
HMX	-	0 / 22	<	0.48	U	<	0.48	U	<	0.66	U	<	1.2	U	<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.27	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.27	U	<	0.5	U	<	0.47	U	<	0.8	U	<	0.8	U
RDX	0.43 J	1 / 23	<	0.48	U	<	0.48	U	<	0.27	U	0.43	0.71	J	<	0.67	U	<	0.8	U	<	0.8	U
Tetryl	1.34	1 / 21	<	0.48	U	<	0.48	U	<	0.53	U	<	1.2	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW062-EXPLOSIVES

FIELD ID			NW062			NW062			NW062			NW062			NW062			NW062			NW062		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/23/1999			6/14/1998			10/2/1997			12/9/1996			7/15/1994			6/12/1994			8/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	0.564	1 / 23	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	0.564	NRL		<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 22	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.43 J	1 / 23	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	1.34	1 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-16
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW062-EXPLOSIVES

FIELD ID			NW062			NW062		
METHOD	Maximum	Detection	UW25			99		
COLLECT DATE	Detection	Frequency	5/30/1991			11/29/1984		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 23	<	2.1	U	<	0.1	U
1,3-Dinitrobenzene	0.564	1 / 23	<	4.6	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.426	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 23	<	0.397	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.6	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA	
2-Nitrotoluene	-	0 / 18		NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA	
HMX	-	0 / 22	<	5.3	U		NA	
MNX	-	0 / 10		NA			NA	
Nitrobenzene	-	0 / 22	<	6.8	U		NA	
RDX	0.43 J	1 / 23	<	4.2	U	<	0.1	U
Tetryl	1.34	1 / 21	1.34	NRL			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW070-EXPLOSIVES

FIELD ID			NW070			NW070			NW070			NW070			NW070			NW070			NW070		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			2/29/2012			3/1/2011			3/9/2010			3/4/2009			3/5/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	1.4	1 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 23	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW070-EXPLOSIVES

FIELD ID			NW070			NW070			NW070			NW070			NW070			NW070			NW070		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/10/2005			3/11/2004			3/13/2003			3/15/2002			3/16/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 26	<	0.48	U	<	0.48	U	<	0.17	U	<	0.31	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 26	<	0.48	U	<	0.48	U	<	0.17	U	<	0.21	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.48	U	<	0.48	U	<	0.17	U	<	0.26	U	<	0.28	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 26	<	0.48	U	<	0.48	U	<	0.33	U	<	0.21	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 26	<	0.48	U	<	0.48	U	<	0.33	U	<	0.81	U	<	0.88	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.48	U	<	0.33	U	<	0.33	U	<	0.35	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.33	U	<	0.64	U	<	0.69	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.33	U	<	0.4	U	<	0.44	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.33	U	<	0.55	U	<	0.60	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.53	U	<	1.3	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 25	<	0.48	U	<	0.48	U	<	0.41	U	<	0.88	U	<	0.96	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.17	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.48	U	<	0.48	U	<	0.17	U	<	0.36	U	<	0.40	U	<	0.8	U	<	0.8	U
RDX	1.4	1 / 26	<	0.48	U	<	0.48	U	<	0.17	U	<	0.52	U	<	0.57	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 23	<	0.48	U	<	0.48	U	<	0.33	U	<	0.86	U	<	0.94	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW070-EXPLOSIVES

FIELD ID			NW070			NW070			NW070			NW070			NW070			NW070			NW070		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/18/1999			6/13/1998			10/2/1997			2/18/1997			7/12/1994			6/9/1994			8/31/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 26	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 25	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	1.4	1 / 26	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 23	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-17
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW070-EXPLOSIVES

FIELD ID			NW070			NW070			NW070			NW070			NW070		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			99		
COLLECT DATE	Detection	Frequency	5/31/1991			10/16/1990			4/24/1990			5/15/1989			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 26	<	0.21	U	<	0.626	U	<	0.626	U	<	0.56	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 26	<	0.458	U	<	0.519	U	<	0.519	U	<	0.61	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.426	U	<	0.588	U	<	0.588	U	<	0.78	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 26	<	0.397	U	<	0.612	U	<	0.612	U	<	0.6	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 26	<	0.6	U	<	1.15	U	<	1.15	U	<	0.55	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
HMX	-	0 / 25	<	5.3	U	<	1.65	U	<	1.65	U	<	1.3	U		NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.682	U	<	1.07	U	<	1.07	U	<	1.13	U		NA	
RDX	1.4	1 / 26	<	0.416	U	<	2.11	U	<	2.11	U	1.4	NRL		<	0.1	U
Tetryl	-	0 / 23	<	0.631	U	<	0.556	U	<	0.556	U		NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW071-EXPLOSIVES

FIELD ID			NW071			NW071			NW071			NW071			NW071			NW071			NW071		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			2/29/2012			3/1/2011			3/9/2010			3/5/2009			3/5/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.47	U	<	0.51	U
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.47	U	<	0.51	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.47	U	<	0.51	U
2,4-Dinitrotoluene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.47	U	<	0.51	U
2,6-Dinitrotoluene	2.28	1 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U	<	0.51	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U	<	0.51	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.47	U	<	0.51	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.47	U	<	0.51	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U	<	0.51	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.47	U	<	0.51	U
HMX	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.47	U	<	0.51	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.47	U	<	0.51	U
Nitrobenzene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.49	U	<	0.47	U	<	0.51	U
RDX	2.6	4 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.47	U	<	0.51	U
Tetryl	0.849	1 / 24	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.47	U	<	0.51	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW071-EXPLOSIVES

FIELD ID			NW071			NW071			NW071			NW071			NW071			NW071			NW071		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/10/2005			3/11/2004			3/13/2003			3/15/2002			3/16/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.21	U	<	0.24	U	<	0.35	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.21	U	<	0.2	U	<	0.29	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 28	<	0.48	U	<	0.48	U	<	0.4	U	<	0.16	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	2.28	1 / 28	<	0.48	U	<	0.48	U	<	0.4	U	<	0.62	U	<	0.90	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.4	U	<	0.25	U	<	0.36	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.4	U	<	0.49	U	<	0.71	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.4	U	<	0.31	U	<	0.45	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.4	U	<	0.42	U	<	0.61	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.65	U	<	1	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 26	<	0.48	U	<	0.48	U	<	0.51	U	<	0.68	U	<	0.99	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 26	<	0.48	U	<	0.48	U	<	0.21	U	<	0.28	U	<	0.41	U	<	0.8	U	<	0.8	U
RDX	2.6	4 / 27	<	0.48	U	<	0.48	U	<	0.21	U	0.2	0.4	J	<	0.58	U	<	0.8	U	<	0.8	U
Tetryl	0.849	1 / 24	<	0.48	U	<	0.48	U	<	0.4	U	<	0.66	U	<	0.96	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW071-EXPLOSIVES

FIELD ID			NW071			NW071			NW071			NW071			NW071			NW071			NW071		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/18/1999			6/13/1998			10/2/1997			2/18/1997			7/12/1994			6/9/1994			8/31/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 28	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	2.28	1 / 28	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 26	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.6	4 / 27	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	0.849	1 / 24	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-18
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW071-EXPLOSIVES

FIELD ID			NW071			NW071			NW071			NW071			NW071			NW071			NW071		
METHOD	Maximum	Detection	UW33			UW25			UW14			UW14			UW01			99			99		
COLLECT DATE	Detection	Frequency	7/24/1991			6/4/1991			10/16/1990			4/24/1990			5/15/1989			3/15/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 28	<	0.425	U	<	0.21	U	<	0.626	U	<	0.626	U	<	0.56	U	<	0.1	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 28	<	0.549	U	<	0.458	U	<	0.519	U	<	0.519	U	<	0.61	U	<	0.1	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.451	U	<	0.426	U	<	0.588	U	<	0.588	U	<	0.78	U	<	0.1	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 28	<	0.26	U	<	0.397	U	<	0.612	U	<	0.612	U	<	0.6	U	<	0.1	U	<	0.1	U
2,6-Dinitrotoluene	2.28	1 / 28	<	0.26	U	<	0.6	U	<	1.15	U	<	1.15	U	2.28	NRL		<	0.1	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.5	U	<	0.8	U		NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
HMX	-	0 / 26	<	0.563	U	<	5.3	U	<	1.65	U	<	1.65	U	<	1.3	U		NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 26	<	0.817	U	<	0.682	U	<	1.07	U	<	1.07	U	<	1.13	U		NA			NA	
RDX	2.6	4 / 27	<	0.412	U		NA		<	2.11	U	<	2.11	U	1.43	NRL		1	NRL		2.6	NRL	
Tetryl	0.849	1 / 24	<	1.18	U	0.849	NRL		<	0.556	U	<	0.556	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW080-EXPLOSIVES

FIELD ID			NW080			NW080			NW080			NW080			NW080			NW080			NW080		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			3/2/2012			3/3/2011			3/15/2010			3/4/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	0.7	1 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.5	U
HMX	3.38	9 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.5	U
RDX	12.4	12 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 23	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW080-EXPLOSIVES

FIELD ID			NW080			NW080			NW080			NW080			NW080			NW080			NW080		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/11/2005			3/11/2004			3/13/2003			3/15/2002			3/16/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 26	<	0.49	U	<	0.53	U	<	0.26	U	<	0.24	U	<	0.60	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 26	<	0.49	U	<	0.53	U	<	0.26	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.49	U	<	0.53	U	<	0.26	U	<	0.2	U	<	0.50	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 26	<	0.49	U	<	0.53	U	<	0.51	U	<	0.16	U	<	0.40	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	0.7	1 / 26	<	0.49	U	<	0.53	U	<	0.51	U	<	0.62	U	<	1.6	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.49	U	<	0.53	U	<	0.51	U	<	0.25	U	<	0.63	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.49	U	<	0.53	U	<	0.51	U	<	0.49	U	<	1.2	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.49	U	<	0.53	U	<	0.51	U	<	0.31	U	<	0.78	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.49	U	<	0.53	U	<	0.51	U	<	0.42	U	<	1.1	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.49	U	<	0.53	U	<	0.82	U	<	1	U	<	2.5	U	<	0.8	U	<	1.1	U
HMX	3.38	9 / 25	<	0.49	U	0.5	0.53	J	0.39	0.64	J	0.35	0.68	J	<	1.7	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.49	U	<	0.53	U	<	0.26	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.49	U	<	0.53	U	<	0.26	U	<	0.28	U	<	0.70	U	<	0.8	U	<	0.8	U
RDX	12.4	12 / 26	<	0.49	U	0.75	0.53		0.71	0.26		0.77	0.4		<	1.0	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 23	<	0.49	U	<	0.53	U	<	0.51	U	<	0.66	U	<	1.7	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW080-EXPLOSIVES

FIELD ID			NW080			NW080			NW080			NW080			NW080			NW080			NW080		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/19/1999			6/15/1998			10/1/1997			12/10/1996			7/16/1994			6/11/1994			9/1/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 26	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	0.7	1 / 26	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	3.38	9 / 25	<	0.8	U	<	0.500	U	1.12	0.16		<	0.16	U	0.732	NRL		0.987	NRL		3.38	NRL	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	12.4	12 / 26	<	0.8	U	<	1.00	U	2.81	0.558		<	0.558	U	1.88	NRL		2.36	NRL		3.99	NRL	
Tetryl	-	0 / 23	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-19
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW080-EXPLOSIVES

FIELD ID			NW080			NW080			NW080			NW080			NW080			NW080		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			3S			99		
COLLECT DATE	Detection	Frequency	5/31/1991			10/16/1990			4/25/1990			5/15/1989			9/10/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 26	<	0.21	U	<	0.626	U	<	0.626	U	<	0.56	U		NA		<	0.1	U
1,3-Dinitrobenzene	-	0 / 26	<	0.458	U	<	0.519	U	<	0.519	U	<	0.61	U		NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 26	<	0.426	U	<	0.588	U	<	0.588	U	<	0.78	U		NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 26	<	0.397	U	<	0.612	U	<	0.612	U	<	0.6	U		NA		<	0.1	U
2,6-Dinitrotoluene	0.7	1 / 26	<	0.6	U	<	1.15	U	<	1.15	U	0.7	NRL			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
HMX	3.38	9 / 25	1.15	NRL		<	1.65	U	<	1.65	U	1.72	NRL			NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.682	U	<	1.07	U	<	1.07	U	<	1.13	U		NA			NA	
RDX	12.4	12 / 26	5.31	NRL		3.85	NRL		5.46	NRL		3.58	NRL		12.4	NRL			NA	
Tetryl	-	0 / 23	<	0.631	U	<	0.556	U	<	0.556	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW081-EXPLOSIVES

FIELD ID			NW081R			NW081R			NW081			NW081			NW081			NW081			NW081		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			4/16/2012			3/3/2011			3/15/2010			3/4/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.928	2 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	1.51	1 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 22	<	0.8	U	<	0.8	U	<	0.8	U	0.14	0.2	J	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 20	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	6.87	25 / 25	1.7	0.8		1.9	0.8		2.2	0.8		2.7	0.4		3.3	0.48		3.2	0.48		3.1	0.49	
MNX	0.12 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	70.7	29 / 29	0.95	0.8		1.6	0.8	J	2.3	0.8		2	0.2		3.1	0.48		3.1	0.48		3.4	0.49	
Tetryl	-	0 / 23	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW081-EXPLOSIVES

FIELD ID			NW081			NW081			NW081			NW081			NW081			NW081			NW081		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/11/2005			3/11/2004			3/13/2003			3/15/2002			3/16/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.928	2 / 27	<	0.48	U	<	0.48	U	<	0.16	U	<	0.24	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 27	<	0.48	U	<	0.48	U	<	0.16	U	<	0.16	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 27	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 27	<	0.48	U	<	0.48	U	<	0.31	U	<	0.17	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	1.51	1 / 27	<	0.48	U	<	0.48	U	<	0.31	U	<	0.62	U	<	0.99	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 22	<	0.48	U	<	0.48	U	<	0.31	U	<	0.25	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.49	U	<	0.78	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.31	U	<	0.31	U	<	0.50	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 20	<	0.48	U	<	0.48	U	<	0.31	U	<	0.42	U	<	0.67	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.5	U	<	1	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	6.87	25 / 25	3	0.48		3	0.48		3.1	0.39		3.4	0.68		4.0	1.1		4.1	1		4.8	0.8	
MNX	0.12 J	1 / 10	<	0.48	U	<	0.48	U	0.12	0.16	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.48	U	<	0.48	U	<	0.16	U	<	0.28	U	<	0.45	U	<	0.8	U	<	0.8	U
RDX	70.7	29 / 29	3.5	0.48		3.9	0.48		3.4	0.16		3.2	0.4		5.0	0.64		5.8	0.8		5.4	0.8	
Tetryl	-	0 / 23	<	0.48	U	<	0.48	U	<	0.31	U	<	0.66	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW081-EXPLOSIVES

FIELD ID			NW081			NW081			NW081			NW081			NW081			NW081			NW081		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/19/1999			6/15/1998			10/1/1997			12/10/1996			7/16/1994			6/11/1994			9/1/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.928	2 / 27	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 27	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 27	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 27	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	1.51	1 / 27	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.954	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 20	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U	<	0.704	U	<	0.704	U		NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	6.87	25 / 25	4.41	0.8		4.29	0.500	J*	3.43	0.16		4.9	0.16		6.62	NRL		6.87	NRL		6.38	NRL	
MNX	0.12 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 25	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	70.7	29 / 29	6.32	0.8		6.58	1.00		6.11	0.558		9.4	0.558		17	NRL		17	NRL		18.8	NRL	
Tetryl	-	0 / 23	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW081-EXPLOSIVES

FIELD ID			NW081			NW081			NW081			NW081			NW081			NW081			NW081		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			3S			99			99		
COLLECT DATE	Detection	Frequency	6/3/1991			10/16/1990			4/25/1990			5/15/1989			9/10/1985			4/16/1985			3/15/1985		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.928	2 / 27	<	0.21	U	0.928	NRL		0.863	NRL		<	0.56	U		NA		NA		<	0.1	U	
1,3-Dinitrobenzene	-	0 / 27	<	0.458	U	<	0.519	U	<	0.519	U	<	0.61	U		NA		NA		<	0.1	U	
2,4,6-Trinitrotoluene	-	0 / 27	<	0.426	U	<	0.588	U	<	0.588	U	<	0.78	U		NA		NA		<	0.1	U	
2,4-Dinitrotoluene	-	0 / 27	<	0.397	U	<	0.612	U	<	0.612	U	<	0.6	U		NA		NA		<	0.1	U	
2,6-Dinitrotoluene	1.51	1 / 27	<	0.6	U	<	1.15	U	<	1.15	U	1.51	NRL			NA		NA		<	0.1	U	
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 22	<	0.8	U		NA			NA			NA			NA		NA			NA		
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA		NA			NA		
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA		NA			NA		
4-Amino-2,6-dinitrotoluene	-	0 / 20		NA			NA			NA			NA			NA		NA			NA		
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA		NA			NA		
HMX	6.87	25 / 25	4.34	NRL		5.65	NRL		5.71	NRL		4.34	NRL			NA		NA			NA		
MNX	0.12 J	1 / 10		NA			NA			NA			NA			NA		NA			NA		
Nitrobenzene	-	0 / 25	<	0.682	U	<	1.07	U	<	1.07	U	<	1.13	U		NA		NA			NA		
RDX	70.7	29 / 29	20.7	NRL		17	NRL		17.7	NRL		5.37	NRL		70.7	NRL		53	NRL		48	NRL	
Tetryl	-	0 / 23	<	0.77	U	<	0.556	U	<	0.556	U		NA			NA		NA			NA		

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-20
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW081-EXPLOSIVES

FIELD ID	NW081				
METHOD	Maximum	Detection	99		
COLLECT DATE	Detection	Frequency	11/29/1984		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	0.928	2 / 27	<	0.1	U
1,3-Dinitrobenzene	-	0 / 27	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 27	<	0.1	U
2,4-Dinitrotoluene	-	0 / 27	<	0.1	U
2,6-Dinitrotoluene	1.51	1 / 27	<	0.1	U
2-Amino-4,6-dinitrotoluene	0.14 J	1 / 22		NA	
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 20		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	6.87	25 / 25		NA	
MNX	0.12 J	1 / 10		NA	
Nitrobenzene	-	0 / 25		NA	
RDX	70.7	29 / 29	54	NRL	
Tetryl	-	0 / 23		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW082-EXPLOSIVES

FIELD ID			NW082R			NW082R			NW082			NW082			NW082			NW082			NW082		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			4/16/2012			3/3/2011			3/15/2010			3/4/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.31	2 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.47	U	<	0.49	U
1,3-Dinitrobenzene	0.547	1 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
2,6-Dinitrotoluene	1.1	1 / 28	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.99	U	<	0.48	U	<	0.47	U	<	0.49	U
HMX	2.27	24 / 26	0.81	0.8	J	0.89	0.8		1.2	0.8		1.2	0.4		1.5	0.48		2.1	0.47		1.6	0.49	
MNX	0.11 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.49	U
Nitrobenzene	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
RDX	20	23 / 28	<	0.8	U	<	0.8	U	1.4	0.8		0.47	0.2		0.7	0.48		1.5	0.47		0.73	0.49	
Tetryl	0.949	1 / 24	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW082-EXPLOSIVES

FIELD ID			NW082			NW082			NW082			NW082			NW082			NW082			NW082		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/10/2006			3/11/2005			3/11/2004			3/13/2003			3/15/2002			3/16/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.31	2 / 28	<	0.48	U	<	0.51	U	<	0.25	U	<	0.24	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	0.547	1 / 28	<	0.48	U	<	0.51	U	<	0.25	U	<	0.16	U	<	0.25	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.48	U	<	0.51	U	<	0.25	U	<	0.2	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 28	<	0.48	U	<	0.51	U	<	0.49	U	<	0.16	U	<	0.25	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	1.1	1 / 28	<	0.48	U	<	0.51	U	<	0.49	U	<	0.62	U	<	0.98	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.49	U	<	0.25	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.49	U	<	0.49	U	<	0.78	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.49	U	<	0.31	U	<	0.49	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.49	U	<	0.42	U	<	0.67	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.79	U	<	1	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	2.27	24 / 26	1.5	0.48		1.3	0.51		1.7	0.62		1.5	0.68		1.6	1.1		1.6	1		1.60	0.8	
MNX	0.11 J	1 / 10	<	0.48	U	<	0.51	U	0.11	0.25	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 26	<	0.48	U	<	0.51	U	<	0.25	U	<	0.28	U	<	0.44	U	<	0.8	U	<	0.8	U
RDX	20	23 / 28	0.81	0.48		0.75	0.51		1.3	0.25		0.87	0.4		1.5	0.63		1.2	0.8		1.1	0.8	
Tetryl	0.949	1 / 24	<	0.48	U	<	0.51	U	<	0.49	U	<	0.66	U	<	1.0	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW082-EXPLOSIVES

FIELD ID	NW082			NW082			NW082			NW082			NW082			NW082			NW082				
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/19/1999			6/15/1998			10/1/1997			12/10/1996			7/16/1994			6/11/1994			9/1/1992		
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.31	2 / 28	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	0.547	1 / 28	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	0.547	NRL		<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 28	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	1.1	1 / 28	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	2.27	24 / 26	1.90	0.8		1.11	0.500	J*	1.69	0.16		1.7	0.16		2.14	NRL		1.81	NRL		1.59	NRL	
MNX	0.11 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 26	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	20	23 / 28	1.62	0.8		<	1.00	U	2.29	0.558		<	0.558	U	3.79	NRL		2.48	NRL		2.86	NRL	
Tetryl	0.949	1 / 24	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW082-EXPLOSIVES

FIELD ID			NW082			NW082			NW082			NW082			NW082			NW082			NW082		
METHOD	Maximum	Detection	UW33			UW25			UW14			UW14			UW01			3S			99		
COLLECT DATE	Detection	Frequency	7/24/1991			6/4/1991			10/16/1990			4/25/1990			5/15/1989			9/10/1985			3/15/1985		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	1.31	2 / 28	<	0.425	U	<	0.21	U	0.984	NRL		1.31	NRL		<	0.56	U		NA		<	0.1	U
1,3-Dinitrobenzene	0.547	1 / 28	<	0.549	U	<	0.458	U	<	0.519	U	<	0.519	U	<	0.61	U		NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.451	U	<	0.426	U	<	0.588	U	<	0.588	U	<	0.78	U		NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 28	<	0.26	U	<	0.397	U	<	0.612	U	<	0.612	U	<	0.6	U		NA		<	0.1	U
2,6-Dinitrotoluene	1.1	1 / 28	<	0.26	U	<	0.6	U	<	1.15	U	<	1.15	U	1.1	NRL			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.5	U	<	0.8	U	<	NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
HMX	2.27	24 / 26	<	0.563	U	1.79	NRL		<	1.65	U	2.27	NRL		1.86	NRL			NA			NA	
MNX	0.11 J	1 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 26	<	0.817	U	<	0.682	U	<	1.07	U	<	1.07	U	<	1.13	U		NA			NA	
RDX	20	23 / 28	4.99	NRL			NA		<	2.11	U	3.94	NRL		7.81	NRL		15.4	NRL		9	NRL	
Tetryl	0.949	1 / 24	<	1.18	U	0.949	NRL		<	0.556	U	<	0.556	U		NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-21
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW082-EXPLOSIVES

FIELD ID	NW082				
METHOD	Maximum	Detection	99		
COLLECT DATE	Detection	Frequency	11/29/1984		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	1.31	2 / 28	<	0.1	U
1,3-Dinitrobenzene	0.547	1 / 28	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 28	<	0.1	U
2,4-Dinitrotoluene	-	0 / 28	<	0.1	U
2,6-Dinitrotoluene	1.1	1 / 28	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23		NA	
2-Nitrotoluene	-	0 / 18		NA	
3-Nitrotoluene	-	0 / 18		NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA	
4-Nitrotoluene	-	0 / 18		NA	
HMX	2.27	24 / 26		NA	
MNX	0.11 J	1 / 10		NA	
Nitrobenzene	-	0 / 26		NA	
RDX	20	23 / 28	20	NRL	
Tetryl	0.949	1 / 24		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW090-EXPLOSIVES

FIELD ID			NW090			NW090			NW090			NW090			NW090			NW090			NW090		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/10/2005			3/10/2004			3/13/2003			3/15/2002			3/16/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 9				<	0.53	U	<	0.3	U	<	0.26	U	<	0.35	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 9				<	0.53	U	<	0.3	U	<	0.17	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 9				<	0.53	U	<	0.3	U	<	0.22	U	<	0.29	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 9				<	0.53	U	<	0.58	U	<	0.17	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 9	Abandoned 2005			<	0.53	U	<	0.58	U	<	0.67	U	<	0.91	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 9				<	0.53	U	<	0.58	U	<	0.27	U	<	0.37	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 9				<	0.53	U	<	0.58	U	<	0.53	U	<	0.72	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 9				<	0.53	U	<	0.58	U	<	0.34	U	<	0.45	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 9				<	0.53	U	<	0.58	U	<	0.46	U	<	0.62	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 9				<	0.53	U	<	0.93	U	<	1.1	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 9				<	0.53	U	<	0.73	U	<	0.74	U	<	1.0	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.53	U	<	0.3	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 9				<	0.53	U	<	0.3	U	<	0.3	U	<	0.41	U	<	0.8	U	<	0.8	U
RDX	-	0 / 9				<	0.53	U	<	0.3	U	<	0.43	U	<	0.59	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 9				<	0.53	U	<	0.58	U	<	0.72	U	<	0.97	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-22
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW090-EXPLOSIVES

FIELD ID				NW090			NW090			NW090		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			
COLLECT DATE	Detection	Frequency	3/19/1999			6/13/1998			9/13/1997			
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)												
1,3,5-Trinitrobenzene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.125	U	
1,3-Dinitrobenzene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.989	U	
2,4,6-Trinitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.29	U	
2,4-Dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.233	U	
2,6-Dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.2	U	
2-Amino-4,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.173	U	
2-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.319	U	
3-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.514	U	
4-Amino-2,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.309	U	
4-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.368	U	
HMX	-	0 / 9	<	0.8	U	<	0.500	U	<	0.16	U	
MNX	-	0 / 2		NA			NA			NA		
Nitrobenzene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.231	U	
RDX	-	0 / 9	<	0.8	U	<	1.00	U	<	0.558	U	
Tetryl	-	0 / 9	<	0.8	U	<	0.500	U	<	0.253	U	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW091-EXPLOSIVES

FIELD ID			NW091			NW091			NW091			NW091			NW091			NW091			NW091		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			3/10/2005			3/10/2004			3/13/2003			3/15/2002			3/16/2001			3/9/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 9				<	0.48	U	<	0.16	U	<	0.32	U	<	0.38	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 9				<	0.48	U	<	0.16	U	<	0.21	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 9				<	0.48	U	<	0.16	U	<	0.26	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 9				<	0.48	U	<	0.31	U	<	0.21	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 9	Abandoned 2005			<	0.48	U	<	0.31	U	<	0.82	U	<	0.99	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 9				<	0.48	U	<	0.31	U	<	0.33	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 9				<	0.48	U	<	0.31	U	<	0.65	U	<	0.78	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 9				<	0.48	U	<	0.31	U	<	0.41	U	<	0.50	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 9				<	0.48	U	<	0.31	U	<	0.55	U	<	0.67	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 9				<	0.48	U	<	0.5	U	<	1.3	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	-	0 / 9				<	0.48	U	<	0.39	U	<	0.9	U	<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 2				<	0.48	U	<	0.16	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 9				<	0.48	U	<	0.16	U	<	0.37	U	<	0.45	U	<	0.8	U	<	0.8	U
RDX	-	0 / 9				<	0.48	U	<	0.16	U	<	0.53	U	<	0.64	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 9				<	0.48	U	<	0.31	U	<	0.87	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-23
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW091-EXPLOSIVES

FIELD ID	NW091					NW091			NW091		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51		
COLLECT DATE	Detection	Frequency	3/19/1999			6/13/1998			9/13/1997		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)											
1,3,5-Trinitrobenzene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.125	U
1,3-Dinitrobenzene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.989	U
2,4,6-Trinitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.29	U
2,4-Dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.233	U
2,6-Dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.2	U
2-Amino-4,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.173	U
2-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.319	U
3-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.514	U
4-Amino-2,6-dinitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.309	U
4-Nitrotoluene	-	0 / 9	<	0.8	U	<	1.00	U	<	0.368	U
HMX	-	0 / 9	<	0.8	U	<	0.500	U	<	0.16	U
MNX	-	0 / 2		NA			NA			NA	
Nitrobenzene	-	0 / 9	<	0.8	U	<	0.500	U	<	0.231	U
RDX	-	0 / 9	<	0.8	U	<	1.00	U	<	0.558	U
Tetryl	-	0 / 9	<	0.8	U	<	0.500	U	<	0.253	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW100-EXPLOSIVES

FIELD ID			NW100			NW100			NW100			NW100			NW100			NW100			NW100		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			2/29/2012			3/3/2011			3/10/2010			3/4/2009			3/5/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	0.63 J	1 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
MNX	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	0.9	1 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW100-EXPLOSIVES

FIELD ID			NW100			NW100			NW100			NW100			NW100			NW100			NW100		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			None			3/16/2004			3/13/2003			3/14/2002			3/19/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U				<	0.24	U	<	0.33	U	<	0.39	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 23	<	0.48	U				<	0.24	U	<	0.22	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U				<	0.24	U	<	0.28	U	<	0.32	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U				<	0.46	U	<	0.22	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	No 2005 Sample Well Dry			<	0.46	U	<	0.86	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U				<	0.46	U	<	0.35	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U				<	0.46	U	<	0.68	U	<	0.79	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U				<	0.46	U	<	0.43	U	<	0.50	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	0.63 J	1 / 17	<	0.48	U				<	0.46	U	<	0.58	U	<	0.68	U	0.63	0.8	J	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U				<	0.74	U	<	1.4	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	-	0 / 25	<	0.48	U				<	0.58	U	<	0.94	U	<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 9	<	0.48	U				<	0.24	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U				<	0.24	U	<	0.39	U	<	0.45	U	<	0.8	U	<	0.8	U
RDX	0.9	1 / 25	<	0.48	U				<	0.24	U	<	0.55	U	<	0.65	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 21	<	0.48	U				<	0.46	U	<	0.91	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW100-EXPLOSIVES

FIELD ID			NW100			NW100			NW100			NW100			NW100			NW100			NW100		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/22/1999			6/12/1998			10/1/1997			2/18/1997			7/12/1994			6/8/1994			8/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	UJ	<	0.449	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	UJ	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	0.63 J	1 / 17	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 25	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 9		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.9	1 / 25	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-24
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW100-EXPLOSIVES

FIELD ID			NW100			NW100			NW100			NW100			NW100			NW100		
METHOD	Maximum	Detection	UW33			UW25			UW14			UW14			UW01			99		
COLLECT DATE	Detection	Frequency	7/23/1991			6/1/1991			10/17/1990			4/30/1990			5/17/1989			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 23	<	0.425	U	<	0.21	U		NA			NA			NA		<	0.1	U
1,3-Dinitrobenzene	-	0 / 23	<	0.549	U	<	0.458	U		NA			NA			NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.451	U	<	0.426	U		NA			NA			NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 23	<	0.26	U	<	0.397	U		NA			NA			NA		<	0.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.26	U	<	0.6	U		NA			NA			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	1	U	<	0.8	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	0.63 J	1 / 17		NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA	
HMX	-	0 / 25	<	0.563	U	<	5.3	U	<	1.65	U	<	1.65	U	<	1.3	U		NA	
MNX	-	0 / 9		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.817	U	<	0.682	U		NA			NA			NA			NA	
RDX	0.9	1 / 25	<	0.412	U		NA		<	2.11	U	<	2.11	U	0.9	NRL		<	0.1	U
Tetryl	-	0 / 21	<	1.18	U	<	0.631	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW101-EXPLOSIVES

FIELD ID			NW101			NW101			NW101			NW101			NW101			NW101			NW101		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			2/29/2012			3/3/2011			3/10/2010			3/4/2009			3/5/2008			3/9/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	3.15	2 / 26	0.54	0.8	J	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	2	3 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW101-EXPLOSIVES

FIELD ID			NW101			NW101			NW101			NW101			NW101			NW101			NW101		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/9/2005			3/11/2004			3/13/2003			3/14/2002			3/19/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.26	U	<	0.28	U	<	0.42	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.26	U	<	0.19	U	<	0.28	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.26	U	<	0.23	U	<	0.35	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.51	U	<	0.19	U	<	0.28	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.51	U	<	0.72	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.48	U	<	0.49	U	<	0.51	U	<	0.29	U	<	0.44	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.51	U	<	0.57	U	<	0.87	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.51	U	<	0.36	U	<	0.55	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.51	U	<	0.49	U	<	0.74	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.82	U	<	1.2	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	3.15	2 / 26	<	0.48	U	<	0.49	U	<	0.64	U	<	0.79	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.49	U	<	0.26	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.48	U	<	0.49	U	<	0.26	U	<	0.33	U	<	0.49	U	<	0.8	U	<	0.8	U
RDX	2	3 / 26	<	0.48	U	<	0.49	U	<	0.26	U	0.24	0.47	J	<	0.71	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 22	<	0.48	U	<	0.49	U	<	0.51	U	<	0.77	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW101-EXPLOSIVES

FIELD ID			NW101			NW101			NW101			NW101			NW101			NW101			NW101		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/22/1999			6/12/1998			10/1/1997			2/18/1997			7/12/1994			6/8/1994			8/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	UJ	<	0.449	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	UJ	<	0.635	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	3.15	2 / 26	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2	3 / 26	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 22	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-25
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW101-EXPLOSIVES

FIELD ID			NW101			NW101			NW101			NW101			NW101			NW101		
METHOD	Maximum	Detection	UW33			UW25			UW14			UW14			UW01			99		
COLLECT DATE	Detection	Frequency	7/24/1991			6/1/1991			10/17/1990			4/30/1990			5/17/1989			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 24	<	0.425	U	<	0.21	U		NA			NA			NA		<	0.1	U
1,3-Dinitrobenzene	-	0 / 24	<	0.549	U	<	0.458	U		NA			NA			NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.451	U	<	0.426	U		NA			NA			NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.397	U		NA			NA			NA		<	0.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.6	U		NA			NA			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.5	U	<	0.8	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
HMX	3.15	2 / 26	<	0.563	U	<	5.3	U	<	1.65	U	<	1.65	U	3.15	NRL			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.817	U	<	0.682	U		NA			NA			NA			NA	
RDX	2	3 / 26	<	0.412	U		NA		<	2.11	U	<	2.11	U	1.29	NRL		2	NRL	
Tetryl	-	0 / 22	<	1.18	U	<	0.631	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW102-EXPLOSIVES

FIELD ID			NW102			NW102			NW102			NW102			NW102			NW102			NW102		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			2/29/2012			3/3/2011			3/10/2010			3/4/2009			3/5/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.53	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.53	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.53	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.53	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.53	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.53	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.53	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.53	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.53	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.53	U
HMX	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.53	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.53	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.53	U
RDX	1.77	4 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.53	U
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.53	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW102-EXPLOSIVES

FIELD ID			NW102			NW102			NW102			NW102			NW102			NW102			NW102		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/10/2005			3/11/2004			3/12/2003			3/13/2002			3/19/2001			3/8/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.24	U	<	0.24	U	<	0.35	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.24	U	<	0.16	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.24	U	<	0.2	U	<	0.29	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.46	U	<	0.16	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.46	U	<	0.62	U	<	0.91	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.46	U	<	0.25	U	<	0.37	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.46	U	<	0.49	U	<	0.72	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.45	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.46	U	<	0.42	U	<	0.62	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.75	U	<	1	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 25	<	0.48	U	<	0.5	U	<	0.58	U	<	0.68	U	<	1.0	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.5	U	<	0.24	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.24	U	<	0.28	U	<	0.41	U	<	0.8	U	<	0.8	U
RDX	1.77	4 / 26	<	0.48	U	<	0.5	U	0.4	0.24		0.15	0.4	J	<	0.59	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 21	<	0.48	U	<	0.5	U	<	0.46	U	<	0.66	U	<	0.97	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW102-EXPLOSIVES

FIELD ID			NW102			NW102			NW102			NW102			NW102			NW102			NW102		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/22/1999			6/12/1998			10/1/1997			2/18/1997			7/12/1994			6/8/1994			8/22/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	J	<	0.449	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	J	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 25	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	1.77	4 / 26	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-26
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW102-EXPLOSIVES

FIELD ID			NW102			NW102			NW102			NW102			NW102		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			99		
COLLECT DATE	Detection	Frequency	6/3/1991			10/17/1990			4/30/1990			5/17/1989			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 23	<	0.21	U		NA			NA			NA		<	0.1	U
1,3-Dinitrobenzene	-	0 / 23	<	0.458	U		NA			NA			NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.426	U		NA			NA			NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 23	<	0.397	U		NA			NA			NA		<	0.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.6	U		NA			NA			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
HMX	-	0 / 25	<	5.3	U	<	1.65	U	<	1.65	U	<	1.3	U		NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.682	U		NA			NA			NA			NA	
RDX	1.77	4 / 26	<	0.416	U	<	2.11	U	<	2.11	U	1.77	NRL		0.2	NRL	
Tetryl	-	0 / 21	<	1.24	U		NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW120-EXPLOSIVES

FIELD ID			NW120			NW120			NW120			NW120			NW120			NW120			NW120		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/1/2012			3/1/2012			3/3/2011			3/10/2010			3/5/2009			3/6/2008			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U			
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	No 2007 Sample Obstructed		
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U			
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U			
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U			
HMX	0.61 J	7 / 24	<	0.8	U	<	0.8	U	0.19	0.8	J	<	0.4	U	<	0.48	U	<	0.48	U			
MNX	-	0 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U			
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
RDX	2.88	14 / 26	<	0.8	U	<	0.8	U	1	0.8		<	0.2	U	<	0.48	U	<	0.48	U			
Tetryl	-	0 / 20	<	0.8	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U			

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW120-EXPLOSIVES

FIELD ID			NW120			NW120			NW120			NW120			NW120			NW120			NW120		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/9/2005			3/10/2004			3/12/2003			3/14/2002			3/15/2001			3/16/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.18	U	<	0.16	U	<	0.53	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.18	U	<	0.16	U	<	0.35	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.18	U	<	0.16	U	<	0.44	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.34	U	<	0.31	U	<	0.35	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.34	U	<	0.31	U	<	1.4	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.48	U	<	0.49	U	<	0.34	U	<	0.31	U	<	0.55	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.49	U	<	0.34	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.49	U	<	0.34	U	<	0.31	U	<	0.68	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.48	U	<	0.49	U	<	0.34	U	<	0.31	U	<	0.92	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 17	<	0.48	U	<	0.49	U	<	0.55	U	<	0.5	U	<	2.2	U	<	0.8	U	<	1.1	U
HMX	0.61 J	7 / 24	<	0.48	U	<	0.49	U	0.29	0.43	J	0.51	0.39		0.60	1.5	J	0.61	1	J	<	0.8	U
MNX	-	0 / 9	<	0.48	U	<	0.49	U	<	0.18	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.48	U	<	0.49	U	<	0.18	U	<	0.16	U	<	0.62	U	<	0.8	U	<	0.8	U
RDX	2.88	14 / 26	<	0.48	U	<	0.49	U	0.25	0.18		0.49	0.16		0.84	0.88	J	0.97	0.8		1	0.8	
Tetryl	-	0 / 20	<	0.48	U	<	0.49	U	<	0.34	U	<	0.31	U	<	1.5	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW120-EXPLOSIVES

FIELD ID			NW120			NW120			NW120			NW120			NW120			NW120			NW120		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/15/1998			10/3/1997			2/18/1997			7/13/1994			6/11/1994			9/2/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 17	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	0.61 J	7 / 24	0.513	0.8	J	<	0.500	U	<	0.16	U	0.404	0.16		<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 9		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.88	14 / 26	1.22	0.8		<	1.00	U	1.37	0.558		2.88	0.558		1.69	NRL		2.29	NRL		<	1.17	U
Tetryl	-	0 / 20	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-27
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW120-EXPLOSIVES

FIELD ID			NW120			NW120			NW120			NW120			NW120			NW120		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			3S			99		
COLLECT DATE	Detection	Frequency	6/3/1991			10/18/1990			5/1/1990			5/24/1989			9/10/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 22	<	0.21	U		NA			NA			NA			NA		<	0.1	U
1,3-Dinitrobenzene	-	0 / 22	<	0.458	U		NA			NA			NA			NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 22	<	0.426	U		NA			NA			NA			NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 22	<	0.397	U		NA			NA			NA			NA		<	0.1	U
2,6-Dinitrotoluene	-	0 / 22	<	0.6	U		NA			NA			NA			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 21	<	0.8	U		NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 17		NA			NA			NA			NA			NA			NA	
HMX	0.61 J	7 / 24	<	0.533	U	<	1.65	U	<	1.65	U	<	1.3	U		NA			NA	
MNX	-	0 / 9		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 21	<	0.682	U		NA			NA			NA			NA			NA	
RDX	2.88	14 / 26	0.828	NRL		<	2.11	U	<	2.11	U	<	0.63	U	<	8.61	U	0.2	NRL	
Tetryl	-	0 / 20	<	0.631	U		NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW121-EXPLOSIVES

FIELD ID			NW121			NW121			NW121			NW121			NW121			NW121			NW121		
METHOD	Maximum	Detection	SW846 M833			SW846 M833			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			3/1/2012			3/3/2011			3/10/2010			3/5/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	0.81	10 / 26	0.22	0.8	J	0.2	0.8	J	0.16	0.8	J	0.2	0.4	J	<	0.48	U	<	0.48	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	-	0 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	0.954	1 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW121-EXPLOSIVES

FIELD ID			NW121			NW121			NW121			NW121			NW121			NW121			NW121		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/9/2005			3/10/2004			3/12/2003			3/14/2002			3/15/2001			3/16/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U	<	0.53	U	<	0.18	U	<	0.21	U	<	0.40	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 23	<	0.48	U	<	0.53	U	<	0.18	U	<	0.21	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U	<	0.53	U	<	0.18	U	<	0.21	U	<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.53	U	<	0.36	U	<	0.4	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.53	U	<	0.36	U	<	0.4	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.48	U	<	0.53	U	<	0.36	U	<	0.4	U	<	0.41	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.53	U	<	0.36	U	<	0.4	U	<	0.81	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.53	U	<	0.36	U	<	0.4	U	<	0.51	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.53	U	<	0.36	U	<	0.4	U	<	0.69	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.53	U	<	0.58	U	<	0.65	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.81	10 / 26	0.53	0.48		0.62	0.53		0.81	0.45		0.65	0.51		<	1.1	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.53	U	<	0.18	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.48	U	<	0.53	U	<	0.18	U	<	0.21	U	<	0.46	U	<	0.8	U	<	0.8	U
RDX	-	0 / 27	<	0.48	U	<	0.53	U	<	0.18	U	<	0.21	U	<	0.66	U	<	0.8	U	<	0.8	U
Tetryl	0.954	1 / 22	<	0.48	U	<	0.53	U	<	0.36	U	<	0.4	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW121-EXPLOSIVES

FIELD ID			NW121			NW121			NW121			NW121			NW121			NW121			NW121		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/15/1998			10/3/1997			12/12/1996			7/13/1994			6/11/1994			9/2/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	UJ	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.500	UJ	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	UJ	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	UJ	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	UJ	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	UJ	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	UJ	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	UJ	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	UJ	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	UJ	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	0.81	10 / 26	<	0.8	U	<	0.500	UJ	0.68	0.16		0.7	0.16		<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.500	UJ	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	-	0 / 27	<	0.8	U	<	1.00	UJ	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	0.954	1 / 22	<	0.8	U	<	0.500	UJ	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-28
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW121-EXPLOSIVES

FIELD ID			NW121			NW121			NW121			NW121			NW121			NW121			NW121		
METHOD	Maximum	Detection	UW33			UW25			UW14			UW14			UW01			38			99		
COLLECT DATE	Detection	Frequency	7/23/1991			6/2/1991			10/18/1990			5/1/1990			5/24/1989			9/10/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.425	U	<	0.21	U		NA			NA			NA			NA			NA	
1,3-Dinitrobenzene	-	0 / 23	<	0.549	U	<	0.458	U		NA			NA			NA			NA			NA	
2,4,6-Trinitrotoluene	-	0 / 23	<	0.451	U	<	0.426	U		NA			NA			NA			NA			NA	
2,4-Dinitrotoluene	-	0 / 23	<	0.26	U	<	0.397	U		NA			NA			NA			NA			NA	
2,6-Dinitrotoluene	-	0 / 23	<	0.26	U	<	0.6	U		NA			NA			NA			NA			NA	
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	1	U	<	0.8	U		NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
HMX	0.81	10 / 26	<	0.563	U	<	0.533	U	<	1.65	U	<	1.65	U	<	1.3	U		NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.817	U	<	0.682	U		NA			NA			NA			NA			NA	
RDX	-	0 / 27	<	0.412	U		NA		<	2.11	U	<	2.11	U	<	0.63	U	<	8.61	U	<	0.1	U
Tetryl	0.954	1 / 22	<	1.18	U	0.954	NRL			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW122-EXPLOSIVES

FIELD ID			NW122			NW122			NW122			NW122			NW122			NW122			NW122		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			3/1/2012			3/3/2011			3/10/2010			3/5/2009			3/6/2008			3/8/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	UJ	<	0.49	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.49	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.49	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.49	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	UJ	<	0.49	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	UJ	<	0.49	U	<	0.49	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.49	U	<	0.49	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.49	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	UJ	<	0.49	U	<	0.49	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	UJ	<	0.49	U	<	0.49	U
HMX	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.49	U	<	0.49	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	UJ	<	0.49	U	<	0.49	U
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	UJ	<	0.49	U	<	0.49	U
RDX	1.9	2 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	UJ	<	0.49	U	<	0.49	U
Tetryl	0.756	1 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	UJ	<	0.49	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW122-EXPLOSIVES

FIELD ID			NW122			NW122			NW122			NW122			NW122			NW122			NW122		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/9/2006			3/9/2005			3/10/2004			3/12/2003			3/14/2002			3/15/2001			3/16/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.26	U	<	0.17	U	<	0.44	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.26	U	<	0.17	U	<	0.29	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.26	U	<	0.17	U	<	0.37	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.5	U	<	0.34	U	<	0.29	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.5	U	<	0.34	U	<	1.1	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.5	U	<	0.34	U	<	0.46	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.5	U	<	0.34	U	<	0.90	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.5	U	<	0.34	U	<	0.57	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.5	U	<	0.34	U	<	0.77	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.51	U	<	0.81	U	<	0.54	U	<	1.8	U	<	0.8	U	<	1.1	U
HMX	-	0 / 26	<	0.48	U	<	0.51	U	<	0.63	U	<	0.42	U	<	1.2	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.51	U	<	0.26	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.48	U	<	0.51	U	<	0.26	U	<	0.17	U	<	0.51	U	<	0.8	U	<	0.8	U
RDX	1.9	2 / 27	<	0.48	U	<	0.51	U	<	0.26	U	<	0.17	U	<	0.73	U	<	0.8	U	<	0.8	U
Tetryl	0.756	1 / 22	<	0.48	U	<	0.51	U	<	0.5	U	<	0.34	U	<	1.2	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW122-EXPLOSIVES

FIELD ID			NW122			NW122			NW122			NW122			NW122			NW122			NW122		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/25/1999			6/15/1998			10/3/1997			12/12/1996			7/13/1994			6/11/1994			9/2/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 26	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	1.9	2 / 27	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	0.756	1 / 22	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-29
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW122-EXPLOSIVES

FIELD ID			NW122			NW122			NW122			NW122			NW122			NW122			NW122		
METHOD	Maximum	Detection	UW33			UW25			UW14			UW14			UW01			38			99		
COLLECT DATE	Detection	Frequency	7/23/1991			6/2/1991			10/18/1990			5/1/1990			5/24/1989			9/10/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.425	U	<	0.21	U		NA			NA			NA			NA			NA	
1,3-Dinitrobenzene	-	0 / 23	<	0.549	U	<	0.458	U		NA			NA			NA			NA			NA	
2,4,6-Trinitrotoluene	-	0 / 23	<	0.451	U	<	0.426	U		NA			NA			NA			NA			NA	
2,4-Dinitrotoluene	-	0 / 23	<	0.26	U	<	0.397	U		NA			NA			NA			NA			NA	
2,6-Dinitrotoluene	-	0 / 23	<	0.26	U	<	0.6	U		NA			NA			NA			NA			NA	
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	1	U	<	0.8	U		NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA			NA	
HMX	-	0 / 26	<	0.563	U	<	0.533	U	<	1.65	U	<	1.65	U	<	1.3	U		NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.817	U	<	0.682	U		NA			NA			NA			NA			NA	
RDX	1.9	2 / 27	<	0.412	U		NA		<	2.11	U	<	2.11	U	1.9	NRL		<	8.61	U	0.2	NRL	
Tetryl	0.756	1 / 22	<	1.18	U	0.756	NRL			NA			NA			NA			NA			NA	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW130/NW130R*-EXPLOSIVES

FIELD ID			NW130R			NW130R			NW130R			NW130R			NW130R			NW130R			NW130R		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			3/1/2012			3/1/2011			3/8/2010			3/3/2009			3/4/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.48	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.48	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.48	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.48	U
HMX	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.48	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.48	U
RDX	1.05	2 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.48	U
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.48	U

Notes:

*NW130 was abandoned and replaced by NW130R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW130/NW130R*-EXPLOSIVES

FIELD ID			NW130R			NW130R			NW130R			NW130			NW130			NW130			NW130		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/8/2005			3/16/2004			3/11/2003			3/13/2002			3/14/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.24	U	<	0.16	U	<	0.30	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.24	U	<	0.16	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.24	U	<	0.16	U	<	0.25	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.20	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.79	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.32	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.62	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.53	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.5	U	<	0.74	U	<	0.5	U	<	1.3	U	<	0.8	U	<	1.1	U
HMX	-	0 / 25	<	0.48	U	<	0.5	U	<	0.58	U	<	0.39	U	<	0.86	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.5	U	<	0.24	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.5	U	<	0.24	U	<	0.16	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	1.05	2 / 26	<	0.48	U	<	0.5	U	<	0.24	U	<	0.16	U	<	0.51	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 21	<	0.48	U	<	0.5	U	<	0.46	U	<	0.31	U	<	0.84	U	<	0.8	U	<	1.3	U

Notes:

*NW130 was abandoned and replaced by NW130R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW130/NW130R*-EXPLOSIVES

FIELD ID			NW130			NW130			NW130			NW130			NW130			NW130			NW130		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/18/1999			6/25/1998			10/1/1997			2/19/1997			7/16/1994			6/9/1994			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 25	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	1.05	2 / 26	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

*NW130 was abandoned and replaced by NW130R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-30
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW130/NW130R*-EXPLOSIVES

FIELD ID			NW130			NW130			NW130			NW130			NW130		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			99		
COLLECT DATE	Detection	Frequency	5/31/1991			10/17/1990			4/30/1990			5/24/1989			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																	
1,3,5-Trinitrobenzene	-	0 / 23	<	0.21	U		NA			NA			NA		<	0.1	U
1,3-Dinitrobenzene	-	0 / 23	<	0.458	U		NA			NA			NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 23	<	0.426	U		NA			NA			NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 23	<	0.397	U		NA			NA			NA		<	0.1	U
2,6-Dinitrotoluene	-	0 / 23	<	0.6	U		NA			NA			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA	
HMX	-	0 / 25	<	5.3	U	<	1.65	U	<	1.65	U	<	1.3	U		NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.682	U		NA			NA			NA			NA	
RDX	1.05	2 / 26	<	0.416	U	<	2.11	U	<	2.11	U	1.05	NRL		0.4	NRL	
Tetryl	-	0 / 21	<	0.631	U		NA			NA			NA			NA	

Notes:

*NW130 was abandoned and replaced by NW130R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW131/NW131R*-EXPLOSIVES

FIELD ID			NW131R			NW131R			NW131R			NW131R			NW131R			NW131R			NW131R		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			3/1/2012			3/1/2011			3/8/2010			3/4/2009			3/4/2008			3/5/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.5	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.5	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.49	U	<	0.48	U	<	0.5	U
HMX	-	0 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.49	U	<	0.48	U	<	0.5	U
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.49	U	<	0.48	U	<	0.5	U
RDX	0.4	1 / 26	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.49	U	<	0.48	U	<	0.5	U
Tetryl	-	0 / 22	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.49	U	<	0.48	U	<	0.5	U

Notes:

*NW131 was abandoned and replaced by NW131R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW131/NW131R*-EXPLOSIVES

FIELD ID			NW131R			NW131R			NW131R			NW131			NW131			NW131			NW131		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/9/2005			3/9/2004			3/11/2003			3/13/2002			3/14/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.18	U	<	0.18	U	<	0.35	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.18	U	<	0.18	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.18	U	<	0.18	U	<	0.29	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.36	U	<	0.34	U	<	0.23	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.48	U	<	0.36	U	<	0.34	U	<	0.90	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.36	U	<	0.34	U	<	0.36	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.36	U	<	0.34	U	<	0.71	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.36	U	<	0.34	U	<	0.45	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.36	U	<	0.34	U	<	0.61	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.48	U	<	0.58	U	<	0.55	U	<	1.5	U	<	0.8	U	<	1.1	U
HMX	-	0 / 26	<	0.48	U	<	0.48	U	<	0.45	U	<	0.43	U	<	0.99	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.18	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.48	U	<	0.48	U	<	0.18	U	<	0.18	U	<	0.41	U	<	0.8	U	<	0.8	U
RDX	0.4	1 / 26	<	0.48	U	<	0.48	U	<	0.18	U	<	0.18	U	<	0.58	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 22	<	0.48	U	<	0.48	U	<	0.36	U	<	0.34	U	<	0.96	U	<	0.8	U	<	1.3	U

Notes:

*NW131 was abandoned and replaced by NW131R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW131/NW131R*-EXPLOSIVES

FIELD ID			NW131			NW131			NW131			NW131			NW131			NW131			NW131		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/18/1999			6/25/1998			10/1/1997			2/19/1997			7/16/1994			6/9/1994			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 26	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	0.4	1 / 26	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 22	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

*NW131 was abandoned and replaced by NW131R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-31
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW131/NW131R*-EXPLOSIVES

FIELD ID			NW131			NW131			NW131			NW131			NW131			NW131		
METHOD	Maximum	Detection	UW33			UW25			UW14			UW14			UW01			99		
COLLECT DATE	Detection	Frequency	7/24/1991			6/2/1991			10/17/1990			4/30/1990			5/24/1989			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 24	<	0.425	U	<	0.21	U		NA			NA			NA		<	0.1	U
1,3-Dinitrobenzene	-	0 / 24	<	0.549	U	<	0.458	U		NA			NA			NA		<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.451	U	<	0.426	U		NA			NA			NA		<	0.1	U
2,4-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.397	U		NA			NA			NA		<	0.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.26	U	<	0.6	U		NA			NA			NA		<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 23	<	0.5	U	<	0.8	U		NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
HMX	-	0 / 26	<	0.563	U	<	5.3	U	<	1.65	U	<	1.65	U	<	1.3	U		NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 23	<	0.817	U	<	0.682	U		NA			NA			NA			NA	
RDX	0.4	1 / 26	<	0.412	U		NA		<	2.11	U	<	2.11	U	<	0.63	U	0.4	NRL	
Tetryl	-	0 / 22	<	1.18	U	<	0.631	U		NA			NA			NA			NA	

Notes:

*NW131 was abandoned and replaced by NW131R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW132/NW132R*-EXPLOSIVES

FIELD ID			NW132R			NW132R			NW132R			NW132R			NW132R			NW132R			NW132R		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/6/2013			3/1/2012			3/1/2011			3/8/2010			3/4/2009			3/4/2008			3/6/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.51	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.51	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.51	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.51	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.51	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.51	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.51	U
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.51	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.51	U
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.51	U
HMX	-	0 / 25	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.51	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.51	U
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.51	U
RDX	2.4	2 / 27	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.51	U
Tetryl	-	0 / 21	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.51	U

Notes:

*NW132 was abandoned and replaced by NW132R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW132/NW132R*-EXPLOSIVES

FIELD ID			NW132R			NW132R			NW132R			NW132			NW132			NW132			NW132		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/8/2006			3/9/2005			3/9/2004			3/11/2003			3/12/2002			3/14/2001			3/13/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.18	U	<	0.18	U	<	0.30	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.18	U	<	0.18	U	<	0.20	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.18	U	<	0.18	U	<	0.25	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.34	U	<	0.34	U	<	0.20	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.48	U	<	0.49	U	<	0.34	U	<	0.34	U	<	0.78	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.34	U	<	0.34	U	<	0.31	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.34	U	<	0.34	U	<	0.61	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.34	U	<	0.34	U	<	0.39	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.34	U	<	0.34	U	<	0.52	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 18	<	0.48	U	<	0.49	U	<	0.55	U	<	0.55	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	-	0 / 25	<	0.48	U	<	0.49	U	<	0.43	U	<	0.43	U	<	0.85	U	<	1	U	<	0.8	U
MNX	-	0 / 10	<	0.48	U	<	0.49	U	<	0.18	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.48	U	<	0.49	U	<	0.18	U	<	0.18	U	<	0.35	U	<	0.8	U	<	0.8	U
RDX	2.4	2 / 27	<	0.48	U	<	0.49	U	<	0.18	U	<	0.18	U	<	0.50	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 21	<	0.48	U	<	0.49	U	<	0.34	U	<	0.34	U	<	0.82	U	<	0.8	U	<	1.3	U

Notes:

*NW132 was abandoned and replaced by NW132R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW132/NW132R*-EXPLOSIVES

FIELD ID			NW132			NW132			NW132			NW132			NW132			NW132			NW132		
METHOD	Maximum	Detection	SW846 M8330			UW51			UW51			UW51			UW33			UW33			UW32		
COLLECT DATE	Detection	Frequency	3/18/1999			6/25/1998			10/1/1997			2/19/1997			7/16/1994			6/9/1994			9/3/1992		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.125	U	<	0.125	U	<	0.425	U	<	0.425	U	<	0.449	U
1,3-Dinitrobenzene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.989	U	<	0.989	U	<	0.549	U	<	0.549	U	<	0.611	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.8	U	<	1.00	U	<	0.29	U	<	0.29	U	<	0.451	U	<	0.451	U	<	0.635	U
2,4-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.233	U	<	0.233	U	<	0.26	U	<	0.26	U	<	0.064	U
2,6-Dinitrotoluene	-	0 / 24	<	0.8	U	<	0.500	U	<	0.2	U	<	0.2	U	<	0.26	U	<	0.26	U	<	0.074	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.173	U	<	0.173	U	<	0.244	U	<	0.244	U	<	0.158	U
2-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.319	U	<	0.319	U		NA			NA			NA	
3-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.514	U	<	0.514	U		NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.309	U	<	0.309	U		NA			NA			NA	
4-Nitrotoluene	-	0 / 18	<	0.8	U	<	1.00	U	<	0.368	U	<	0.368	U		NA			NA			NA	
HMX	-	0 / 25	<	0.8	U	<	0.500	U	<	0.16	U	<	0.16	U	<	0.563	U	<	0.563	U	<	1.21	U
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.8	U	<	0.500	U	<	0.231	U	<	0.231	U	<	0.817	U	<	0.817	U	<	0.645	U
RDX	2.4	2 / 27	<	0.8	U	<	1.00	U	<	0.558	U	<	0.558	U	<	0.412	U	<	0.412	U	<	1.17	U
Tetryl	-	0 / 21	<	0.8	U	<	0.500	U	<	0.253	U	<	0.253	U	<	1.18	U	<	1.18	U		NA	

Notes:

*NW132 was abandoned and replaced by NW132R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.4-32
CORNHUSKER ARMY AMMUNITION PLANT
WELL NW132/NW132R*-EXPLOSIVES

FIELD ID			NW132			NW132			NW132			NW132			NW132			NW132		
METHOD	Maximum	Detection	UW25			UW14			UW14			UW01			99			99		
COLLECT DATE	Detection	Frequency	6/3/1991			10/17/1990			4/30/1990			5/24/1989			3/15/1985			11/29/1984		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																				
1,3,5-Trinitrobenzene	-	0 / 24	<	0.21	U		NA			NA			NA		<	0.1	U	<	0.1	U
1,3-Dinitrobenzene	-	0 / 24	<	0.458	U		NA			NA			NA		<	0.1	U	<	0.1	U
2,4,6-Trinitrotoluene	-	0 / 24	<	0.426	U		NA			NA			NA		<	0.1	U	<	0.1	U
2,4-Dinitrotoluene	-	0 / 24	<	0.397	U		NA			NA			NA		<	0.1	U	<	0.1	U
2,6-Dinitrotoluene	-	0 / 24	<	0.6	U		NA			NA			NA		<	0.1	U	<	0.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 22	<	0.8	U		NA			NA			NA			NA			NA	
2-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
3-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Amino-2,6-dinitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
4-Nitrotoluene	-	0 / 18		NA			NA			NA			NA			NA			NA	
HMX	-	0 / 25	<	5.3	U	<	1.65	U	<	1.65	U	<	1.3	U		NA			NA	
MNX	-	0 / 10		NA			NA			NA			NA			NA			NA	
Nitrobenzene	-	0 / 22	<	0.682	U		NA			NA			NA			NA			NA	
RDX	2.4	2 / 27	<	0.416	U	<	2.11	U	<	2.11	U	<	0.63	U	1.4	NRL		2.4	NRL	
Tetryl	-	0 / 21	<	0.874	U		NA			NA			NA			NA			NA	

Notes:

*NW132 was abandoned and replaced by NW132R in 2004.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

C.1 Explosives**C.1.5 OU1 OFF-POST FEEDLOT WELLS**

WELL	TABLE
CA350	C.1.5-1
CA351	C.1.5-2
CA352	C.1.5-3
CA360	C.1.5-4
CA361	C.1.5-5
CA362	C.1.5-6
CA370	C.1.5-7
CA380	C.1.5-8
CA381	C.1.5-9
CA382	C.1.5-10
CA390	C.1.5-11

FEEDLOT LAGOON (SURFACE WATER SAMPLING)

SURFACE WATER SAMPLES	TABLE
Lagoon SW001-SW005	C.1.5-12

TABLE C.1.5-1
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA350-EXPLOSIVES

FIELD ID			CA350			CA350			CA350			CA350			CA350			CA350			CA350		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/7/2012			3/9/2011			3/11/2010			3/11/2009			3/10/2008			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U			
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U			
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U			
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U			
HMX	2.2	7 / 12	<	0.8	U	0.52	0.8	J	<	0.8	J	1.1	0.4		1.7	0.48		2.2	0.48				
MNX		0 / 6	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U			
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
RDX	0.21 J	1 / 12	<	0.8	U	<	0.8	UJ	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U			
Tetryl	-	0 / 12	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U			

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-1
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA350-EXPLOSIVES

FIELD ID			CA350			CA350			CA350			CA350			CA350			CA350			CA350		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			3/24/2003			3/26/2002			4/2/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12										<	0.24	U	<	0.28	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 12										<	0.24	U	<	0.18	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 12										<	0.24	U	<	0.23	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 12										<	0.46	U	<	0.18	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 12	No 2006 Sample			No 2005 Sample			No 2004 Sample			<	0.46	U	<	0.71	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	Well Dry			Well Dry			Well Dry			<	0.46	U	<	0.29	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 12										<	0.46	U	<	0.56	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 12										<	0.46	U	<	0.36	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 12										<	0.46	U	<	0.48	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 12										<	0.74	U	<	1.2	U	<	0.8	U	<	1.1	U
HMX	2.2	7 / 12										1.7	0.58		0.82	0.78		<	1	U	<	0.8	U
MNX		0 / 6											NA			NA			NA			NA	
Nitrobenzene	-	0 / 12										<	0.24	U	<	0.32	U	<	0.8	U	<	0.8	U
RDX	0.21 J	1 / 12										0.21	0.24	J	<	0.46	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 12										<	0.46	U	<	0.76	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-1
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA350-EXPLOSIVES

FIELD ID			CA350			CA350		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/1/1999			6/17/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U	<	1.00	U
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
HMX	2.2	7 / 12	0.71	0.8	J	<	0.500	U
MNX		0 / 6		NA			NA	
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.500	U
RDX	0.21 J	1 / 12	<	0.8	U	<	1.00	U
Tetryl	-	0 / 12	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.5-2
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA351-EXPLOSIVES**

FIELD ID			CA351			CA351			CA351			CA351			CA351			CA351			CA351		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/7/2012			3/9/2011			3/11/2010			3/11/2009			3/10/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	24 J	9 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	3.78 J	10 / 16	<	0.8	U	<	0.8	U	<	0.8	U	0.19	0.39	J	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	65 J	16 / 16	1.2	0.8	J	1.7	0.8		4.2	0.8		5.8	0.2		6.6	0.48		5.1	0.48		12	0.49	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	49.4 J	16 / 16	1.1	1.4	J	2.4	1.4		5.9	0.8		4.9	0.2		7.5	0.48		3.9	0.48		6.6	0.49	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.98	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	14.8 J	16 / 16	1	0.8	J	1.9	0.8		2.9	0.8		1.2	0.39	J	4.7	0.48		1.2	0.48		1.7	0.49	
MNX	0.11 J	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.39	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	16	12 / 16	<	0.8	U	0.93	0.8		1.4	0.8		0.45	0.2		<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-2
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA351-EXPLOSIVES

FIELD ID			CA351			CA351			CA351			CA351			CA351			CA351			CA351		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2006			3/23/2005			3/24/2004			3/24/2003			3/26/2002			4/2/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.17	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.17	U	<	0.23	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	24 J	9 / 16	0.71	0.48		1	0.48		2.4	0.25		6	0.17		11	2.8	J	24	8	J	17	30	J
2,4-Dinitrotoluene	3.78 J	10 / 16	0.67	0.48		0.85	0.48		1.4	0.49		1.9	0.34		2.9	0.23	J	3.6	0.8		2.9	1.1	
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.34	U	<	0.88	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	65 J	16 / 16	14	0.48		18	0.48	P	28	2.5		35	3.4		49	3.5	J	65	8	J	56	20	
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.34	U	<	0.69	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.34	U	<	0.44	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	49.4 J	16 / 16	8.8	0.48		11	0.48		15	0.49		21	3.4		35	6.0	J	45	8	J	42	20	
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.79	U	<	0.54	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	14.8 J	16 / 16	1.8	0.48	J	2	0.48		2.7	0.62		2.7	0.42		6.1	0.96	J	5.8	1	J	7	0.8	
MNX	0.11 J	1 / 10	<	0.48	U	<	0.48	U	0.11	0.25	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.25	U	<	0.17	U	<	0.40	U	<	0.8	U	<	0.8	U
RDX	16	12 / 16	0.66	0.48		1.1	0.48		1.9	0.25		2.5	0.17		7.2	0.57	J	12	0.8	U	16	0.8	
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.49	U	<	0.34	U	<	0.94	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-2
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA351-EXPLOSIVES

FIELD ID				CA351			CA351		
METHOD	Maximum	Detection	SW846 M8330			UW51			
COLLECT DATE	Detection	Frequency	4/1/1999			6/17/1998			
			Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)									
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	UJ	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ	
2,4,6-Trinitrotoluene	24 J	9 / 16	12	0.8		18.8	1.00	J	
2,4-Dinitrotoluene	3.78 J	10 / 16	2.4	0.8		3.78	0.500	J	
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	UJ	
2-Amino-4,6-dinitrotoluene	65 J	16 / 16	42	4		53.4	0.500	J	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ	
4-Amino-2,6-dinitrotoluene	49.4 J	16 / 16	33	4		49.4	1.00	J	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	UJ	
HMX	14.8 J	16 / 16	5.9	0.8		14.8	0.500	J	
MNX	0.11 J	1 / 10		NA			NA		
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	UJ	
RDX	16	12 / 16	12	0.8	J	13.5	1.00	J	
Tetryl	-	0 / 16	<	0.8	U	<	0.500	UJ	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-3
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA352-EXPLOSIVES

FIELD ID			CA352			CA352			CA352			CA352			CA352			CA352			CA352		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/7/2012			3/9/2011			3/11/2010			3/11/2009			3/10/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	2.7	3 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.49	U
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	1.8	2 / 16	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.49	U
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.49	U
HMX	3.1	3 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	0.54	0.49	
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U	<	0.49	U
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.47	U	<	0.49	U
RDX	0.5 J	2 / 16	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	<	0.49	U
Tetryl	-	0 / 16	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-3
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA352-EXPLOSIVES

FIELD ID			CA352			CA352			CA352			CA352			CA352			CA352			CA352		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/29/2006			3/23/2005			3/24/2004			3/24/2003			3/26/2002			4/2/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.40	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.27	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.33	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.27	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	2.7	3 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.42	U	0.24	0.8	J	2.7	1	
2-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.82	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.52	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	1.8	2 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	0.70	U	<	0.8	U	1.8	1	
4-Nitrotoluene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.67	U	<	0.5	U	<	1.7	U	<	0.8	U	<	1.1	U
HMX	3.1	3 / 16	<	0.48	U	<	0.48	U	<	0.52	U	<	0.39	U	<	1.1	U	<	1	U	3.1	0.8	
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.47	U	<	0.8	U	<	0.8	U
RDX	0.5 J	2 / 16	<	0.48	U	<	0.48	U	<	0.21	U	<	0.16	U	<	0.67	U	<	0.8	U	0.5	0.8	J
Tetryl	-	0 / 16	<	0.48	U	<	0.48	U	<	0.41	U	<	0.31	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-3
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA352-EXPLOSIVES

FIELD ID				CA352			CA352		
METHOD	Maximum	Detection	SW846 M8330			UW51			
COLLECT DATE	Detection	Frequency	4/1/1999			6/17/1998			
			Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)									
1,3,5-Trinitrobenzene	-	0 / 16	<	0.8	U	<	1.00	U	
1,3-Dinitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U	
2,4,6-Trinitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
2,4-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U	
2,6-Dinitrotoluene	-	0 / 16	<	0.8	U	<	0.500	U	
2-Amino-4,6-dinitrotoluene	2.7	3 / 16	0.68	0.8	J	<	0.500	U	
2-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
3-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
4-Amino-2,6-dinitrotoluene	1.8	2 / 16	0.94	0.8		<	1.00	U	
4-Nitrotoluene	-	0 / 16	<	0.8	U	<	1.00	U	
HMX	3.1	3 / 16	0.95	0.8		<	0.500	U	
MNX	-	0 / 10		NA			NA		
Nitrobenzene	-	0 / 16	<	0.8	U	<	0.500	U	
RDX	0.5 J	2 / 16	0.37	0.8	J	<	1.00	U	
Tetryl	-	0 / 16	<	0.8	U	<	0.500	U	

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-4
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA360-EXPLOSIVES

FIELD ID			CA360			CA360			CA360			CA360			CA360			CA360			CA360		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/21/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.25 J	1 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.49	U	<	0.49	U	<	0.5	U
1,3-Dinitrobenzene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.49	U	<	0.49	U	<	0.5	U
2,4,6-Trinitrotoluene	0.12 J	1 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.49	U	<	0.49	U	<	0.5	U
2,4-Dinitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.49	U	<	0.49	U	<	0.5	U
2,6-Dinitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.22	U	<	0.49	U	<	0.49	U	<	0.5	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.22	U	<	0.49	U	<	0.49	U	<	0.5	U
2-Nitrotoluene	1.4	1 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.49	U	<	0.49	U	<	0.5	U
3-Nitrotoluene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.49	U	<	0.49	U	<	0.5	U
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	1.4	U	<	1.4	U	<	0.8	U	<	0.22	U	<	0.49	U	<	0.49	U	<	0.5	U
4-Nitrotoluene	0.89	1 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	1.1	U	<	0.49	U	<	0.49	U	<	0.5	U
HMX	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.49	U	<	0.49	U	<	0.5	U
MNX	0.17 J	1 / 9	<	0.8	U	<	0.8	U	<	0.8	U	<	2.2	U	<	0.49	U	<	0.49	U	<	0.5	U
Nitrobenzene	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.43	U	<	0.49	U	<	0.49	U	<	0.5	U
RDX	-	0 / 15	<	0.8	U	<	0.8	U	<	0.8	U	<	0.22	U	<	0.49	U	<	0.49	U	<	0.5	U
Tetryl	-	0 / 15	<	1.6	U	<	0.8	U	<	0.8	U	<	0.26	U	<	0.49	U	<	0.49	U	<	0.5	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.5-4
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA360-EXPLOSIVES**

FIELD ID			CA360			CA360			CA360			CA360			CA360			CA360			CA360		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2006			None			3/24/2004			3/24/2003			3/26/2002			3/29/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	0.25 J	1 / 15	<	0.48	U				<	0.18	U	<	0.23	U	<	0.52	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 15	<	0.48	U				<	0.18	U	<	0.23	U	<	0.35	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	0.12 J	1 / 15	<	0.48	U				0.12	0.18	J	<	0.23	U	<	0.43	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 15	<	0.48	U				<	0.34	U	<	0.45	U	<	0.35	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 15	<	0.48	U	No 2005 Sample Well Dry			<	0.34	U	<	0.45	U	<	1.3	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.48	U				<	0.34	U	<	0.45	U	<	0.54	U	<	0.8	U	<	1	U
2-Nitrotoluene	1.4	1 / 15	1.4	0.48					<	0.34	U	<	0.45	U	<	1.1	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 15	<	0.48	U				<	0.34	U	<	0.45	U	<	0.67	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	0.48	U				<	0.34	U	<	0.45	U	<	0.91	U	<	0.8	U	<	1	U
4-Nitrotoluene	0.89	1 / 15	<	0.48	U				<	0.55	U	0.89	0.73		<	2.2	U	<	0.8	U	<	1.1	U
HMX	-	0 / 15	<	0.48	U				<	0.43	U	<	0.57	U	<	1.5	U	<	1	U	<	0.8	U
MNX	0.17 J	1 / 9	<	0.48	U				0.17	0.18	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 15	<	0.48	U				<	0.18	U	<	0.23	U	<	0.61	U	<	0.8	U	<	0.8	U
RDX	-	0 / 15	<	0.48	U				<	0.18	U	<	0.23	U	<	0.87	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 15	<	0.48	U				<	0.34	U	<	0.45	U	<	1.4	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-4
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA360-EXPLOSIVES

FIELD ID			CA360			CA360		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/2/1999			6/17/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	0.25 J	1 / 15	0.25	0.8	J	<	1.00	U
1,3-Dinitrobenzene	-	0 / 15	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	0.12 J	1 / 15	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	-	0 / 15	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 15	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	-	0 / 15	<	0.8	U	<	0.500	U
2-Nitrotoluene	1.4	1 / 15	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 15	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	-	0 / 15	<	0.8	U	<	1.00	U
4-Nitrotoluene	0.89	1 / 15	<	0.8	U	<	1.00	U
HMX	-	0 / 15	<	0.8	U	<	0.500	U
MNX	0.17 J	1 / 9		NA			NA	
Nitrobenzene	-	0 / 15	<	0.8	U	<	0.500	U
RDX	-	0 / 15	<	0.8	U	<	1.00	U
Tetryl	-	0 / 15	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-5
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA361-EXPLOSIVES

FIELD ID			CA361			CA361			CA361			CA361			CA361			CA361			CA361		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	2/21/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	0.72 J	1 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	0.57 J	1 / 14	<	0.8	U	<	0.8	U	<	0.8	U	0.57	0.2	J	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	0.91 J	1 / 14	<	0.8	U	<	0.8	U	<	0.8	U	0.91	0.41	J	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
MNX	2.5	2 / 10	<	0.8	U	<	0.8	U	<	0.8	U	2.5	2		<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.48	U	<	0.48	U
RDX	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-5
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA361-EXPLOSIVES

FIELD ID			CA361			CA361			CA361			CA361			CA361			CA361			CA361		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2006			3/23/2005			3/24/2004			3/24/2003			3/26/2002			3/29/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.18	U	<	0.27	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.18	U	<	0.27	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	0.72 J	1 / 14	<	0.49	U	<	0.48	U	<	0.18	U	<	0.27	U	0.72	0.20	J	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.36	U	<	0.52	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.36	U	<	0.52	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	0.57 J	1 / 14	<	0.49	U	<	0.48	U	<	0.36	U	<	0.52	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.36	U	<	0.52	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	0.91 J	1 / 14	<	0.49	U	<	0.48	U	<	0.36	U	<	0.52	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.36	U	<	0.52	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.58	U	<	0.84	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 14	<	0.49	U	<	0.48	U	<	0.45	U	<	0.66	U	<	0.68	U	<	1	U	<	0.8	U
MNX	2.5	2 / 10	<	0.49	U	<	0.48	U	0.41	0.18			NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.18	U	<	0.27	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	-	0 / 14	<	0.49	U	<	0.48	U	<	0.18	U	<	0.27	U	<	0.40	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 14	<	0.49	U	<	0.48	U	<	0.36	U	<	0.52	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-6
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA362-EXPLOSIVES

FIELD ID			CA362			CA362			CA362			CA362			CA362			CA362			CA362		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/21/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/10/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
3-Nitrotoluene	0.16 J	1 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.49	U
HMX	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
MNX	0.24	1 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.48	U	<	0.48	U	<	0.49	U
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.42	U	<	0.48	U	<	0.48	U	<	0.49	U
RDX	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.48	U	<	0.49	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.48	U	<	0.49	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-6
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA362-EXPLOSIVES

FIELD ID			CA362			CA362			CA362			CA362			CA362			CA362			CA362		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2006			3/23/2005			3/24/2004			3/24/2003			3/26/2002			3/29/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.26	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.31	U	<	0.39	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.31	U	<	0.39	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.31	U	<	0.39	U	<	0.25	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.31	U	<	0.39	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	0.16 J	1 / 14	<	0.48	U	<	0.48	U	<	0.31	U	0.16	0.39	J	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.31	U	<	0.39	U	<	0.42	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.5	U	<	0.62	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	-	0 / 14	<	0.48	U	<	0.48	U	<	0.39	U	<	0.49	U	<	0.68	U	<	1	U	<	0.8	U
MNX	0.24	1 / 10	<	0.48	U	<	0.48	U	0.24	0.16			NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	-	0 / 14	<	0.48	U	<	0.48	U	<	0.16	U	<	0.2	U	<	0.40	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 14	<	0.48	U	<	0.48	U	<	0.31	U	<	0.39	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-7
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA370-EXPLOSIVES

FIELD ID	CA370 ¹				
METHOD	Maximum	Detection	UW51		
COLLECT DATE	Detection	Frequency	6/17/1998		
			Result	RL	Qual
EXPLOSIVES (µg/L)					
1,3,5-Trinitrobenzene	-	0/1	<	1.00	U
1,3-Dinitrobenzene	-	0/1	<	0.500	U
2,4,6-Trinitrotoluene	-	0/1	<	1.00	U
2,4-Dinitrotoluene	-	0/1	<	0.500	U
2,6-Dinitrotoluene	-	0/1	<	0.500	U
2-Amino-4,6-dinitrotoluene	-	0/1	<	0.500	U
2-Nitrotoluene	-	0/1	<	1.00	U
3-Nitrotoluene	-	0/1	<	1.00	U
4-Amino-2,6-dinitrotoluene	-	0/1	<	1.00	U
4-Nitrotoluene	-	0/1	<	1.00	U
HMX	-	0/1	<	0.500	U
MNX				NA	
Nitrobenzene	-	0/1	<	0.500	U
RDX	-	0/1	<	1.00	U
Tetryl	-	0/1	<	0.500	U

Notes:

¹Not part of LTM program.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

LTM = long-term monitoring

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-8
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA380-EXPLOSIVES

FIELD ID			CA380			CA380			CA380			CA380			CA380			CA380			CA380		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/11/2008			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U			
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U	No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
2-Nitrotoluene	0.18 J	1 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U			
HMX	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U			
MNX		0 / 6	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.47	U			
Nitrobenzene	1.4	1 / 12	<	0.8	U	<	0.8	U	<	0.8	U	1.4	0.41		<	0.48	U	<	0.47	U			
RDX	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.47	U			
Tetryl	-	0 / 12	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.47	U			

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-8
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA380-EXPLOSIVES

FIELD ID			CA380			CA380			CA380			CA380			CA380			CA380			CA380		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	None			None			None			3/24/2003			3/26/2002			3/29/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12										<	0.26	U	<	0.32	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 12										<	0.26	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 12										<	0.26	U	<	0.27	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 12										<	0.51	U	<	0.22	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 12	No 2006 Sample			No 2005 Sample			No 2004 Sample			<	0.51	U	<	0.84	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	Well Dry			Well Dry			Well Dry			<	0.51	U	<	0.34	U	<	0.8	U	<	1	U
2-Nitrotoluene	0.18 J	1 / 12										<	0.51	U	<	0.66	U	0.18	0.8	J	<	1.1	U
3-Nitrotoluene	-	0 / 12										<	0.51	U	<	0.42	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 12										<	0.51	U	<	0.57	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 12										<	0.82	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	-	0 / 12										<	0.64	U	<	0.92	U	<	1	U	<	0.8	U
MNX		0 / 6											NA			NA			NA			NA	
Nitrobenzene	1.4	1 / 12										<	0.26	U	<	0.38	U	<	0.8	U	<	0.8	U
RDX	-	0 / 12										<	0.26	U	<	0.54	U	<	0.8	U	<	0.8	U
Tetryl	-	0 / 12										<	0.51	U	<	0.89	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-8
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA380-EXPLOSIVES

FIELD ID			CA380			CA380		
METHOD	Maximum	Detection	SW846 M8330			UW51		
COLLECT DATE	Detection	Frequency	4/2/1999			6/17/1998		
			Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)								
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U	<	1.00	U
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.500	U
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	0.500	U
2-Nitrotoluene	0.18 J	1 / 12	<	0.8	U	<	1.00	U
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	1.00	U
HMX	-	0 / 12	<	0.8	U	<	0.500	U
MNX		0 / 6		NA			NA	
Nitrobenzene	1.4	1 / 12	<	0.8	U	<	0.500	U
RDX	-	0 / 12	<	0.8	U	<	1.00	U
Tetryl	-	0 / 12	<	0.8	U	<	0.500	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-9
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA381-EXPLOSIVES

FIELD ID			CA381			CA381			CA381			CA381			CA381			CA381			CA381		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/11/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4,6-Trinitrotoluene	2.3 J	2 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,4-Dinitrotoluene	0.34 J	1 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	23 J	4 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
3-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	22 J	4 / 14	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U	<	0.48	U
HMX	8.4 J	6 / 14	1.6	0.8		<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U	<	0.48	U
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U	<	0.48	U
Nitrobenzene	1.3	1 / 14	<	0.8	U	<	0.8	U	<	0.8	U	1.3	0.4		<	0.48	U	<	0.48	U	<	0.48	U
RDX	19 J	6 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	<	0.48	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

**TABLE C.1.5-9
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA381-EXPLOSIVES**

FIELD ID			CA381			CA381			CA381			CA381			CA381			CA381			CA381		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2006			3/23/2005			3/24/2004			3/24/2003			3/26/2002			3/29/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.22	U	<	0.21	U	<	0.34	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.22	U	<	0.21	U	<	0.22	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	2.3 J	2 / 14	<	0.49	U	<	0.48	U	<	0.22	U	<	0.21	U	2.3	0.28	J	1.9	0.8	U	<	1.5	U
2,4-Dinitrotoluene	0.34 J	1 / 14	<	0.49	U	<	0.48	U	<	0.43	U	<	0.4	U	0.34	0.22	J	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.43	U	<	0.4	U	<	0.87	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	23 J	4 / 14	<	0.49	U	<	0.48	U	<	0.43	U	8.3	0.4		23	3.5	J	18	8		10	1	
2-Nitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.43	U	<	0.4	U	<	0.69	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.43	U	<	0.4	U	<	0.43	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	22 J	4 / 14	<	0.49	U	<	0.48	U	<	0.43	U	7.9	0.4		22	5.9	J	13	0.8		9.2	1	
4-Nitrotoluene	-	0 / 14	<	0.49	U	<	0.48	U	<	0.7	U	<	0.64	U	<	1.4	U	<	0.8	U	<	1.1	U
HMX	8.4 J	6 / 14	<	0.49	U	<	0.48	U	1.9	0.55		4.3	0.5		8.4	0.95	J	5.6	1		6.6	0.8	
MNX	-	0 / 10	<	0.49	U	<	0.48	U	<	0.22	U		NA			NA			NA			NA	
Nitrobenzene	1.3	1 / 14	<	0.49	U	<	0.48	U	<	0.22	U	<	0.21	U	<	0.39	U	<	0.8	U	<	0.8	U
RDX	19 J	6 / 14	<	0.49	U	0.83	0.48	P	0.2	0.22	J	5.6	0.21		19	5.6	J	9	0.8		11	0.8	
Tetryl	-	0 / 14	<	0.49	U	<	0.48	U	<	0.43	U	<	0.4	U	<	0.92	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-10
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA382-EXPLOSIVES

FIELD ID			CA382			CA382			CA382			CA382			CA382			CA382			CA382		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2013			3/6/2012			3/8/2011			3/9/2010			3/10/2009			3/11/2008			3/19/2007		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.48	U
1,3-Dinitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.48	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.48	U
2,4-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.48	U
2,6-Dinitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.47	U	<	0.48	U
2-Amino-4,6-dinitrotoluene	11	4 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.47	U	<	0.48	U
2-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.48	U
3-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.48	U
4-Amino-2,6-dinitrotoluene	2.8	4 / 14	<	1.4	U	<	1.4	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.47	U	<	0.48	U
4-Nitrotoluene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.47	U	<	0.48	U
HMX	5	8 / 14	0.26	0.8	J	0.47	0.8	J	0.71	0.8	J	0.24	0.41	J	<	0.48	U	<	0.47	U	0.93	0.48	
MNX	-	0 / 10	<	0.8	U	<	0.8	U	<	0.8	U	<	2.1	U	<	0.48	U	<	0.47	U	<	0.48	U
Nitrobenzene	-	0 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.41	U	<	0.48	U	<	0.47	U	<	0.48	U
RDX	4.4	3 / 14	<	0.8	U	<	0.8	U	<	0.8	U	<	0.21	U	<	0.48	U	<	0.47	U	<	0.48	U
Tetryl	-	0 / 14	<	1.6	U	<	0.8	U	<	0.8	U	<	0.25	U	<	0.48	U	<	0.47	U	<	0.48	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-10
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA382-EXPLOSIVES

FIELD ID			CA382			CA382			CA382			CA382			CA382			CA382			CA382		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/20/2006			3/23/2005			3/24/2004			3/24/2003			3/26/2002			3/29/2001			3/22/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.21	U	<	0.32	U	<	0.24	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.21	U	<	0.32	U	<	0.16	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.21	U	<	0.32	U	<	0.20	U	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.4	U	<	0.62	U	<	0.16	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.4	U	<	0.62	U	<	0.62	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	11	4 / 14	<	0.48	U	<	0.48	U	<	0.4	U	0.7	0.62		2.4	0.25		11	0.8		7.3	1	
2-Nitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.4	U	<	0.62	U	<	0.49	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.4	U	<	0.62	U	<	0.31	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	2.8	4 / 14	<	0.48	U	<	0.48	U	<	0.4	U	0.38	0.62	J	0.52	0.42		2.8	0.8		2.4	1	
4-Nitrotoluene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.65	U	<	1	U	<	1.0	U	<	0.8	U	<	1.1	U
HMX	5	8 / 14	<	0.48	U	<	0.48	U	<	0.51	U	<	0.78	U	0.81	0.68		3.8	1	U	5	0.8	
MNX	-	0 / 10	<	0.48	U	<	0.48	U	<	0.21	U		NA			NA			NA			NA	
Nitrobenzene	-	0 / 14	<	0.48	U	<	0.48	U	<	0.21	U	<	0.32	U	<	0.28	U	<	0.8	U	<	0.8	U
RDX	4.4	3 / 14	<	0.48	U	<	0.48	U	<	0.21	U	<	0.32	U	0.64	0.40		4.4	0.8		2.7	0.8	
Tetryl	-	0 / 14	<	0.48	U	<	0.48	U	<	0.4	U	<	0.62	U	<	0.66	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-11
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA390-EXPLOSIVES

FIELD ID			CA390			CA390			CA390			CA390			CA390			CA390			CA390		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/7/2013			3/6/2012			3/9/2011			3/18/2010			3/11/2009			3/11/2008			None		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U			
1,3-Dinitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,4,6-Trinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,4-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
2,6-Dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U	No 2007 Sample Well Dry		
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U			
2-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
3-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	1.4	U	<	1.4	U	<	0.8	U	<	0.2	U	<	0.48	U	<	0.48	U			
4-Nitrotoluene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	1	U	<	0.48	U	<	0.48	U			
HMX	0.93	11 / 12	0.54	0.8	J	0.56	0.8	J	0.52	0.8	J	0.62	0.4		0.77	0.48		0.93	0.48				
MNX	0.085 J	1 / 8	<	0.8	U	<	0.8	U	<	0.8	U	<	2	U	<	0.48	U	<	0.48	U			
Nitrobenzene	-	0 / 12	<	0.8	U	<	0.8	U	<	0.8	U	<	0.4	U	<	0.48	U	<	0.48	U			
RDX	2.9	12 / 12	0.66	0.8	J	1.2	0.8	J	1.4	0.8		0.89	0.2		2.1	0.48		2.9	0.48	U			
Tetryl	-	0 / 12	<	1.6	U	<	0.8	U	<	0.8	U	<	0.24	U	<	0.48	U	<	0.48				

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-11
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT WELL CA390-EXPLOSIVES

FIELD ID			CA390			CA390			CA390			CA390			CA390			CA390			CA390		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330		
COLLECT DATE	Detection	Frequency	3/29/2006			3/23/2005			3/24/2004			3/24/2003			3/26/2002			3/29/2001			6/15/2000		
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
EXPLOSIVES (µg/L)																							
1,3,5-Trinitrobenzene	-	0 / 12	<	0.48	U				<	0.17	U	<	0.25	U	<	0.39	U	<	0.8	U	<	0.8	U
1,3-Dinitrobenzene	-	0 / 12	<	0.48	U				<	0.17	U	<	0.25	U	<	0.26	U	<	0.8	U	<	0.8	U
2,4,6-Trinitrotoluene	-	0 / 12	<	0.48	U				<	0.17	U	<	0.25	U	<	0.32	UJ	<	0.8	U	<	1.5	U
2,4-Dinitrotoluene	-	0 / 12	<	0.48	U				<	0.33	U	<	0.48	U	<	0.26	U	<	0.8	U	<	1.1	U
2,6-Dinitrotoluene	-	0 / 12	<	0.48	U	No 2005 Sample Well Dry			<	0.33	U	<	0.48	U	<	1.0	U	<	0.8	U	<	1.1	U
2-Amino-4,6-dinitrotoluene	-	0 / 12	<	0.48	U				<	0.33	U	<	0.48	U	<	0.40	U	<	0.8	U	<	1	U
2-Nitrotoluene	-	0 / 12	<	0.48	U				<	0.33	U	<	0.48	U	<	0.79	U	<	0.8	U	<	1.1	U
3-Nitrotoluene	-	0 / 12	<	0.48	U				<	0.33	U	<	0.48	U	<	0.50	U	<	0.8	U	<	1.1	U
4-Amino-2,6-dinitrotoluene	-	0 / 12	<	0.48	U				<	0.33	U	<	0.48	U	<	0.68	U	<	0.8	U	<	1	U
4-Nitrotoluene	-	0 / 12	<	0.48	U				<	0.53	U	<	0.77	U	<	1.6	U	<	0.8	U	<	1.1	U
HMX	0.93	11 / 12	<	0.48	U				0.55	0.41		0.62	0.6		0.39	1.1	J	0.58	1	J	0.53	0.8	
MNX	0.085 J	1 / 8	<	0.48	U				0.085	0.17	J		NA			NA			NA			NA	
Nitrobenzene	-	0 / 12	<	0.48	U				<	0.17	U	<	0.25	U	<	0.45	U	<	0.8	U	<	0.8	U
RDX	2.9	12 / 12	1	0.48					0.89	0.17		2	0.25		1.2	0.65		1.5	0.8		1.3	0.8	
Tetryl	-	0 / 12	<	0.48	U				<	0.33	U	<	0.48	U	<	1.1	U	<	0.8	U	<	1.3	U

Notes:

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE C.1.5-12
CORNHUSKER ARMY AMMUNITION PLANT
FEEDLOT SURFACE WATER SAMPLES-EXPLOSIVES

FIELD ID				LAGOON SW001			LAGOON SW002			LAGOON SW003			LAGOON SW004			LAGOON SW005		
METHOD	Maximum	Detection	SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			SW846 M8330			
COLLECT DATE	Detection	Frequency	3/29/2001			3/29/2001			3/29/2001			3/29/2001			3/29/2001			
			Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	
EXPLOSIVES (µg/L)																		
1,3,5-Trinitrobenzene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
1,3-Dinitrobenzene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
2,4,6-Trinitrotoluene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
2,4-Dinitrotoluene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
2,6-Dinitrotoluene	0.82	3/5	<	0.8	U	<	0.8	U	0.19	0.8	J	0.82	0.8		0.59	0.8	J	
2-Amino-4,6-dinitrotoluene	1.9	4/5	0.35	0.8	J	0.17	0.8	J	<	0.8	U	1.9	0.8		0.92	0.8	U	
2-Nitrotoluene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
3-Nitrotoluene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
4-Amino-2,6-dinitrotoluene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
4-Nitrotoluene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
HMX	-	0/5	<	1	U	<	1	U	<	1	U	<	1	U	<	1	U	
MNX				NA			NA			NA			NA			NA		
Nitrobenzene	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
RDX	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	
Tetryl	-	0/5	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	<	0.8	U	

Notes:

Lagoon sampling discontinued after 2001 LTM event.

< = less than reporting limit

µg/L = micrograms per liter

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

ID = identification number

J = estimated

LTM = long-term monitoring

MNX = mono-nitroso-RDX

NA = not analyzed

NRL = no reporting limit

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RL = reporting limit

U = nondetect

TABLE 8-1
SAMPLING RECOMMENDATIONS
OU1 OFF-POST MONITORING WELL LOCATIONS
CORNHUSKER ARMY AMMUNITION PLANT

Well Number	Frequency	Explosives (+MNX) ¹	Field NA Parameters ²	Laboratory NA Parameters ³	Notes
NW020	Annual	X	X		
NW021	Annual	X	X		
NW022	Annual	X	X		
NW030	Annual	X	X		
NW031	Annual	X	X		
NW032	Annual	X	X		
NW050	Annual	X	X		
NW051	Annual	X	X		
NW052	Annual	X	X		
NW060	5-year				Sampling scheduled 2018
NW061	5-year				Sampling scheduled 2018
NW062	5-year				Sampling scheduled 2018
NW070	5-year				Sampling scheduled 2018
NW071	5-year				Sampling scheduled 2018
NW080	Annual	X	X		
NW081R	Annual	X	X		
NW082R	Annual	X	X		
NW100	5-year				Sampling scheduled 2018
NW101	5-year				Sampling scheduled 2018
NW102	5-year				Sampling scheduled 2018
NW120	Annual	X	X		
NW121	Annual	X	X		
NW122	Annual	X	X		
NW130R	5-year				Sampling scheduled 2018
NW131R	5-year				Sampling scheduled 2018
NW132R	5-year				Sampling scheduled 2018
CA210	5-year				Sampling scheduled 2018
CA211	5-year				Sampling scheduled 2018
CA212	5-year				Sampling scheduled 2018
CA213	5-year				Sampling scheduled 2018
CA240	5-year				Sampling scheduled 2018
CA241	5-year				Sampling scheduled 2018
CA242	5-year				Sampling scheduled 2018
CA250	Annual	X	X		
CA251	Annual	X	X		
CA252	Annual	X	X		
CA253	Annual	X	X		
CA260	Abandon				Abandon in November 2013
CA261	Abandon				Abandon in November 2013
CA262	Abandon				Abandon in November 2013
CA270	Annual	X	X		
CA271	Annual	X	X		
CA272	Annual	X	X		
CA273	Annual	X	X		
CA280	5-year				Sampling scheduled 2018
CA281	5-year				Sampling scheduled 2018

TABLE 8-1
SAMPLING RECOMMENDATIONS
OU1 OFF-POST MONITORING WELL LOCATIONS
CORNHUSKER ARMY AMMUNITION PLANT

Well Number	Frequency	Explosives (+MNX) ¹	Field NA Parameters ²	Laboratory NA Parameters ³	Notes
CA282	5-year				Sampling scheduled 2018
CA290R	Annual	X	X		
CA291R	Annual	X	X		
CA292R	Annual	X	X		
CA310	Annual	X	X		
CA311	Annual	X	X		
CA312	Annual	X	X		
CA313	Annual	X	X		
CA322	Annual	X	X		
CA330	Annual	X	X		
CA331	Annual	X	X		
CA332	Annual	X	X		
CA342	Annual	X	X		
CA343	Annual	X	X		
CA350	Abandon				Abandon in November 2013
CA351	Abandon				Abandon in November 2013
CA352	Abandon				Abandon in November 2013
CA360	Abandon				Abandon in November 2013
CA361	Abandon				Abandon in November 2013
CA362	Abandon				Abandon in November 2013
CA380	Abandon				Abandon in November 2013
CA381	Abandon				Abandon in November 2013
CA382	Abandon				Abandon in November 2013
CA390	Abandon				Abandon in November 2013

Notes:

¹Explosives will include the standard compounds for USEPA Method 8330 plus the addition of MNX.

²Field NA parameters will include: dissolved oxygen, oxidation/reduction potential, ferrous iron, specific conductance, turbidity, pH, and temperature.

³Laboratory NA parameters will not be collected:

MNX = mono-nitroso-RDX

NA = natural attenuation

OU = Operable Unit

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

USEPA = U.S. Environmental Protection Agency

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment D
Site Inspection Checklist

Five Year Review Site Inspection Checklist

I. SITE INFORMATION	
Site name: Cornhusker Army Ammunition Plant	Date of inspection: July 30 and 31, 2014
Location and Region: Grand Island, NE, EPA Region VII	EPA ID: NE2213820234
Agency, office, or company leading the five-year review: U.S. Army Corps of Engineers	Weather/temperature: 83°F, partly cloudy
Remedy Includes: (Check all that apply) <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input type="checkbox"/> Landfill cover/containment <input type="checkbox"/> Access controls <input checked="" type="checkbox"/> Institutional controls <input checked="" type="checkbox"/> Groundwater pump and treatment <input type="checkbox"/> Surface water collection and treatment <input checked="" type="checkbox"/> Other: Soil Removal Actions </div> <div style="width: 45%;"> <input checked="" type="checkbox"/> Monitored natural attenuation <input type="checkbox"/> Groundwater containment <input type="checkbox"/> Vertical barrier walls </div> </div>	
Attachments: <input checked="" type="checkbox"/> Inspection team roster attached <input type="checkbox"/> Site map attached	
II. INTERVIEWS (Check all that apply)	
<div style="display: flex; justify-content: space-between;"> <div>1. O&M site manager</div> <div style="text-align: center;"> <u>Gary Carson</u> Name </div> <div style="text-align: center;"> <u>GWTP Operator, Bay West</u> Title </div> <div style="text-align: center;"> <u>31 July 2014</u> Date </div> </div> <p>Interviewed <input checked="" type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____</p> <p>Problems, suggestions; <input checked="" type="checkbox"/> Report attached <u>Interview summary provided in Attachment G</u></p> <p>_____</p>	
<div style="display: flex; justify-content: space-between;"> <div>2. O&M staff</div> <div style="text-align: center;"> _____ Name </div> <div style="text-align: center;"> _____ Title </div> <div style="text-align: center;"> _____ Date </div> </div> <p>Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____</p> <p>Problems, suggestions; <input type="checkbox"/> Report attached _____</p> <p>_____</p>	

- | | | | | |
|--|--|---------------------------------------|---------------------|---------------------|
| Agency | <u>Grand Island Economic Development Corporation</u> | | | |
| Contact | <u>Randy Gard</u> | <u>President</u> | <u>30 July 2014</u> | <u>308-381-7500</u> |
| | Name | Title | Date | Phone no. |
| Problems; suggestions; <input checked="" type="checkbox"/> Report attached | <u>Interview summary provided in Attachment G</u> | | | |
| <hr/> | | | | |
| Agency | <u>City of Grand Island</u> | | | |
| Contact | <u>Craig Lewis</u> | <u>Director, Building Dept.</u> | <u>30 July 2014</u> | <u>308-385-5325</u> |
| | Name | Title | Date | Phone no. |
| Problems; suggestions; <input checked="" type="checkbox"/> Report attached | <u>Interview summary provided in Attachment G</u> | | | |
| <hr/> | | | | |
| Agency | <u>Hall County Regional Planning Department</u> | | | |
| Contact | <u>Chad Nabity</u> | <u>Director, Regional Planning</u> | <u>30 July 2014</u> | <u>308-385-5240</u> |
| | Name | Title | Date | Phone no. |
| Problems; suggestions; <input checked="" type="checkbox"/> Report attached | <u>Interview summary provided in Attachment G</u> | | | |
| <hr/> | | | | |
| Agency | <u>USACE-NWO</u> | | | |
| Contact | <u>Patti Thomason & Dave Kachek</u> | <u>Lead Technical & Geologist</u> | <u>31 July 2014</u> | <u>402-995-2298</u> |
| | Name | Title | Date | Phone no. |
| Problems; suggestions; <input checked="" type="checkbox"/> Report attached | <u>Interview summary provided in Attachment G</u> | | | |

- [illegible]

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)				
1.	O&M Documents <input checked="" type="checkbox"/> O&M manual <input checked="" type="checkbox"/> As-built drawings <input checked="" type="checkbox"/> Maintenance logs Remarks _____	<input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A
2.	Site-Specific Health and Safety Plan <input checked="" type="checkbox"/> Contingency plan/emergency response plan Remarks _____	<input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A <input type="checkbox"/> N/A
3.	O&M and OSHA Training Records Remarks <u>Not Verified</u>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input type="checkbox"/> N/A
4.	Permits and Service Agreements <input type="checkbox"/> Air discharge permit <input checked="" type="checkbox"/> Effluent discharge <input type="checkbox"/> Waste disposal, POTW <input type="checkbox"/> Other permits _____ Remarks _____	<input type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
5.	Gas Generation Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
6.	Settlement Monument Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
7.	Groundwater Monitoring Records Remarks _____	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
8.	Leachate Extraction Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
9.	Discharge Compliance Records <input type="checkbox"/> Air <input checked="" type="checkbox"/> Water (effluent) Remarks _____	<input type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A
10.	Daily Access/Security Logs Remarks <u>All personnel entering the GWTP are required to sign in and out each time the site is entered</u>	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A

IV. O&M COSTS																																											
1.	O&M Organization <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> State in-house <input type="checkbox"/> PRP in-house <input type="checkbox"/> Federal Facility in-house <input type="checkbox"/> Other _____ </div> <div> <input type="checkbox"/> Contractor for State <input type="checkbox"/> Contractor for PRP <input checked="" type="checkbox"/> Contractor for Federal Facility </div> </div>																																										
2.	O&M Cost Records <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Readily available <input type="checkbox"/> Up to date <input checked="" type="checkbox"/> N/A </div> <input type="checkbox"/> Funding mechanism/agreement in place Original O&M cost estimate _____ <input type="checkbox"/> Breakdown attached <div style="text-align: center;">Total annual cost by year for review period if available</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">From _____</td> <td style="width: 20%;">To _____</td> <td style="width: 20%;"></td> <td style="width: 40%; text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> </table>			From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost	
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3.	Unanticipated or Unusually High O&M Costs During Review Period Describe costs and reasons: _____ _____ _____ _____ _____ _____																																										
V. ACCESS AND INSTITUTIONAL CONTROLS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A																																											
A. Fencing																																											
1.	Fencing damaged <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Gates secured <input type="checkbox"/> N/A Remarks <u>Existing fencing and gates appear to be in good repair</u> _____																																										
B. Other Access Restrictions																																											
1.	Signs and other security measures <input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A Remarks <u>Signs are in place</u> _____																																										

C. Institutional Controls (ICs)			
1.	Implementation and enforcement Site conditions imply ICs not properly implemented <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A Site conditions imply ICs not being fully enforced <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A Type of monitoring (<i>e.g.</i> , self-reporting, drive by) _____ Frequency _____ Responsible party/agency _____ Contact _____		
	<div style="display: flex; justify-content: space-between;"> Name Title Date Phone no. </div>		
	Reporting is up-to-date <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Reports are verified by the lead agency <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Specific requirements in deed or decision documents have been met <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Violations have been reported <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A Other problems or suggestions: <input type="checkbox"/> Report attached <u>A review of ICs is included in the Five-Year Review Report</u>		
2.	Adequacy <input checked="" type="checkbox"/> ICs are adequate <input type="checkbox"/> ICs are inadequate <input type="checkbox"/> N/A Remarks <u>A review of ICs is included in the Five-Year Review Report</u>		
D. General			
1.	Vandalism/trespassing <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> No vandalism evident Remarks _____		
2.	Land use changes on site <input type="checkbox"/> N/A Remarks <u>Land use remains consistent with the intended land use as specified in the 1997 Hall County Comprehensive Reuse Plan with one exception. Land owned by the Grand Island Economic Development Corporation was originally intended to be developed as an industrial park; however, in 2013 much of this land was sold. Most of the land was sold to famers and is currently irrigated farm fields. A small portion of the land was sold to Hornady Manufacturing and a warehouse is currently being built on this portion of the land.</u>		
3.	Land use changes off site <input type="checkbox"/> N/A Remarks <u>Land use remains consistent with the intended land use as specified in the 1997 Hall County Comprehensive Reuse Plan</u>		
VI. GENERAL SITE CONDITIONS			
A. Roads <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	Roads damaged <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Roads adequate <input type="checkbox"/> N/A Remarks <u>Paved site roads are maintained by Hall County but are generally in a state of disrepair, but adequate for current use.</u>		

B. Other Site Conditions		
Remarks _____ _____ _____ _____		
VII. LANDFILL COVERS <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
A. Landfill Surface		
1.	Settlement (Low spots) Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Settlement not evident Depth _____
2.	Cracks Lengths _____ Widths _____ Depths _____ Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Cracking not evident
3.	Erosion Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Erosion not evident Depth _____
4.	Holes Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Holes not evident Depth _____
5.	Vegetative Cover <input type="checkbox"/> Grass <input type="checkbox"/> Cover properly established <input type="checkbox"/> No signs of stress G Trees/Shrubs (indicate size and locations on a diagram) Remarks _____	
6.	Alternative Cover (armored rock, concrete, etc.) <input type="checkbox"/> N/A Remarks _____	
7.	Bulges Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Bulges not evident Height _____
8.	Wet Areas/Water Damage <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Wet areas <input type="checkbox"/> Ponding <input type="checkbox"/> Seeps <input type="checkbox"/> Soft subgrade Remarks _____ </div> <div style="width: 35%;"> <input type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map </div> <div style="width: 30%;"> Areal extent _____ Areal extent _____ Areal extent _____ Areal extent _____ </div> </div>	

9.	Slope Instability	<input type="checkbox"/> Slides	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of slope instability
Areal extent _____ Remarks _____ _____				
B. Benches <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)				
1.	Flows Bypass Bench	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay	
Remarks _____ _____				
2.	Bench Breached	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay	
Remarks _____ _____				
3.	Bench Overtopped	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay	
Remarks _____ _____				
C. Letdown Channels <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)				
1.	Settlement	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of settlement	
Areal extent _____ Depth _____ Remarks _____ _____				
2.	Material Degradation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of degradation	
Material type _____ Areal extent _____ Remarks _____ _____				
3.	Erosion	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of erosion	
Areal extent _____ Depth _____ Remarks _____ _____				

4.	Undercutting Areal extent _____ Depth _____ Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of undercutting	
5.	Obstructions Type _____ <input type="checkbox"/> Location shown on site map Areal extent _____ Size _____ Remarks _____	<input type="checkbox"/> No obstructions	
6.	Excessive Vegetative Growth Type _____ <input type="checkbox"/> No evidence of excessive growth <input type="checkbox"/> Vegetation in channels does not obstruct flow <input type="checkbox"/> Location shown on site map Areal extent _____ Remarks _____		
D. Cover Penetrations <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Gas Vents <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____	<input type="checkbox"/> Active <input type="checkbox"/> Passive	
2.	Gas Monitoring Probes <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____		
3.	Monitoring Wells (within surface area of landfill) <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____		
4.	Leachate Extraction Wells <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____		
5.	Settlement Monuments Remarks _____	<input type="checkbox"/> Located <input type="checkbox"/> Routinely surveyed <input type="checkbox"/> N/A	

E. Gas Collection and Treatment			<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	Gas Treatment Facilities <input type="checkbox"/> Flaring <input type="checkbox"/> Thermal destruction <input type="checkbox"/> Collection for reuse <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____			
2.	Gas Collection Wells, Manifolds and Piping <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____			
3.	Gas Monitoring Facilities (<i>e.g.</i> , gas monitoring of adjacent homes or buildings) <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____			
F. Cover Drainage Layer			<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	Outlet Pipes Inspected Remarks _____ _____	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
2.	Outlet Rock Inspected Remarks _____ _____	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
G. Detention/Sedimentation Ponds			<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	Siltation Areal extent _____ Depth _____ <input type="checkbox"/> Siltation not evident Remarks _____ _____		<input type="checkbox"/> N/A	
2.	Erosion Areal extent _____ Depth _____ <input type="checkbox"/> Erosion not evident Remarks _____ _____			
3.	Outlet Works Remarks _____ _____	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
4.	Dam Remarks _____ _____	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	

H. Retaining Walls		<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A
1.	Deformations <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Deformation not evident Horizontal displacement _____ Vertical displacement _____ Rotational displacement _____ Remarks _____ _____	
2.	Degradation <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Degradation not evident Remarks _____ _____	
I. Perimeter Ditches/Off-Site Discharge		<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A
1.	Siltation <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Siltation not evident Areal extent _____ Depth _____ Remarks _____ _____	
2.	Vegetative Growth <input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A <input type="checkbox"/> Vegetation does not impede flow Areal extent _____ Type _____ Remarks _____ _____	
3.	Erosion <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Erosion not evident Areal extent _____ Depth _____ Remarks _____ _____	
4.	Discharge Structure <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____	
VIII. VERTICAL BARRIER WALLS		<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A
1.	Settlement <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Settlement not evident Areal extent _____ Depth _____ Remarks _____ _____	
2.	Performance Monitoring Type of monitoring _____ <input type="checkbox"/> Performance not monitored Frequency _____ <input type="checkbox"/> Evidence of breaching Head differential _____ Remarks _____ _____	

IX. GROUNDWATER/SURFACE WATER REMEDIES <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A	
A. Groundwater Extraction Wells, Pumps, and Pipelines <input type="checkbox"/> Applicable <input type="checkbox"/> N/A	
1.	Pumps, Wellhead Plumbing, and Electrical <input checked="" type="checkbox"/> Good condition <input checked="" type="checkbox"/> All required wells properly operating <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks <u>Rehabilitation work recently completed on EW-7 in an effort to increase specific capacity</u> _____ _____
2.	Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____
3.	Spare Parts and Equipment <input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks <u>Stored at GWTP</u> _____ _____
B. Surface Water Collection Structures, Pumps, and Pipelines <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A	
1.	Collection Structures, Pumps, and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____
3.	Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks _____ _____
C. Treatment System <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A	
1.	Treatment Train (Check components that apply) <input type="checkbox"/> Metals removal <input type="checkbox"/> Oil/water separation <input type="checkbox"/> Bioremediation <input type="checkbox"/> Air stripping <input checked="" type="checkbox"/> Carbon adsorbers <input type="checkbox"/> Filters _____ <input type="checkbox"/> Additive (e.g., chelation agent, flocculent) _____ <input type="checkbox"/> Others _____ <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance <input checked="" type="checkbox"/> Sampling ports properly marked and functional <input checked="" type="checkbox"/> Sampling/maintenance log displayed and up to date <input checked="" type="checkbox"/> Equipment properly identified <input checked="" type="checkbox"/> Quantity of groundwater treated annually <u>~ 262 million gallons</u> <input type="checkbox"/> Quantity of surface water treated annually _____ Remarks _____ _____

2.	Electrical Enclosures and Panels (properly rated and functional) <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____
3.	Tanks, Vaults, Storage Vessels <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Proper secondary containment <input type="checkbox"/> Needs Maintenance Remarks _____ _____
4.	Discharge Structure and Appurtenances <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____
5.	Treatment Building(s) <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition (esp. roof and doorways) <input type="checkbox"/> Needs repair <input type="checkbox"/> Chemicals and equipment properly stored Remarks _____ _____
6.	Monitoring Wells (pump and treatment remedy) <input checked="" type="checkbox"/> Properly secured/locked <input checked="" type="checkbox"/> Functioning <input checked="" type="checkbox"/> Routinely sampled <input checked="" type="checkbox"/> Good condition <input checked="" type="checkbox"/> All required wells located <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____
D. Monitoring Data	
1.	Monitoring Data <input checked="" type="checkbox"/> Is routinely submitted on time <input checked="" type="checkbox"/> Is of acceptable quality
2.	Monitoring data suggests: <input checked="" type="checkbox"/> Groundwater plume is effectively contained <input checked="" type="checkbox"/> Contaminant concentrations are declining
E. Monitored Natural Attenuation	
1.	Monitoring Wells (natural attenuation remedy) <input checked="" type="checkbox"/> Properly secured/locked <input checked="" type="checkbox"/> Functioning <input checked="" type="checkbox"/> Routinely sampled <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> All required wells located <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____
X. OTHER REMEDIES	
If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.	

XI. OVERALL OBSERVATIONS	
A.	<p>Implementation of the Remedy</p> <p>Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).</p> <p><u>At OU1, RAOs include the remediation of groundwater below the HALs, the containment of high concentrations of explosives in groundwater on-post, on-post groundwater extraction and treatment, MNA of the off-post plume, and institutional controls designed to limit public exposure to contamination groundwater on- and off-post. The selected remedies for OU1 are functioning as designed and achieving the desired results as intended in the associated ROD documents.</u></p> <p><u>In the Final ROD for OU2, a no further action/no response action was selected as the preferred alternative. Because the only detections above residential action levels at OU2 were in areas that were unlikely to be used for residential purposes, no deed restrictions were placed on OU2. The land use at the time of the 1998 ROD was industrial. These properties have all been sold to various entities and are generally in either industrial or agricultural use at this time. Therefore, the selected remedy for OU2 is functioning and achieving the desired results as intended in the associated ROD document.</u></p> <p><u>At OU3, the results of confirmation sampling indicate that the cleanup levels for contaminated soils at OU3 have been met. The concentrations of all remaining soil contamination at OU3 are below the protective levels for industrial use established in the ROD and institutional controls remain in place for all four AOCs within OU3 to prevent residential use. The selected remedy for the Shop Area also includes MNA of VOCs in groundwater, which is conducted during the LTM groundwater sampling events at CHAAP. The contamination does not appear to be migrating and institutional controls remain in place to prevent direct contact, or ingestion of, contaminants in groundwater. The remedy is functioning and achieving the results intended in the associated ROD.</u></p> <p><u>At OU4, the selected remedy as specified in the ROD is institutional controls in the form of deed restrictions to prevent residential use. The majority of CHAAP property has been transferred out of United States ownership. The institutional controls required for the Army were put into place. The deeds for all of the former load line properties restrict land use to commercial, industrial, and agricultural. The deeds do not permit residential use of the land. In addition, domestic use of the groundwater that is part of the explosives-contaminated groundwater plume is prohibited. Overall, the remedy is functioning and achieving the results intended in the associated ROD.</u></p>
B.	<p>Adequacy of O&M</p> <p>Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.</p> <p><u>Since adapting the plant to prevent oxidation and precipitation of dissolved iron and manganese and only running groundwater from EW-07, which is intentionally at least 1200 feet from the nearest subsurface injection, the GWTP has seen less maintenance issues.</u></p> <p>_____</p> <p>_____</p> <p>_____</p>
C.	<p>Early Indicators of Potential Remedy Problems</p>

<p>Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.</p> <p><u>This is discussed in Section 5.7 of the Five-Year Review Report.</u></p> <p>_____</p> <p>_____</p>
<p>D. Opportunities for Optimization</p>
<p>Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.</p> <p><u>Opportunities for optimization are discussed in Section 5.7 of the Five-Year Review Report.</u></p> <p>_____</p> <p>_____</p> <p>_____</p>

Site Inspection Team Roster		
Personnel	Representing	Phone Number
Angela Mason	USACE-NWK	816-389-3620
Greg Hattan	USACE-NWK	816-389-3579
Julius Calderon	USACE-NWK	816-389-3550

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment E
Site Inspection Photographs



Photo 1

Date: July 31, 2014

Site: Cornhusker Army Ammunition Plant (CHAAP)

Description: Sand Filter Tanks in Groundwater Treatment Plant (GWTP).



Photo 2

Date: July 31, 2014

Site: CHAAP

Description: GAC Feed Pump in GWTP.



Photo 3

Date: July 31, 2014

Site: CHAAP

Description: GAC Feed Tank in GWTP.



Photo 4

Date: July 31, 2014

Site: CHAAP

Description: GAC Unit in GWTP.



Photo 5 **Date:** July 31, 2014 **Site:** CHAAP
Description: GAC Air Actuator Valves in GWTP



Photo 6 **Date:** July 31, 2014 **Site:** CHAAP
Description: New Air Dryer in GWTP



Photo 7

Date: July 31, 2014

Site: CHAAP

Description: Air Compressor 1 in GWTP



Photo 8

Date: July 31, 2014

Site: CHAAP

Description: Air Compressor 2 in GWTP.



Photo 9

Date: July 31, 2014

Site: CHAAP

Description: Sludge Thickener Tank in GWTP



Photo 10

Date: July 31, 2014

Site: CHAAP

Description: Mothballed Effluent Pump in GWTP.



Photo 11 **Date:** July 31, 2014 **Site:** CHAAP
Description: Filter Press in GWTP.



Photo 12 **Date:** July 31, 2014 **Site:** CHAAP
Description: Filter Press Control Panel in GWTP.



Photo 13

Date: July 31, 2014

Site: CHAAP

Description: Filter Press Plate in GWTP.



Photo 14

Date: July 31, 2014

Site: CHAAP

Description: Filter Cake Chute in GWTP.



Photo 15 **Date:** July 31, 2014 **Site:** CHAAP
Description: Concrete floor beneath chute in GWTP.



Photo 16 **Date:** July 31, 2014 **Site:** CHAAP
Description: Removed well pumps in GWTP.



Photo 17 **Date:** July 31, 2014 **Site:** CHAAP
Description: Motor Control Center – main electrical panel in GWTP.



Photo 18 **Date:** July 31, 2014 **Site:** CHAAP
Description: Main Instrument Panel in GWTP.



Photo 19

Date: July 31, 2014
Description: EW-07.

Site: CHAAP



Photo 20

Date: July 31, 2014
Description: EW-07 Well House Panels.

Site: CHAAP



Photo 21

Date: July 31, 2014

Site: CHAAP

Description: EW-07 Pump Control Panel.



Photo 22

Date: July 31, 2014

Site: CHAAP

Description: Current site conditions. Looking south of GWTP towards Load Line 2 at irrigated farm fields.



Photo 23 **Date:** July 31, 2014 **Site:** CHAAP
Description: Current site conditions. Looking north at the GWTP.

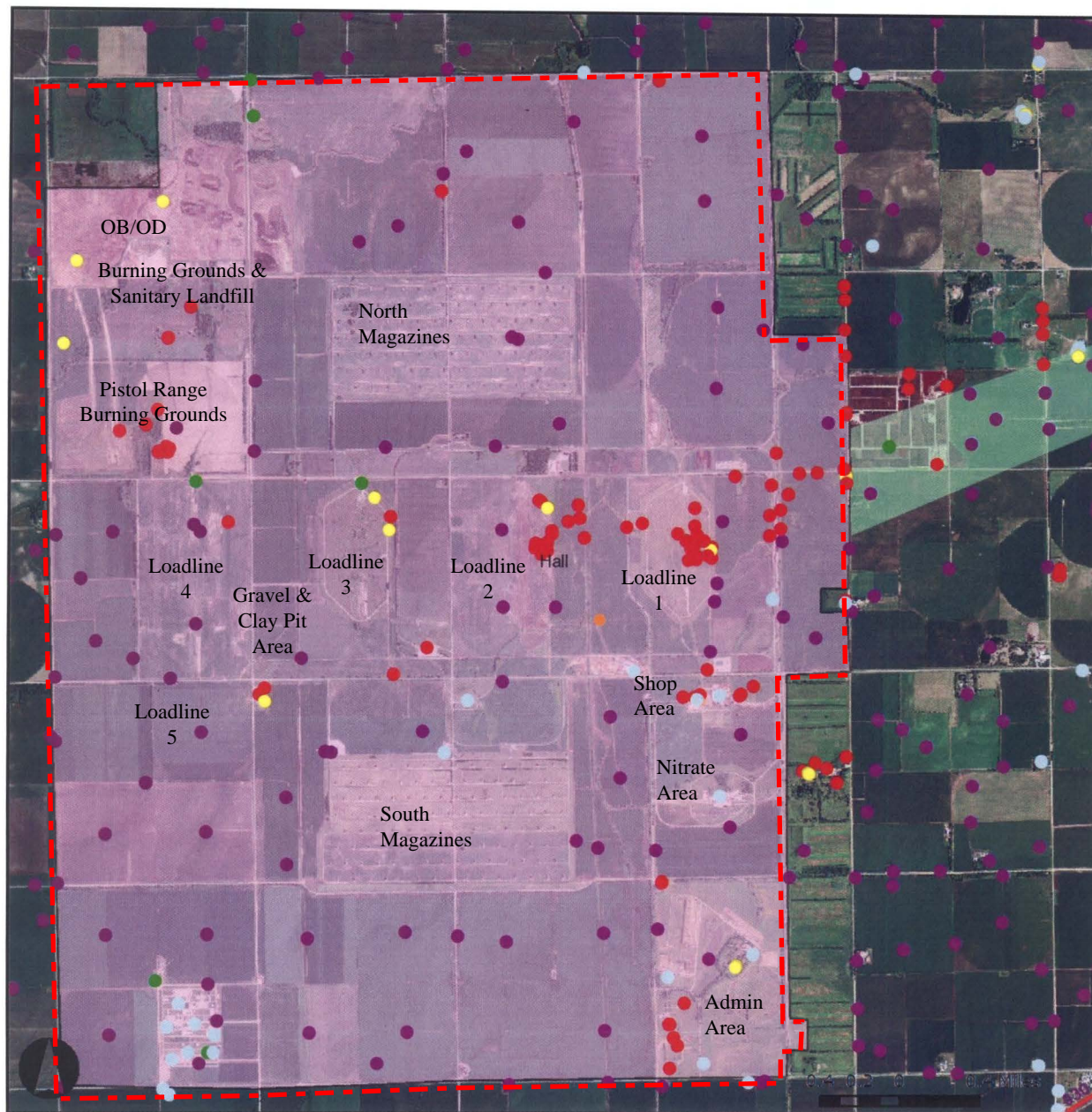


Photo 24 **Date:** July 31, 2014 **Site:** CHAAP
Description: Current site conditions. East Discharge Canal.

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment F
Institutional Controls

CHAAP Institutional Controls Map



City Points



City Bounds



Counties with labels



Wells by Use

- All Other Uses
- Commercial
- Domestic

Wells by Use (continued)

- Groundwater Heat Exch.
- Irrigation
- Groundwater Quality
- Livestock

Major Roads

- Interstate
- Spurs
- Nebr. Highway
- US Highway

GW Institutional Controls

- Groundwater Restrictions
- Soil Restrictions
- Soil and Groundwater Restrictions

State Bounds



Facility Boundary

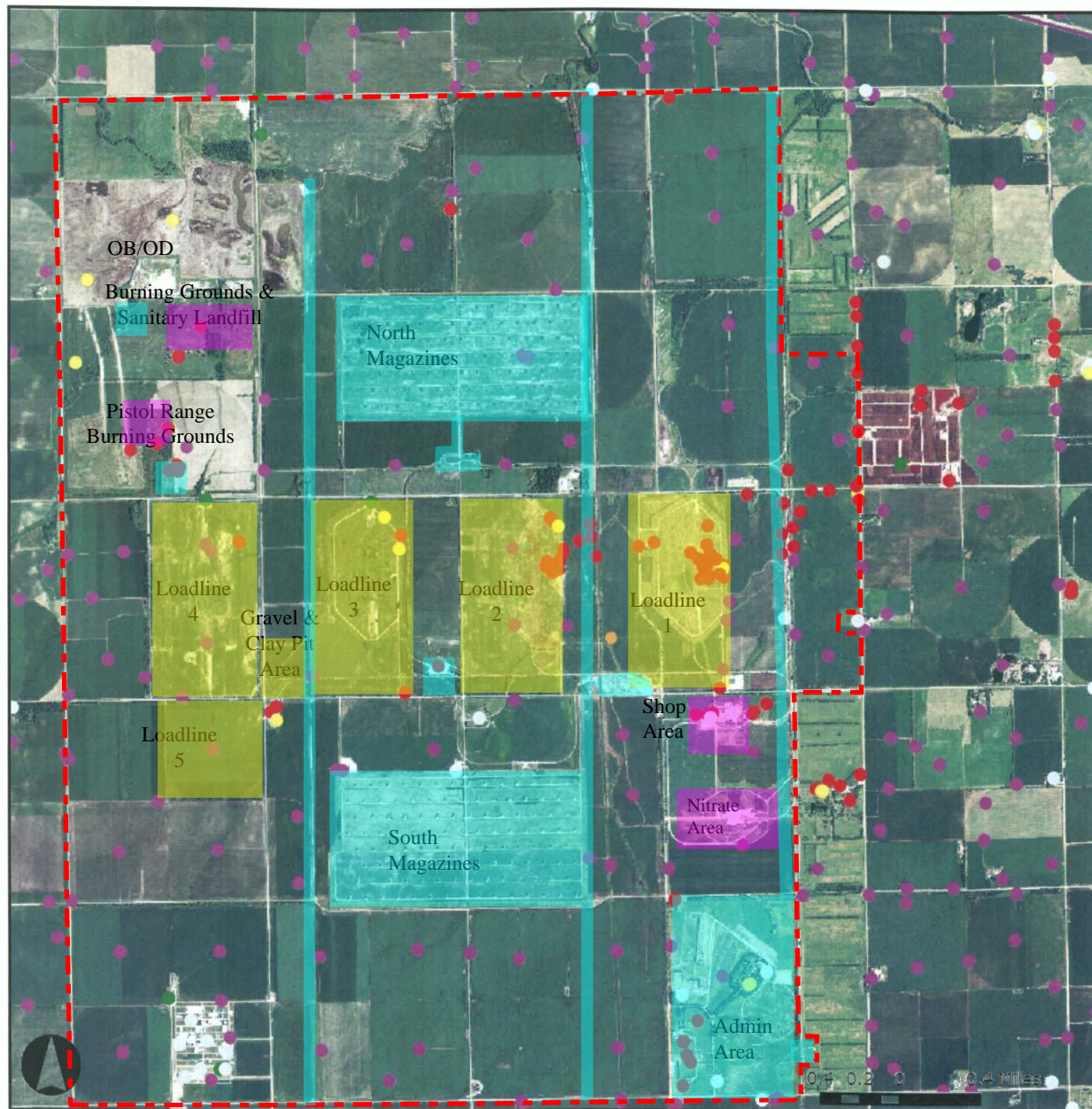


Find a Problem

If a problem is found use Email Us link top right.

If the problem is with a specific well, please include information about the well.

CHAAP Operable Units



City Points



City Bounds



Wells by Use

- All Other Uses
- Commercial
- Domestic

Wells by Use (continued)

- Groundwater Heat Exch.
- Irrigation
- Groundwater Quality
- Livestock

Major Roads

- Interstate
- Spurs
- Nebr. Highway
- US Highway

State Bounds



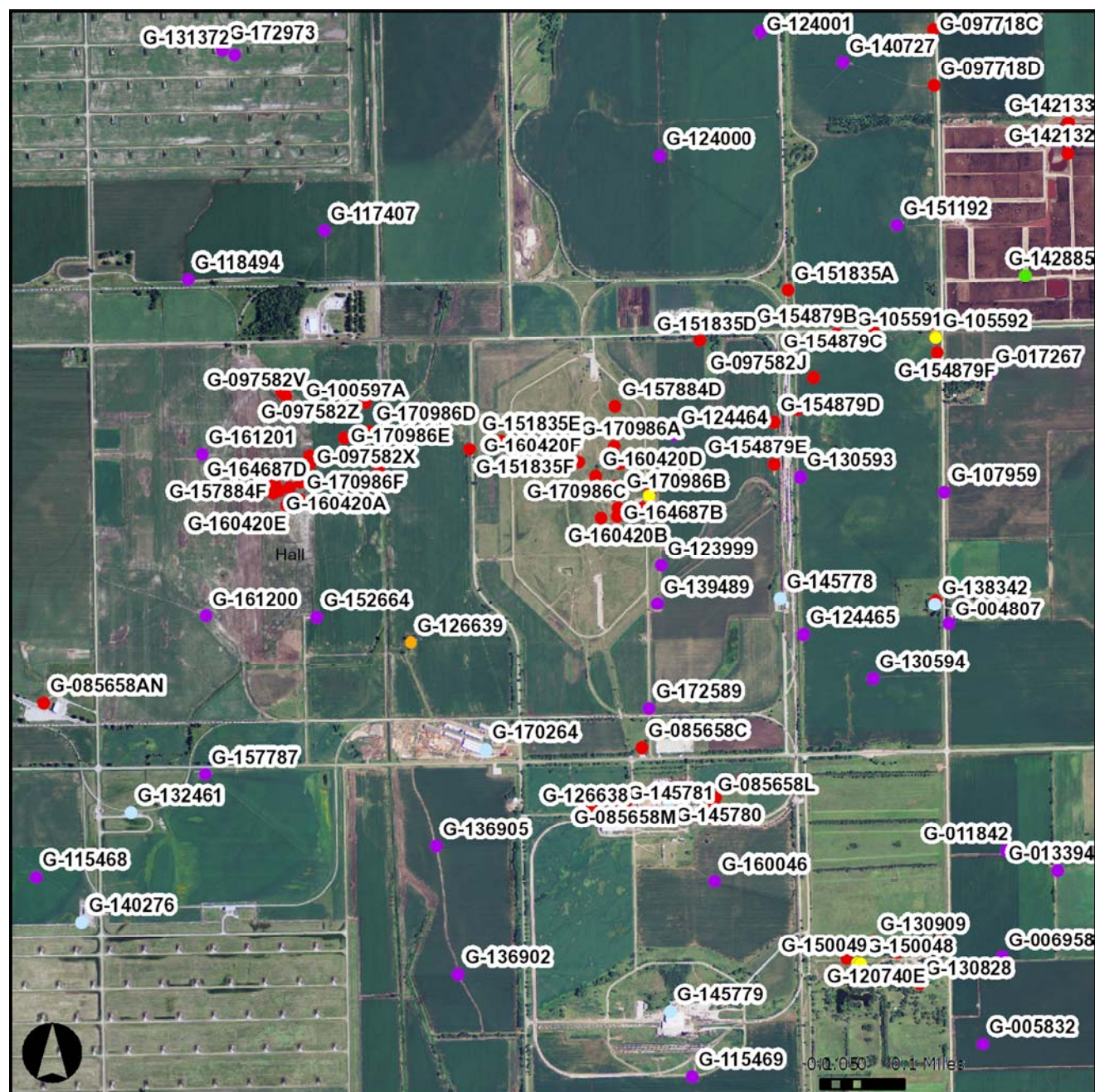
- - - Facility Boundary
- OU2 Boundary
- OU3 Boundary
- OU4 Boundary

Find a Problem

If a problem is found use Email Us link top right.

If the problem is with a specific well, please include information about the well.

CHAAP well ID Map



City Points



City Bounds



Counties with labels



Wells by Use

Yellow dot: All Other Uses

Orange dot: Commercial

Light blue dot: Domestic

Dark blue dot: Groundwater Heat Exch.

Wells by Use (continued)

Purple dot: Irrigation

Red dot: Groundwater Quality

Green dot: Livestock

State Bounds



Find a Problem

If a problem is found use Email Us link top right.

If the problem is with a specific well, please include information about the well.

Domestic Wells Located Within CHAAP OU1 Treatment Zone

Registration Number	Well ID	Completion Date	Total Depth	Gravel Pack	Screened Interval	GPM	Owner	Use/Status	OU1 Area	Confirmed Use
G-138342	173611	6/22/2005	80	10-50 60-80	60-80	15	Southern Power District	Domestic Active	east of Load Line 1	Used for restroom and hand washing in warehouse facilities
G-145778	186661	6/19/2007	128	15-70 83-128	118-128	12	DTE Energy ¹	Domestic Active	east of Load Line 1	Used for hand washing and restroom facilities. Bottled water is used for drinking.
G-170264	228844	10/8/2013	154	10-65 70-154	124-154		O'Neill Wood Resources	Domestic Inactive	Shop Area	n/a
G-145780	186665	6/15/2007	154	15-68 125-154	134-154	30	DTE Energy ¹	Domestic Active	Shop Area	n/a
G-145781	186666	6/29/2007	60	15-60	50-60	12	DTE Energy ¹	Domestic Active	Shop Area	Used for hand washing and restroom facilities. Bottled water is used for drinking.
G-145779	186664	6/28/2007	140	15-65 95-140	120-140	30	DTE Energy ¹	Domestic Active	Nitrate Area	n/a
G-132461	165958	11/18/2004	70	16-70	60-70	15	Heritage Disposal	Domestic Active	South Magazine	Used for hand washing and restroom facilities in the office. Bottled water used for drinking.
G-140276	174214	11/12/2005	65	12-65	55-65	15	Heritage Disposal	Domestic Active	South Magazine	Used for hand washing and restroom facilities in the guard shack. Bottled water used for drinking.

¹ DTE has 4 buildings on site: 1 is an office, 1 is a lunch room/restroom for the train crew, and 2 are used for railcar wash down stations and repair work

Mason, Angela N NWK

From: Simpleman, Douglas P NWO
Sent: Tuesday, December 09, 2014 11:36 AM
To: Mason, Angela N NWK
Subject: FW: Wells (UNCLASSIFIED)
Attachments: Domestic Wells on Cornhusker Army Ammunition Plant.docx

Classification: UNCLASSIFIED

Caveats: NONE

Angie,

See attached.

-----Original Message-----

From: Wellensiek, Mary K NWO
Sent: Tuesday, December 09, 2014 11:21 AM
To: Simpleman, Douglas P NWO
Subject: RE: Wells (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Doug,

I have attached a word document with the information that you requested. Dan Clemente (CPNRD) and I went over each well this morning to make sure the depths were accurate, etc. Dan suggested, if KC needed more information they could get on the web site for NRD and see the GPS information.

The web site is: DNR.nebraska.gov (Department of Natural Resources) they have all of the information needed loaded on this site. I didn't include this with the information that you wanted to submit to KC, thought I would let you decide if you wanted to add this or not.

Thanks
Mary

-----Original Message-----

From: Simpleman, Douglas P NWO
Sent: Tuesday, December 09, 2014 7:20 AM
To: Wellensiek, Mary K NWO
Subject: Wells (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Mary,

I received your message. Please type up the results in a document that I can forward to Kansas City.

Thanks,

Doug Simpleman
Project Manager (PMP)
1616 Capitol Ave.
Omaha, NE 68102-4901

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Domestic Wells on Cornhusker Army Ammunition Plant

Upper aquifer is 60 feet to 80 feet deep, below this aquifer level is a clay base. The upper aquifer is the one that is contaminated with explosives

Well Numbers:

G-170264 – 154 feet deep - Michael O'Neill owner

G-138342 – 80 feet deep – Southern Public Power District owner – warehouse facilities used for restroom and hand washing

G-145778 – 28 feet deep – DTE Railcar Services owner – used for hand washing and restroom facilities - bottled water for drinking

G-145779 – 140 feet deep – DTE Railcar Services owner

G-145780 – 154 feet deep – DTE Railcar Services owner

G-1457871 – 65 feet deep – DTE Railcar Services owner – hand washing and restroom facilities- (bottled water for drinking

DTE has 4 buildings on site, 1 is an office, 1 is a lunchroom/restroom for the train crew, 2 are used for railcar wash down stations and repair work.

G-132461 – 70 feet deep – Heritage Storage and Disposal (bottled water for drinking) – hand washing and restroom facilities - Office

G-140276 – 65 feet deep – Heritage Storage and Disposal (bottled water for drinking) –hand washing and restroom facilities – Guard Shack



DEPARTMENT OF THE ARMY

CORNHUSKER ARMY AMMUNITION PLANT
GRAND ISLAND, NEBRASKA 68803

REPLY TO
ATTENTION OF:

September 11, 2002

SOSCH

Central Platte Natural Resource District
ATTN: Mr. Ron Bishop
215 Kaufman Avenue
Grand Island, NE 68803

Dear Mr. Bishop:

In March 2002, the US Army conducted the annual Long Term Monitoring (LTM) of the groundwater explosives plume of the Cornhusker Army Ammunition Plant (CHAAP). As part of the LTM efforts, the Army and its contractors also performed an assessment of the existing institutional controls (ICs) / land use controls (LUCs) established to prevent the use of groundwater within the area of the explosives plume.

The ICs/LUCs include an ordinance passed by the City of Grand Island that prohibits the installation of domestic drinking water wells within the plume and requires the connection of all houses and other buildings to municipal water lines. This ordinance is applicable to the two-mile extra-jurisdictional area outside the city limits. An annual update of the current location of the explosives plume is provided to the City of Grand Island for use with their Geographical Information System (GIS). The GIS map can be accessed by City personnel to ensure that any wells installed within the plume are not connected to houses or other buildings for drinking water usage.

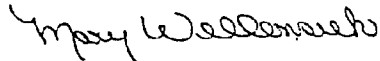
The LTM effort also included interviews with Milton Moravek and Dan Clement of your organization to determine whether the Central Platte Natural Resources District (CPNRD) had the ability to control the installation of wells within and/or near the explosives plume. Mr. Moravek and Mr. Clement indicated that the CPNRD had the authority only to prevent the installation of new irrigation and industrial wells within 600 feet and 1000 feet, respectively, of existing wells.

Because of the potential for industrial development at CHAAP, the Army is concerned about the possible installation of new high capacity irrigation and industrial wells adjacent to the explosives plume. Such wells could affect the containment of the plume by the extraction wells of the on-post groundwater treatment system (GWTS). The Army asks that the CPNRD be cognizant of requests for permits for any new irrigation and/or industrial wells whose cones of influence could affect the effectiveness of the GWTS extraction wells. A copy of a map with the latest explosive plume outline will be provided to the CPNRD on an annual basis, in a GIS file, for reference by your personnel.

As CHAAP property underlain and/or immediately adjacent to the explosives plume is sold, the Army will place restrictions on the deeds that will include a negative easement to prevent the installation of wells for domestic drinking water usage. The Army will place a restrictive covenant on the deeds of parcels sold for industrial usage.

If you have any questions, please call the undersigned at (308) 381-6214.

Sincerely,



Mary Wellensiek

Contracting Officer's Representative

CF:

Omaha District Corps of Engineers, ATTN: Al Kam
HydroGeoLogic Inc., ATTN: Darrell Hollowell

Institutional Controls Tracking System

Facility Name:	Cornhusker Army Ammunition Plant	Zip Code:	68802
City:	Grand Island	County:	Hall

Geographic Area: Applies to land overlaying the groundwater explosives plume, designated as the "Overlay Zone," as described in the annual Long Term Monitoring report plume map. However, groundwater use restrictions within the "Overlay Zone" greater than two (2) miles outside the city limits cannot be enforced by the City of Grand Island

Latitude: NA: Address: NA
Longitude: NA

Category: Government Media: GroundWater
Type: Local Ordinance

Text:: Groundwater pumped from wells within Groundwater Control Area No. 2 shall not be used for any human consumption including drinking water, cooking, washing or other household uses. Because groundwater from wells within the groundwater control area may be contaminated and present a hazard to the health, safety, and welfare of persons exposed to said water, any known human consumption of groundwater from wells within Groundwater Control Area No. 2 is a violation of this Article and is declared a public nuisance subject to abatement as provided hereafter. This Article shall not apply to uses of groundwater pumped from wells within Groundwater Control Area No. 2 which do not involve human consumption, including, but not limited to, non-contact cooling water for industrial, commercial or residential uses and watering of vegetation other than gardens, plants, and trees producing food for human consumption.

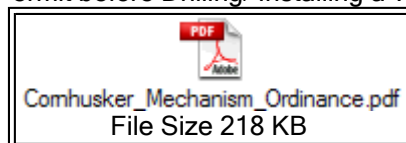
(A)All wells for which drilling has commenced or existing within Groundwater Control Area No. 2 as of the effective date of this Article shall be registered with the Building Department by the person owning the real estate on which the well is located. There shall be no fee for registering an existing well.

(B)No person may drill or install a well within Groundwater Control Area No. 2 prior to applying for and obtaining a well permit from the Building Department.

(C)No person may drill or install a well within Groundwater Control Area No. 2 which penetrates two or more water- bearing zones unless water-tight casings are installed which conform to the regulations governing water well construction, pump installation, and water well decommissioning standards of the Nebraska Department of Health and Human Services, Regulation and Licensure Division.

Compliance Reporting: Annual reporting by responsible party pursuant to approved remedy, and Superfund 5-year review

Restrictions: Prohibit Installation/ Construction of Groundwater Wells Used for Human Consumption
Require Registration of New and Existing Wells
Require a Well Permit before Drilling/ Installing a Well



Geographic Area: Applies to the entire former Cornhusker Army Ammunition Plant

Latitude: NA: Address: NA

Longitude: NA

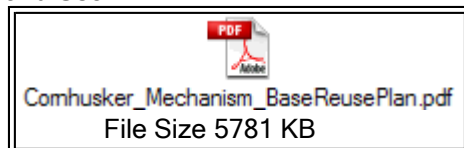
Category: Government
Type: Base Use Plan

Media: Soil

Text:: The Hall County Reuse Plan will enforce former facility land designation for agriculture, recreation, conservation, warehousing, industrial and special events zoning which includes the restriction of sites for residential purposes.

Compliance Reporting: Annual reporting by responsible party pursuant to approved remedy, and Superfund 5-year review.

Restrictions: Limit Future Land Use



Geographic Area: Various parcels located throughout the former Cornhusker Army Ammunition Plant.

Latitude: NA:

Address: NA

Longitude: NA

Category: Proprietary

Media: GroundWater
Soil

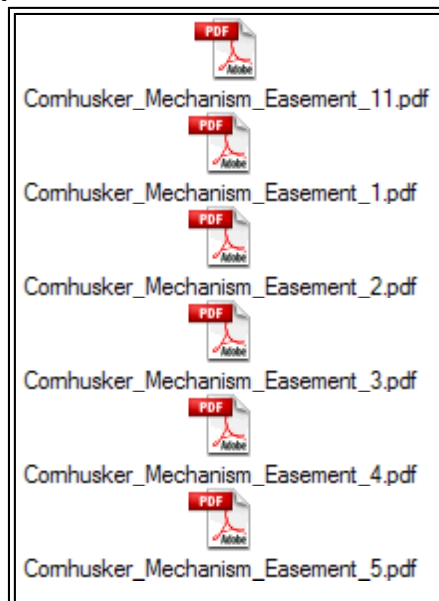
Type: Easement - Unspecified Type






Text:: See individual property easements.

Compliance Reporting: Annual reporting by responsible party pursuant to approved remedy, and Superfund 5-year review.

Restrictions: Restrictions on individual parcels range from

- Restrict land use to commercial, industrial or agricultural; and prohibit residential
- Restrict land use to agricultural, conservation or recreation; and prohibit residential
- No groundwater shall be used for domestic purposes
- Restrict use of existing buildings containing lead-based paint and/or asbestos
- Restrict land use that would threaten existing archaeological site, wetland, or endangered species habitat




[Comhusker_Mechanism_Easement_6.pdf](#)

[Comhusker_Mechanism_Easement_7.pdf](#)

[Comhusker_Mechanism_Easement_8.pdf](#)

[Comhusker_Mechanism_Easement_9.pdf](#)

[Comhusker_Mechanism_Easement_10.pdf](#)

File Size 1472
 530
 516
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 3243
 646
 1716
 1669
 1295
 970
 1190 KB

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[Nebraska.gov](#)

Nebraska Department of Environmental Quality
 1200 "N" Street, Suite 400
 PO Box 98922
 Lincoln, Nebraska 68509
 (402) 471-2186

CHAPTER 35

WATER

Article I. In General

§35-1. Director of Utilities Operations; Authority

The authority and powers vested in the Director of Utilities Operations by this chapter shall, in all cases, be subject to review by the mayor and council.

§35-2. Reports to be Submitted

It shall be the duty of the Director of Utilities Operations to report to the city council monthly a particular account of the affairs of the water department for the preceding month, together with all suggestions and recommendations as deemed proper. The director shall also make and submit a statement at the beginning of each fiscal year for the whole of the preceding year.

§35-3. Application for Water Service

Every person desiring a supply of water from the city water system shall make application therefor to the Director of Utilities Operations upon forms furnished for such purpose.

§35-4. Water Service; Order Required

Water will not be supplied into any house or service pipe except upon the order of the Director of Utilities Operations, and plumbers are prohibited from turning the water into any service pipe except on the order of the Director of Utilities Operations; provided, that this rule shall not be construed to prevent licensed plumbers from admitting water to test pipes, but for that purpose only. The Director of Utilities Operations shall not order water to be supplied into any house or service pipe, whether new or existing construction, until the water system to be served has been inspected and approved by the Grand Island Department of Public Works.

When water has been turned off from any consumer, the consumer shall not turn it on or permit it to be turned on without the written consent of the Director of Utilities Operations.

§35-5. Service Pipes; Specifications; Laying

Either copper or ductile iron service pipe may be used at the option of the consumer. Such service pipe shall be at least one-eighth inch larger in diameter than the tap through which it is supplied. All pipe shall sustain a pressure of not less than two hundred pounds per square inch (200 psi).

All service pipes shall be laid under the surface of the ground with no less than five feet of earth cover, and in all cases shall be so protected as to prevent rupture by freezing.

In all cases, water service pipes, one and one-half inch or smaller in diameter, shall be of copper pipe between the water main and water meter. Service pipe laid between the water main and the curb stop at the property line shall be built of continuous construction without joints, unions, or splices. All piping shall meet the following specifications:

Specifications for Copper Pipe:

Copper pipe shall be Type K, cold drawn to size and of the proper bending temper and shall be made from phosphorized copper completely deoxidized and have a purity of at least ninety-nine and nine-tenths percent copper.

Copper pipe shall have the following dimensions:

Nominal Size in Inches	Wall Thickness In Inches	Pounds/ Lineal Foot	Outside Diameter In Inches
3/4	.065	.641	.875
1	.065	.839	1.125
1 ¼	.065	1.04	1.375
1 ½	.072	1.36	1.625

In all cases, service pipes two inches or larger in diameter which are laid between the water main in the street and the valve at the property line shall be of class 52 ductile iron, either mechanical joint or slip joint pipe. This shall be built and laid to withstand a pressure of 200 psi and shall conform to the standard specifications as recommended by the American Water Works Association for ductile iron pipe.

§35-6. Service Pipes; Tapping

No person shall be permitted to make or have made any taps or connection with any water service pipe between the water meter and the water mains.

§35-7. Service Pipes; Cost and Installation

The city shall furnish and install the water service pipe from the water main in the street to within six inches of the property line, at the expense of the consumer, and such service pipe shall include the corporation stop, pipe, curb stop, and stop box, and such installation shall include all labor of excavating and laying the same. The cost of the same shall be paid in advance to the Utilities Department before any work is done. In the event any expense is incurred by the city which exceeds the amount so paid, such additional expense shall be paid by the person responsible therefor before water is supplied to such consumer.

§35-8. Excavations In Paved Streets

Whenever it shall be necessary to cut into, excavate in, or remove any portion of the paving in any street in the city to serve any lot with water, or to repair or relay any service pipe connecting any water main with any lot, the consent of the Director of Utilities Operations shall be first secured and the paving shall be restored to its former condition. The expense of cutting into, removing, and restoring the pavement shall be paid in advance by the owner of the lot to the Utilities Department. The work of removing and restoring any street pavement for any such purpose shall be by or under the supervision, control, and direction of the public works director and in accordance with the provisions of this Code and any other specifications of the City regulating paving.

§35-9. Refilling Excavations

After service pipes are laid, in refilling the opening, the earth shall be laid in layers of not more than nine inches in depth and each layer thoroughly tamped and settled with water. The streets, sidewalks, and pavements shall be restored to as good condition as before the excavation, and all dirt, stones or rubbish shall be removed immediately after completing the work. Should an excavation in any street, alley, or highway be left open or unfinished for the space of twenty-four hours, or should such work be improperly done or should any rubbish not be removed, the Director of Utilities Operations shall have the right to finish or correct the work, and the expense incurred shall be charged to and paid by the person responsible for such work, and shall be paid before water is supplied.

§35-10. Curb Stops; Stop Boxes

Unless otherwise permitted, curb stops shall be placed in the service pipe within six inches of the property line and protected by a valve box reaching from the top of the curb stop to the surface of the ground, of suitable size to admit a valve key for turning on and off the stop, and with a cast iron cover, having the letter "W" marked thereon, visible and even with the pavement, sidewalk or top of the ground. The valve box shall be kept closed and in good repair by the water consumer. In case a consumer refuses to keep the valve box in good condition, the Utilities Department shall put the same in good order, at the expense of the owner of the premises.

§35-11. Tapping Mains or Distributing Pipes

No person except by direction of the Director of Utilities Operations will be permitted, under any circumstances, to tap the water mains or distributing pipes, or install corporation stops or appurtenances thereon. All pipes shall, in all cases, be tapped at the two o'clock position or at level, and not in any case nearer than fifteen inches of either end of the pipe, nor nearer than two feet to any other tap.

§35-12. Repairs and Maintenance

All persons taking city water shall keep the service pipes, curb stops, meters, valves, valve boxes, and other apparatus in good working order and repair, and protect the same from frost at their own risk and expense. Leaking service pipes, curb stops, corporation stops, valves, and other water service appurtenances shall be repaired in a timely manner by the consumer at the consumer's expense. Equipment not in good working order shall be replaced or repaired by the consumer at the consumer's expense. The Utilities Department shall have the right to operate the curb stops and/or valves at any time deemed necessary by the Director of Utilities Operations. The City shall not be responsible for any damage to or damage caused by failure of the customer's service pipe, corporation stops, curb stops, valves, or any other appurtenances of the water service, unless caused by gross negligence or intentional acts by the City or its employees or agents.

§35-13. Exposure of Water Pipes to Frost

No person shall dig up or uncover so as to expose to the frost, any water pipe of the city, except under the direction of the Director of Utilities Operations.

§35-14. Public Fire Hydrants

All hydrants erected in the city for the purpose of extinguishing fire are hereby declared to be public hydrants. It shall be unlawful for anyone but authorized persons to obstruct a public hydrant, open any of such hydrants, attempt to draw water from the same, or in any manner interfere with the same. For purposes of this section, authorized persons shall mean members of the Fire Department, and then only for the use and purpose of the Fire Department, or persons specially authorized by the City or the Director of Utilities Operations, and then only in the exercise of the authority delegated by the City or Director of Utilities Operations.

§35-15. House Boilers

All house boilers shall be constructed with one or more air holes near the top of the inlet pipe, and shall be sufficiently strong to bear the pressure of the atmosphere under the vacuum, and shall have an approved backflow preventer between the service pipe and the boiler. The valves and other appurtenances shall be sufficiently strong to bear the pressure of water in the mains.

§35-16. Use of Water for Construction Purposes

The Director of Utilities Operations shall have the authority to issue permits for the use of water for building and construction purposes. The regular charge shall be paid as though the water was taken by regular customer service.

§35-17. City May Suspend Use of Water

The City reserves the right to suspend the use of water for fountains, or for sprinkling yards, lawns and gardens or for any other purpose whenever in the opinion of the city council the public exigency may require it.

§35-18. Right of City to Shut Off Water

The city may shut off the water supply at any time, from any or all premises, to repair the plant, pumps or mains, to make extensions or connections, or for violations of this chapter or failure to pay water charges, or for any other purpose that may be deemed necessary by the Director of Utilities Operations, any permit granted to the contrary notwithstanding, and no claim for damages shall be made against the city or the Director of Utilities Operations on account of any such shutoff or on account of a failure of the water supply from any cause.

§35-19. Injuring Waterworks Property

No person shall willfully or carelessly break, damage or deface, interfere with, or disturb any

equipment, apparatus, fixtures, attachments or appurtenances of the water works of the City, or any public or private hydrant, valve, meter, water supply or service pipe, or any part thereof, or commit any act tending to obstruct or impair the intended use of any of the above mentioned properties.

§35-20. Notice When Premises Vacated

If any consumer of city water shall move from the premises for which water is being supplied by the City, or if such premises shall be destroyed by fire, such consumer shall notify the Director of Utilities Operations thereof, who shall cause the water to be shut off from such premises.

§35-21. Right of Entry to Examine Fixtures, Etc.

All consumers of city water shall permit the Director of Utilities Operations, or person designated by the Director, during reasonable daytime hours, to enter their premises or buildings for the purpose of testing any meter, or to examine the pipes, meters or other fixtures.

§35-22. Report of Leakage; Violations

It shall be the duty of the police of the city to report to the Director of Utilities Operations all cases of leakage and of violations of this chapter or any other ordinances relating to the water works of the city that may be brought to their notice, and they shall enforce the observance of all such provisions, so far as they have that authority to do so.

§35-23. Contract for Water; Violations

All the rules, regulations and provisions of this chapter shall be considered a part of the contract with every person who is supplied with water through the waterworks system of the city, and every such person, by taking water, shall be considered and held to consent to be bound thereby, and when any of them are violated, or such others as the city or Director of Utilities Operations may adopt, the water shall be cut off from the building or place of such violation, and the water shall not be turned on again except by order of the Director of Utilities Operations and on payment of the expenses of shutting off and turning on the same, and upon such other terms as the Director of Utilities Operations shall determine; provided, there is a satisfactory understanding with the offending party that no further cause for complaint shall arise.

Article II. Meters and Rates

§35-24. Meter; Generally

All water meters used in connection with the waterworks system of the city shall be of standard manufacture, approved by the Director of Utilities Operations, and put in place or removed by the Director of Utilities Operations or some other employee of the city designated for that purpose. The cost of such meters and the placing or removing or the keeping of the same in good order and repair shall be at the expense of the consumer. All work, repairs, and removals of such meters shall be done under the supervision and direction of the Director of Utilities Operations, and in such case the owner or consumer shall pay to the City the actual cost for such repairs, and, upon failing to do so, the Director of Utilities Operations may cause the water to be cut off from such premises.

§35-25. Meters; Access

The owner or tenant of any premises served with city water shall provide ready and convenient access to the water meter located on such premises so that it may be easily examined and read by the Director of Utilities Operations or any person designated by the director to perform such functions.

§35-26. Water to be Furnished at Meter Rates

All water furnished through the waterworks system of the City shall be furnished at meter rates.

§35-27. Charges When Meter Out of Order

Should any water meter get out of order or repair and fail to register properly, the consumer will be charged at the average monthly consumption, as shown by the meter when in order, for six months previous, or fraction thereof, if the same has not been used that long.

§35-28. Billing; Nonpayment; When Bills Due

All money due the city for water furnished will become due and payable upon billing by the City.

It shall be the duty of the Director of Utilities Operations, on all water accounts remaining unpaid thirty days after the bill for the same is rendered, or within such thirty day period, if in the director's discretion the circumstances warrant, to shut off the supply of water to such consumer and the same shall remain shut off until the account is paid in full, together with the cost of turning the same off and on. Bills for water furnished shall be rendered by the Director of Utilities Operations monthly or quarterly, and shall designate the number of cubic feet of water registered at the date of the bill and shall subtract therefrom the number of cubic feet of water registered at the date of last settlement, and compute the amount due for the difference in dollars and cents, in accordance with the rates fixed by this article or by resolution of the city council. All officers of the water department are positively prohibited from allowing credit to any one.

§35-29. Minimum Rates

The minimum rates as set forth in this article shall be uniform and apply in all cases where water is furnished within or without the city as the case may be, and such minimum rate shall be credited to the account of each consumer, or the person to be charged, until the amount paid as a minimum rate shall be exhausted by water charges as aforesaid. The charges for water furnished at the rates set forth in this article shall be collected by the Director of Utilities Operations as provided by this article. If the amount of water consumed monthly is not sufficient to exhaust the minimum rate as herein below provided and charged by the city, such consumer or person to be charged shall not be entitled to any return or credit for any portion of such minimum rate. The minimum rate shall be charged for each dwelling unit which is directly or indirectly connected to the city water system. For the purposes of this article, a dwelling unit shall mean one or more rooms and a single kitchen designed as a unit for occupancy by one family for living and sleeping purposes, and shall include a manufactured home. If more than one dwelling unit is served from a single water meter as in the case of apartments and manufactured home courts, a percentage of the minimum rate shall be charged against each unit, depending on the number of dwelling units per water meter as follows:

2-5 dwelling units.....	65%
6-10 dwelling units.....	60%
11-20 dwelling units.....	55%

21 and over dwelling units..... 50%

The above charges shall be computed upon the yearly average of the number of dwelling units occupied.

§35-30. Schedule of Rates

The rate to be charged for water furnished shall be as follows:

Monthly Billings	
Cubic feet per month	Rate per 100 cubic feet
First 500.....	\$1.332
Next 500.....	0.560
Next 500.....	0.552
Next 2,500.....	0.625
Next 6,000.....	0.572
Next 90,000.....	0.515
Next 100,000.....	0.437
Over 200,000.....	0.399
Monthly Minimum (500 cu.ft.).....	6.660*

*Plus a customer charge of \$0.30 per month for unfunded federal mandates for the Clean Water Act and the City's backflow program, in addition to the regular rates charged for water furnished to the customer.

Amended by Ordinance No. 8935, effective 10-1-2004

Amended by Ordinance No. 8987, effective 7-27-2005

§35-31. Reserved

§35-32. Sprinkler Systems

Owners of all private fire sprinkler systems connected to City water mains shall pay the City an annual fee in accordance with the City of Grand Island Fee Schedule.

§35-33. Water Charges To Be A Lien

All water and meter rates shall be charged to and collected from the owner of the premises served and the same shall be a lien on such premises and real estate where used, and may be collected by the city at any time after the same becomes due by civil action in the courts. The Director of Utilities Operations may report the names of owners of any premises served with water that are delinquent in the payment of their water bills or charges, showing the amount due from each delinquent, together with a description of the property upon, or for which the water has been supplied, and thereupon the city council shall, by resolution, direct the city clerk to file with the city treasurer a certified copy of such report and resolution, directing that the amount assessed against the different premises, as shown by such report, be placed upon the assessment rolls and tax books of the city for collection as other taxes.

Article III. Mains Constructed By Private Parties

§35-34. Water Mains; Department Standards

The design and construction of all water mains connected, either directly or indirectly, by private persons or entities, to the existing city water system shall meet all standards and specifications established by the Grand Island Department of Public Works and the Grand Island Utilities Department.

§35-35. Plans Signed by Engineer

All water main construction plans and specifications shall bear the signature and seal of a registered professional engineer who has prepared them.

§35-36. Review and Approval of Plans

All water main construction plans and specifications shall be reviewed and approved by the Grand Island Director of Utilities Operations, the Fire Department, and Department of Public Works. Prior to commencement of construction, the private person or entity constructing the water main, shall obtain a construction permit from the public works director after the water main construction plans and specifications have been approved as set forth above and before any water main construction work has commenced.

§35-37. Cost to Review Plans

The Department of Public Works may charge to review plans submitted by persons or entities proposing to construct water mains in the planning area. The charge shall be the rate per hour established and published from time to time by the Department of Public Works.

§35-38. Workmanship and Materials

All workmanship and materials shall comply fully with the requirements of the approved plans and specifications. If at any time within one year after the date of the final inspection any defect shall appear which in the opinion of the Director of Utilities Operations or the Public Works Director is due to inferior materials or workmanship, the property owner shall do whatever is necessary to remedy the defect at no cost to the City of Grand Island. Either director will notify the property owner in writing of the defects and repairs to be made. If the party notified fails to commence repairs within ten days, the Department of Public Works may cause the defects to be remedied and charge the costs and expense involved to the property owner. The contractor surety shall not be relieved until the defects or repairs are corrected and approved and a written release is furnished to the surety by the requesting department.

§35-39. Water Main Inspection and Approval

The Department of Utilities Operations or the Department of Public Works shall investigate and approve or reject the laying of all water mains. The City shall have the right to enter property containing water mains at all reasonable hours for inspection and investigation purposes.

§35-40. Commencement of Service

Before any water main which is constructed by a private person or entity and connected to the city water system will be accepted and service commenced, the following requirements must be met:

- (A) The water mains must pass all pressure tests required by either the Department of Utilities Operations or Department of Public Works.
- (B) The water mains must pass all water quality tests required by the City of Grand Island or any state or federal agency.
- (C) The registered professional engineer must inspect and approve the water main and issue a certificate of completion attesting that the water mains were constructed in accordance with the water main construction plans and specifications.
- (D) The public works director must accept the engineer's certificate of completion.

§35-41. Service Pipes

Private persons or entities may furnish and install water service pipes to within six inches of private property lines; provided, only the Utilities Department will be permitted to tap the water mains or distribution pipes or install corporation stops or appurtenances as required.

Article IV. Temporary Service And Abandonment

§35-42. Temporary Connections

No person may connect any temporary service pipe to the city water mains or distribution lines without the approval of the Director of Utilities Operations. Persons wishing to make a temporary service pipe connection shall file a written request for such connection with the Grand Island Director of Utilities Operations, specifying the connection desired to be made, giving the number of feet of service pipe required, a diagram of the premises and equipment to be served, and an estimate as to the duration of the temporary service pipe connection. The director may, at his or her discretion, approve the temporary service pipe

connection which shall be done at the expense of the applicant and under the supervision of the director. Such temporary service pipe shall at all times be under the absolute control and supervision of the City Utilities Department and Department of Public Works, and the city reserves the right to disconnect the temporary service pipe at any time there is reasonable cause to believe the applicant is failing to comply with the terms and conditions of the temporary connection permit or is jeopardizing either the city water system or the quality of water in the premises or equipment being served. The temporary service pipe permit shall expire at the earliest of either the applicant's estimated time of duration or the connection of the premises or equipment to an approved permanent service line. The applicant may obtain an extension of time on the temporary service pipe permit for good cause shown to the director.

§35-43. Abandonment of Service Pipes

All persons abandoning any water service pipe shall have a licensed plumber turn off the line at the water main tap and shall cut and crimp the service pipe as close as possible to, not to exceed one foot from, the tap. The City Utilities Department shall be notified whenever a service pipe is abandoned and shall be permitted to inspect and approve all work done in connection with such abandonment. Any person failing to abandon a service pipe in compliance with this section shall be guilty of a violation of the Grand Island City Code and shall pay the City Utility Department for the costs of properly shutting off, closing or crimping any abandoned service pipe and shall be liable for any damages to municipal property caused by the improperly abandoned service pipe. The Director of Utilities Operations may approve alternate means of closing and abandoning service pipes upon request if the foregoing procedure is impractical.

Article V. Backflow Prevention

§35-44. Definitions

Definitions of terms as stated in this paragraph and in the Uniform Plumbing Code, as adopted by the City of Grand Island, are hereby adopted for the purposes of this Article.

(A) Air Gap - The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptor.

(B) Atmospheric Vacuum Breaker - A device which prevents back-siphonage by creating an atmospheric vent when there is a negative pressure in a water system, and not subject to static line pressure.

(C) Auxiliary Water Supply - Any water supply system on or available to the premises other than the City's approved public potable water supply system.

(D) Backflow - The reversal of designed flow in a potable water system.

(E) Backflow Preventer - An assembly or means that prohibits the backflow of water into the potable water supply.

(F) Backpressure - A pressure, higher than the supply pressure, caused by a pump, elevated tank, air/stream pressure, or any other means, which may cause backflow.

(G) Back-siphonage - Backflow caused by negative or reduced pressure in the supply piping.

(H) Cross-connection - Any arrangement whereby contamination or pollution due to backflow, backpressure, or back-siphonage can occur.

(I) Double Check Valved Assembly - An assembly of two (2) independently operating spring loaded check valves with tightly closing shut-off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.

(J) Pressure Vacuum Breaker - A device containing one or two independently operated spring loaded check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check or checks. Device includes tightly closing shut-off valves on each side of the check valve and properly located test cocks for the testing of the check valve(s), which is designed to be subject to static line pressure.

(K). Reduced Pressure Principle Backflow Preventer - An assembly consisting of two independently operating approved check valves with an automatically operating differential relief valve located between the two check valves, tightly closing shut-off valves on each side of the check valves, plus properly located test cocks for the testing of the check valves and the relief valve.

(L) Residential Dual Check - An assembly of two spring loaded, independently operating check valves. Generally employed immediately downstream of the water meter to act as a containment device.

(M) Water Service Line - The water conveying piping, valves, fittings, and other appurtenances, including the water meter, which allow the movement of water to or from the water distribution system main.

§35-45. Backflow Prevention

In order to provide protection and prevent the potential of pollutants and contaminants from entering the public water system, backflow protection devices shall be required on all water service lines installed, replaced, or repaired after March 1, 1993. Backflow protection shall be in accordance with §35-47 and as approved by the Utilities Director in cooperation with the Building Department Director.

§35-46. Backflow Protection for Existing Facilities

The Utilities Director, in cooperation with the Building Department Director, shall conduct, or cause to be conducted, inspections as required to determine the backflow protection requirements of facilities connected to the city water system at the time of enactment of this Code Section, and shall require the completion of appropriate backflow protection measures at these existing facilities in accordance with the following schedule:

(A) To be completed no later than December 31, 1994:

1. Hospitals
2. Dental clinics
3. Medical clinics
4. Health clinics
5. Laboratories
6. Mortuaries
7. Nursing homes
8. Convalescent homes
9. Pharmaceutical plants
10. Cosmetic plants
11. Radioactive materials plants
12. Veterinary establishments
13. All City-owned facilities

14. Premises where, because of security requirements or other prohibitions, restrictions, or other existing conditions it is impossible or impractical to make a complete cross-connection premises survey.

(B) To be completed no later than December 31, 1995:

1. Automotive service stations
2. Car washes
3. Chemical processing plants
4. Chemical storage plants
5. Film laboratories
6. Film development facilities
7. Laundries
8. Dry cleaning facilities
9. Packing facilities
10. Petroleum processing plants
11. Petroleum storage plants
12. Rendering plants

(C) To be completed no later than December 31, 1996:

1. Fire suppression systems
2. Premises utilizing boilers or water cooling systems
3. Premises utilizing water recirculating systems and pumps
4. Beauty salons
5. Barber shops
6. Swimming pools with connections to customer service pipes
7. Feed yards
8. Stock yards
9. Kennels
10. Pet grooming salons

(D) To be completed no later than December 31, 1997:

1. Sand and gravel plants
2. Yard sprinkling or irrigation systems
3. Food processing plants
4. Beverage processing plants
5. Machine tool plants
6. Dye and metal processing plants
7. Metal plating plants

8. Multi-storied buildings greater than 3 stories in height
 9. Paper product plants
 10. Schools
 11. Multiple dwelling units served by one water service pipe
- (E) To be completed no later than December 31, 1998:

1. All non-residential facilities not included in A through D.

Upon notification by the Utilities Director or Building Department Director in accordance with §35-50, the owner of an affected facility shall have 180 days to complete the required backflow protection measures. If the customer fails to complete protection measures, including submittal of initial certification test results to the Utility Department, within 180 days, the water service line shall be shut off.

§35-47. Evaluation of Hazard and Backflow Protection Requirements

Evaluation of hazard shall be in accordance with Table 1 for commonly encountered equipment, fixtures, facilities, and their use. For a more complete list, refer to the *Manual of Cross-Connection Control, Eighth Edition*, published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, which is incorporated by reference as a part of this section. Determination of required backflow devices and methods shall be in accordance with Table 2.

TABLE 1
Direct or Indirect Potable Water Connections
Cross-connections Rated by Degree of Hazard for Commonly Encountered Equipment,
Fixtures, Facilities, and Their Use

	Hazard	
	High	Low
I. Subject to Back Pressure		
A. Pumps, tanks & lines handling:		
1. Sewage	X	
2. Toxic substances	X	
3. Nontoxic substances		X
B. Water connection to steam and steam boiler:		
1. Boiler or steam connection to toxic substances	X	
2. Boiler or steam connection to nontoxic substances (boiler blowoff through air gap)		X
II. Not Subject to Back Pressure		
A. Sewer-connected water line (not subject to waste stoppages)	X	
B. Low inlets to receptacles containing:		
1. Toxic substances	X	
2. Nontoxic substances		X
C. Coils or jackets used as heat exchangers in compressors in lines carrying:		
1. Sewage	X	
2. Toxic substances	X	
3. Nontoxic substances		X
D. Flush valve toilets or urinals	X	
E. Toilet, urinal tanks and approved bathtubs		X
F. Bidets, sitz tanks, or spa, therapy and roman pools not otherwise isolated by design or backflow protectors	X	
G. Trough urinals		X
H. Valved outlets or fixtures with hose attachments that may constitute a cross-connection to:		
1. Toxic substances	X	
2. Nontoxic substances		X
I. Aspirators that may constitute a cross-connection to:		
1. Toxic substances	X	
2. Nontoxic substances		X

III. Other Equipment and Facilities Subject to a Variety of Backflow Conditions		
A. Lawn sprinkling systems that may constitute a cross-connection to:		
1. Toxic substances including lawn chemicals	X	
2. Nontoxic substances		X
B. Fire suppression systems employing toxic chemicals	X	
C. Soft drink dispenser or bar carbonators	X	
D. Radiological, photographic, dental, medical, biological or chemical laboratories or facilities	X	
E. Swimming pools	X	
F. Tank truck loading station	X	

TABLE 2
Permitted Backflow Assemblies, Devices, and Methods

Assembly, Device or Method ¹	Degree of Hazard				Installation ^{2,3,4,6}
	Low		High		
	Back siphonage	Back pressure	Back siphonage	Back pressure	
Air Gap	X	X	X	X	Shall be a minimum of 1 inch but not less than 2 times the diameter of the effective spout opening when not affected by side walls, and 8 times the diameter of the effective opening when affected by side walls. Side walls will be assumed to not affect air gaps when they are spaced horizontally a distance greater than 4 times the effective opening from the spout opening.
Atmospheric Vacuum Breaker	X		X		Upright position. No valves downstream. Minimum of 6 inches or listed distance above all downstream piping & flood level rim of receptor ⁵ .
Double Check Valve Assembly	X	X			Horizontal unless otherwise listed. Requires 1 foot below & sufficient side & head room for testing & maintenance with a maximum of 5 feet above the ground, work floor, or a permanently installed working platform with stairs or ladder affixed. Does not discharge water.
Pressure Vacuum Breaker Assembly	X		X		Upright position. May have valves downstream. Minimum of 12 inches above all downstream piping & flood level rim of receptor. May discharge water.
Reduced Pressure Principle Backflow Prevention Assembly	X	X	X	X	Same as Double Check Valve Assembly above except may discharge water & wherever installed, provision for draining away at least 2 times the rated gallons per minute of the device shall be made.
Dual Check	X	X			Residential services only & where

Valves					high hazards are not known to exist on the premises. Properly protected lawn sprinkling systems are assumed to be low hazard for this purpose. Dual checks are not subject to annual inspection unless so stipulated by the manufacturer. Otherwise, reasonable inspection periods will be assumed to be every 6 years.
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Table Footnotes:

1. For description of assemblies and devices, refer to the *Manual of Cross-Connection Control*, published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, Eighth Edition and *American Water Works Manual, M-14, Second Edition*. Backflow preventers described herein and in the guidelines as "assemblies" must be installed as assemblies keeping the shut-off valves intact.

2. Previous approval by the public water supply system is required for use of a pit or vault (normally prohibited due to possible flooding) or for parallel and bypass installations (normally prohibited without special design considerations and proper cross-connection controls).

3. Backflow preventers shall not be located in any area containing fumes that are toxic, poisonous or corrosive; nor in any area in which they could be damaged by freezing, or by excessively high temperatures or pressures, vibration, physical impact or structural stress; nor knowingly be allowed to conduct highly corrosive or sandy waters without a special testing and maintenance program to assure proper and safe operation.

4. Refer to general and specific installation requirements as stated in the *Manual of Cross-Connection Control, Eighth Edition*, for conditions or situations not otherwise covered in these regulations.

5. Atmospheric vacuum breakers shall not be subjected to operating pressure for more than 12 hours in any 24-hour period. Hose bibb vacuum breakers are permitted for some uses described in the manual for *Cross-Connection Control, Eighth Edition*. Garden hose bibbs shall be protected with approved, non-removable or integral, frost-proof, self-draining, anti-siphoning vacuum breakers.

6. Fire protection systems as a minimum shall be equipped with backflow prevention devices as described in *AWWA Manual M-14, Second Edition*. Backflow preventers under this regulation and connected to fire protection systems shall be considered part of those systems. As such, they shall not be installed, moved, removed, replaced, shut off or in any way altered unless in strict compliance with the rules and regulations promulgated by the State Fire Marshal, and shall be tested and repaired only by authorized fire protection system certified testers. The backflow protection device shall be Underwriters Laboratory listed.

§35-48. Device Certification

Backflow preventers required by this Article shall have been tested and approved or listed for the intended use by one of the following organizations:

(A) Foundation for Cross-Connection Control and Hydrologic Research, University of Southern California, University Park, Los Angeles, California 90089.

(B) American National Standards Institute, 1430 Broadway, New York, New York 10018.

(C) Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, Illinois 60062.

(D) National Sanitation Foundation, 2355 West Stadium Boulevard, P. O. Box 1468, Ann Arbor, Michigan 48106.

(E) International Association of Plumbing and Mechanical Officials, 5032 Alhambra Avenue, Los Angeles, California 90032.

§35-49. Backflow Inspections

The Building Department or Utilities Department may inspect any premise to determine what level of protection will be necessary to protect the public health and safety.

In order to inspect a premise, the inspecting department shall give notice to the customer, setting forth a proposed date and time at least ten (10) working days in advance. If the customer cannot make the premises available for inspection on that date and time, the customer shall contact the Department to arrange

another date and time for inspection. If the Department and the customer cannot agree on a date and time for inspection within 30 days of the initial notice, the water service line shall be shut off.

All inspections shall be made during normal working hours.

§35-50. Backflow Prevention; Order Authority

The Utilities Director or Building Department Director shall have the authority to issue any order consistent with the provisions of this ordinance in order to protect the public health and safety. Any order of either department shall be in writing and shall clearly state the nature of the order, compliance requirements and set a reasonable date by which compliance must be met. All orders will be mailed to the customer certified mail, return receipt requested.

§35-51. Appeal of Backflow Prevention Order

The customer shall have the right to appeal any order issued in accordance with §35-50 to the Plumbing Board. This appeal shall be done in accordance with the provisions of Chapter 26, *Plumbing*, of the Grand Island City Code.

§35-52. Backflow Preventer; Installation, Maintenance, and Testing

The cost of the installation, maintenance, and testing of backflow preventers in accordance with this Article shall be paid by the customer. All backflow prevention devices shall be installed in accordance with all manufacturers' instructions and guidelines, in a manner that the device shall be accessible for inspection and testing, and in accordance with §35-47. A reduced pressure principle backflow preventer shall not be installed in a pit or other location which may be subject to flooding.

§35-53. Customers Responsibility

Backflow prevention devices shall be maintained in good working condition by the customer.

(A) The customer shall be responsible to cause all backflow, backpressure or back-siphonage protection devices equipped with test ports to be tested as often as required by the Utilities Director, but at least upon initial installation, when repaired, and once each year. All tests shall be done by a Backflow Preventer Test and Repair Technician, Grade VI Water Supply Operator, certified by the State of Nebraska Department of Health. Test results shall be forwarded to the Utilities Director on standard reporting forms. The test report shall be signed by the certified tester, attesting to proper backflow preventer operation. Devices equipped with test ports and installed on lawn sprinkling systems which are supplied with water from a service line equipped with a backflow, backpressure or back siphonage detection device shall be tested upon initial installation, replacement of integral parts, and every fifth year thereafter.

(B) Public water supply system consumers are required to assess and report potential backflow hazards on their premises and take any steps necessary for protection of public health and safety as often as reasonably requested by the Utilities Director and which shall be no less often than every five years.

§35-54. Backflow Prevention; Penal Provision; Violation; Penalty

Any person who violates any of the prohibitions or provisions of this ordinance, or who modifies plumbing or backflow preventers so as to defeat the protection against backflow, shall be deemed guilty of a misdemeanor. A new violation shall be deemed to have been committed each day of such failure to comply.

§35-55. Reserved

§35-56. Reserved

§35-57. Reserved

§35-58. Reserved

§35-59. Reserved

Article VI. Groundwater Control Area No. 1

§35-60. Purpose

The United States Environmental Protection Agency issued a Record of Decision (ROD) for the

Cleburn Street Well Superfund Site on June 7, 1996, which identified three sources of subsurface soil and groundwater contamination. These sources included the former One Hour Martinizing facility, Liberty Cleaners and Shirt Launderers, and Ideal Cleaners. The former Nebraska Solvent Company was identified as a possible fourth contamination source subject to subsequent evaluation and testing. The ROD described selected remedies for the three source areas, an element of which required the City of Grand Island to enact and enforce institutional control ordinances designating a Groundwater Control Area No. 1 in which groundwater use would be restricted to prevent human exposure and consumption of potentially contaminated groundwater, requiring registration of existing wells and requiring approval and registration of new wells. The institutional control ordinances are to remain in full force and effect until the groundwater contamination identified in the ROD is reduced to a level making the groundwater safe to be used as a source of drinking water pursuant to 42 USC §300g, et seq., the Safe Drinking Water Act, or its successor legislation.

§35-61. Definitions

As used in this Article, the following terms mean:

Groundwater means water pumped from a well located within the Groundwater Control Area No. 1 described in Section 35-62.

Groundwater Contamination means the chemicals of concern (COC) described in the United States Environmental Protection Agency Record of Decision (ROD) for the Cleburn Street Well Superfund Site dated June 7, 1996, which was received and accepted by the Mayor and City Council pursuant to Resolution 98-28.

Groundwater Control Area No. 1 means a defined area within the corporate limits of the City of Grand Island subject to the institutional controls provided in this Article which are intended to prohibit human consumption of potentially contaminated groundwater from wells.

Well means a hole or shaft sunk into the earth in order to obtain water from a natural subterranean supply or aquifer.

The definitions found in Neb. Rev. Stat., Chapter 46 - Irrigation and Regulation of Water are adopted by reference, except where such definitions are in conflict with those provided in this section above.

§35-62. Groundwater Control Area Boundaries

The outer boundaries of the Groundwater Control Area No. 1 are described as follows: Commencing at the southeasterly corner of the intersection of 9th Street and Adams Street; thence running northeasterly along the south boundary of 9th Street to the southwesterly corner of the intersection of 9th Street and Sycamore Street; thence running southeasterly along the west boundary of Sycamore Street to the northwesterly corner of the intersection of Sycamore Street and 1st Street; thence running southwesterly along the north boundary of 1st Street to the northwesterly corner of the intersection of 1st Street and Locust Street; thence running southerly along the west boundary of Locust Street to the intersection of Locust Street and Division Street; thence running southwesterly along the north boundary of Division Street to the northeasterly corner of the intersection of Division Street and Adams Street; thence running northwesterly along the east boundary of Adams Street to the point of beginning.

§35-63. Duration of Institutional Control Ordinance

(A) This Article shall remain in full force and effect for an initial term of twenty-five (25) years from the effective date following approval and adoption by the Mayor and City Council.

(B) The term of this Article may be extended by the Mayor and City Council if at the end of the initial term there remains groundwater contamination identified in the ROD described in Section 35-60 making the groundwater unsafe to be used as a source of drinking water pursuant to the Safe Drinking Water Act or its successor legislation.

(C) In the event the City of Grand Island is notified during the initial term by the Environmental Protection Agency that groundwater contamination within the Groundwater Control Area No. 1 has been reduced to a level making the groundwater safe to be used as a source of drinking water pursuant to the Safe Drinking Water Act or its successor legislation, the Mayor and City Council may proceed to repeal this Article forthwith.

§35-64. Prohibited Groundwater Uses

(A) Groundwater pumped from wells within the Groundwater Control Area No. 1 shall not be used

for any human consumption including drinking water, cooking, washing or other household uses. Because groundwater from wells within the groundwater control area may be contaminated and present a hazard to the health, safety and welfare of persons exposed to said water, any known human consumption of groundwater from wells within the Groundwater Control Area No. 1 is a violation of this Article and is declared a public nuisance subject to abatement as provided hereafter.

(B) This Article shall not apply to uses of groundwater pumped from wells within the Groundwater Control Area No. 1 which do not involve human consumption, including, but not limited to, non-contact cooling water for industrial, commercial or residential uses and watering of vegetation other than gardens, plants and trees producing food for human consumption.

§35-65. Well Registration

(A) All wells for which drilling has commenced or existing within the Groundwater Control Area No. 1 as of the effective date of this Article shall be registered with the Building Department by the person owning the real estate on which the well is located. There shall be no fee for registering an existing well.

(B) No person shall drill or install a well within the Groundwater Control Area No. 1 prior to applying for and obtaining a well permit from the Building Department. There shall be a nonrefundable fee in accordance with the City of Grand Island Fee Schedule paid to the Building Department contemporaneously with making an application for a well permit.

§35-66. Existing Well Registration, Information Required

The following information shall be submitted to the Building Department in connection with registering a well in existence as of the effective date of this Article:

- (A) The name and address of the person owning the real estate on which the well is located.
- (B) The address and legal description of the property on which the well is located.
- (C) The address of all properties being served by groundwater pumped from the well.
- (D) A description of the uses of the water pumped from the well, including specifically whether such groundwater is used for human consumption including, but not limited to drinking, cooking, washing, or other household uses.
- (E) Whether City water is available to the property currently served by the well.
- (F) The depth of the well, if known.
- (G) A diagram showing the location of the well.

§35-67. New Well Registration, Application for Well Permit

The following information shall be submitted to the Building Department in connection with applying for a well permit for a new well in the Groundwater Control Area No. 1:

- (A) The name and address of the person owning the real estate on which the proposed well is to be located.
- (B) The address and legal description of the property on which the proposed well is to be located.
- (C) The address of all properties to be served by groundwater pumped from the proposed well.
- (D) A description of the uses to be made of water pumped from the proposed well, including a certification that said groundwater will not be used for human consumption, including but not limited to drinking, cooking, washing, or other household uses.
- (E) Whether City water is available to the property to be served by the proposed well.
- (F) The depth of the proposed well.
- (G) A diagram showing the location of the proposed well.

§35-68. Violations of Institutional Control Ordinance, Abatement of Public Nuisance

Whenever the Building Department Director, or his/her designee has inspected any well within the Groundwater Control Area No. 1 and determined that groundwater pumped from the well is being used in violation of this Article, he/she shall send a written notice to the owner of record or owner's duly authorized agent, or person in possession, charge or control, or to the occupant by ordinary first-class mail and by certified mail, return receipt requested, notifying the addressee of the violation. The written notice shall contain the following information:

- (A) The street address and a legal description sufficient for identification of the premises on which the well is located.

(B) A brief and concise description of the acts or circumstances constituting a violation of this Article.

(C) A brief and concise description of the corrective action required to be taken to render the well and groundwater uses in compliance with this code.

(D) A brief and concise statement advising the addressee that if the well and groundwater uses are not brought into compliance with this Article within the time specified, that the Building Department Director, or his/her designee may order electrical power to the well disconnected and may request the City Attorney, with the consent of the Mayor, to file an action to abate the public nuisance and charge the costs thereof against the real estate, the owner of record and the addressee.

§35-69. Procedure for Abatement of Public Nuisance

If the addressee of the written notice described in Section 35-68 fails to abate said nuisance within the time specified, the City of Grand Island, at the written request of the Building Department Director, or his/her designee directed to the City Attorney, and with the consent of the Mayor, may proceed to abate said public nuisance pursuant to Section 20-15 of the Grand Island City Code, and charge the costs thereof against the real estate on which the well is located and the addressee of the written notice.

In the event the use of the groundwater in violation of this Article might cause irreparable harm or poses a threat to public health, safety or welfare, or the health, safety or welfare of the persons using the groundwater, the written notice to abate pursuant to Section 20-15 shall not be required as a condition precedent to commencing a legal action to obtain abatement of the nuisance. The City of Grand Island, with the consent of the Mayor, may immediately file an action requesting such temporary and permanent orders as are appropriate to expeditiously and permanently abate said public nuisances and protect the public health, safety or welfare or the health, safety or welfare of persons using the groundwater in violation of this Article.

§36-70. Reserved

§36-71. Reserved

§36-72. Reserved

§36-73. Reserved

Article VII. Groundwater Control Area No. 2

§35-74. Purpose

The U.S. Army, in consultation with the U.S. Environmental Protection Agency (USEPA), and the Nebraska Department of Environmental Quality (NDEQ), issued a Record of Decision and Record of Decision Amendment (collectively ROD) for the former Cornhusker Army Ammunition Plant (CHAAP) which identified soil and groundwater contamination consisting of explosives above the USEPA Health Advisory Levels. The revised proposed plan for OU1 ROD Amendment identifies the Preferred Remedial Alternative for remediating groundwater at Operable Unit One (OU1) of CHAAP and provides the rationale for the OU1 ROD Amendment. The preferred remedial alternatives include remedies for the on-post and off-post groundwater plume containing explosives. The on-post explosives plume will be treated to remedial action objectives using existing extraction and treatment technologies. The On-Post Plume Institutional Controls will include land use restrictions, enforcement of the Hall County Reuse Plan for agricultural and industrial zoning on CHAAP and prohibiting water supply well drilling in the plume area. The Health Advisory Level in effect as of March 1, 2001, is 2ug/l (microgram per liter) or 2 ppb (parts per billion).

Pending natural attenuation obtaining the remedial action objectives of the ROD, the U.S. Army has requested that the City of Grand Island enact and enforce an ordinance instituting Off-Post Plume Institutional Controls by designating a groundwater control area in which groundwater use would be restricted to prevent human exposure and consumption of potentially contaminated groundwater, requiring registration of existing wells, prohibiting installation of new wells supplying water for human consumption in the plume area, and requiring approval and registration of new wells. The Institutional Control Ordinance is to remain in full force and effect until the explosive contamination identified in the ROD is attenuated to less than USEPA Health Advisory Levels.

§35-75. Definitions

As used in this Article, the following terms mean:

Groundwater means water pumped from a well located within Groundwater Control Area No. 2 described in Section 35-72.

Groundwater Contamination means the explosives described in the U.S. Army Record of Decision and Record of Decision Amendment (ROD) for the former Cornhusker Army Ammunition Plant (CHAAP).

Groundwater Control Area No. 2 means a defined area within the corporate limits and zoning jurisdiction of the City of Grand Island subject to the Off-Post Plume Institutional Controls provided in this Article.

Off-Post Plume Institutional Controls means the provisions of this Article which are intended to prohibit human consumption of potentially contaminated groundwater from wells and contamination of otherwise uncontaminated water-bearing zones located within Groundwater Control Area No. 2.

Well means a hole or shaft sunk into the earth in order to obtain water from a natural subterranean supply or aquifer.

The definitions found in Neb. Rev. Stat., Chapter 46 - Irrigation and Regulation of Water are adopted by reference, except where such definitions are in conflict with those provided in this section above.

§35-76. Groundwater Control Area No. 2 Boundaries

The boundaries of Groundwater Control Area No. 2 shall be maintained in the Hall County – City of Grand Island Cooperative Geographic Information System (GIS) using information supplied by the U.S. Army and modified in accordance with periodic monitoring data prepared by the U.S. Army and reviewed by the USEPA and NDEQ.

§35-77. Duration of Institutional Control Ordinance

(A) This Article shall remain in full force and effect for so long as there remains groundwater contamination identified in the ROD described in §35-70 making the groundwater unsafe to be used as a source of drinking water because of explosives contamination above the USEPA Health Advisory Levels then in effect.

(B) When the City of Grand Island is notified by the U.S. Army or the USEPA that groundwater contamination within Groundwater Control Area No. 2 has been reduced to a level below the USEPA Health Advisory Levels, the Mayor and City Council may proceed to repeal this Article forthwith.

§35-78. Prohibited Groundwater Uses

(A) Groundwater pumped from wells within Groundwater Control Area No. 2 shall not be used for any human consumption including drinking water, cooking, washing or other household uses. Because groundwater from wells within the groundwater control area may be contaminated and present a hazard to the health, safety, and welfare of persons exposed to said water, any known human consumption of groundwater from wells within Groundwater Control Area No. 2 is a violation of this Article and is declared a public nuisance subject to abatement as provided hereafter.

(B) This Article shall not apply to uses of groundwater pumped from wells within Groundwater Control Area No. 2 which do not involve human consumption, including, but not limited to, non-contact cooling water for industrial, commercial or residential uses and watering of vegetation other than gardens, plants, and trees producing food for human consumption.

§35-79. Well Registration

(A) All wells for which drilling has commenced or existing within Groundwater Control Area No. 2 as of the effective date of this Article shall be registered with the Building Department by the person owning the real estate on which the well is located. There shall be no fee for registering an existing well.

(B) No person may drill or install a well within Groundwater Control Area No. 2 prior to applying for and obtaining a well permit from the Building Department. There shall be a nonrefundable fee in accordance with the City of Grand Island Fee Schedule paid to the Building Department contemporaneously with making an application for a well permit.

(C) No person may drill or install a well within Groundwater Control Area No. 2 which penetrates two or more water-bearing zones unless water-tight casings are installed which conform to the regulations governing water well construction, pump installation, and water well decommissioning standards of the

Nebraska Department of Health and Human Services, Regulation and Licensure Division (178 NAC 12, Section 003.11D - Contaminated Water-Bearing Zones).

§35-80. Existing Well Registration, Information Required

The following information shall be submitted to the Building Department in connection with registering a well in existence as of the effective date of this Article:

- (A) The name and address of the person owning the real estate on which the well is located.
- (B) The address and legal description of the property on which the well is located.
- (C) The address of all properties being served by groundwater pumped from the well.
- (D) A description of the uses of the water pumped from the well, including specifically whether such groundwater is used for human consumption including, but not limited to drinking water, cooking, washing, or other household uses.
- (E) Whether City water is available to the property currently served by the well.
- (F) The depth of the well, if known.
- (G) A diagram showing the location of the well.

§35-81. New Well Registration, Application for Well Permit

The following information shall be submitted to the Building Department in connection with applying for a well permit for a new well in the Groundwater Control Area No 2:

- (A) The name and address of the person owning the real estate on which the proposed well is to be located.
- (B) The address and legal description of the property on which the proposed well is to be located.
- (C) The address of all properties to be served by groundwater pumped from the proposed well.
- (D) A description of the uses to be made of water pumped from the proposed well, including a certification that said groundwater will not be used for human consumption, including but not limited to drinking water, cooking, washing, or other household uses.
- (E) Whether City water is available to the property to be served by the proposed well.
- (F) The depth of the proposed well.
- (G) A diagram showing the location of the proposed well.

Following installation of any new, permitted well in Groundwater Control Area No. 2, a copy of the well boring logs shall be filed with the Building Department and made a part of the records for the real estate on which the well is located.

§35-82. Violations of Institutional Control Ordinance, Abatement of Public Nuisance

Whenever the Building Department Director, or his/her designee has inspected any well within the Groundwater Control Area No. 2 and determined that groundwater pumped from the well is being used in violation of this Article, the Director shall send a written notice to the owner of record or owner's duly authorized agent, or person in possession, charge or control, or to the occupant by ordinary first-class mail and by certified mail, return receipt requested, notifying the addressee of the violation. The written notice shall contain the following information:

- (A) The street address and a legal description sufficient for identification of the premises on which the well is located.
- (B) A brief and concise description of the acts or circumstances constituting a violation of this Article.
- (C) A brief and concise description of the corrective action required to be taken to render the well and groundwater uses in compliance with this code.
- (D) A brief and concise statement advising the addressee that if the well and groundwater uses are not brought into compliance with this Article within the time specified, that the Building Department Director, or his/her designee may order electrical power to the well disconnected and may request the City Attorney, with the consent of the Mayor, to file an action to abate the public nuisance and charge the costs thereof against the real estate, the owner of record and the addressee.

§35-83. Procedure for Abatement of Public Nuisance

If the addressee of the written notice described in Section 35-78 fails to abate said nuisance within the time specified, the City of Grand Island, at the written request of the Building Department Director, or his/her designee directed to the City Attorney, and with the consent of the Mayor, may proceed to abate said

public nuisance pursuant to Section 20-15 of the Grand Island City Code, and charge the costs thereof against the real estate on which the well is located and the addressee of the written notice.

In the event the use of the groundwater in violation of this Article might cause irreparable harm or poses a threat to public health, safety or welfare, or the health, safety or welfare of the persons using the groundwater, the written notice from the City Attorney to abate pursuant to Section 20-15 shall not be required as a condition precedent to commencing a legal action to obtain abatement of the nuisance. The City of Grand Island, with the consent of the Mayor, may immediately file an action requesting such temporary and permanent orders as are appropriate to expeditiously and permanently abate said public nuisances and protect the public health, safety or welfare or the health, safety or welfare of persons using the groundwater in violation of this Article.



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COMPREHENSIVE REUSE PLAN FOR THE CORNHUSKER ARMY AMMUNITION PLANT

December 30, 1997

**Prepared for the
Cornhusker Army Ammunition Plant
Reuse Committee
Hall County, Nebraska**

**Under a Contract with the
Defense Logistics Agency
Administrative Support Center
Fort Belvoir, Virginia
Contract Number: SP4700-97-C-0007**

**Prepared by
RKG Associates, Inc.
Durham, New Hampshire**

**In Association with
Black & Veatch Special Projects Corp.
Overland Park, Kansas**

The Comprehensive Reuse Plan was prepared for Hall County, Nebraska under a contract with the Administrative Support Center of the Defense Logistics Agency with financial support provided by the Office of Economic Adjustment, Department of Defense. The contents of this document reflects the views of the Cornhusker Army Ammunition Plant Reuse Committee but do not necessarily reflect the views of the Office of Economic Adjustment.

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EXECUTIVE SUMMARY

INTRODUCTION

In 1942, the U.S. Government initiated construction of the Cornhusker Army Ammunition Plant (CAAP) in Hall County, Nebraska. During World War II the facility was used for the production of artillery shells, mines, bombs and rockets. CAAP was placed on standby status in September 1945, and reactivated for the Korean War in February 1950. In 1957, CAAP was once again placed on standby status and then reactivated in 1965 for the Vietnam War. The site was closed once again in 1973, and then declared excess property in 1989. CAAP contains 11,936 acres of land, the equivalent of 19 square miles. At one time CAAP functioned as a self contained community with 50 miles of electrical distribution lines, a water production and distribution system, 12 miles of sanitary sewer collection lines as well as 220,000 gallons per day of wastewater treatment capacity. There is also an extensive network of roadways and rail lines at CAAP.

In 1993, the Hall County Board of Supervisors established an eleven member Cornhusker Army Ammunition Plant Reuse Committee, that was assigned the responsibility for developing a reuse plan for CAAP. A twelve member advisory group was also organized to assist the Reuse Committee. In March 1995, the Reuse Committee completed a *Discussion Paper* that outlined a preliminary land use plan for the site as well as highlighting a number of key land use, environmental and financial issues associated with redeveloping the CAAP site. A key recommendation contained in the *Discussion Paper* was the desire to obtain professional consulting assistance in order to prepare a detailed reuse plan and implementation strategy for the entire CAAP site.

In July 1997, RKG Associates, Inc. and Black & Veatch were retained by the Department of Defense to assist the CAAP Reuse Committee in preparing a comprehensive reuse plan for the Cornhusker Army Ammunition Plant. This document represents the results of a six-month planning process undertaken by the Reuse Committee in order to identify a land use plan and development strategy for the CAAP site. Although the Comprehensive Reuse Plan represents a major first step in the transition of the site from military to civilian use, additional steps will be required to implement the plan and redevelop the Cornhusker Army Ammunition Plant. The Reuse Plan provides direction for taking these steps as well as suggestions for redevelopment actions that are reasonable and financially prudent.

LOCATION

The Cornhusker Army Ammunition Plant is located in Hall County, Nebraska approximately 90

miles west of Lincoln. The CAAP site is in the northwest corner of Hall County near the City of Grande Island, the county seat. The site has relatively good access to the regional transportation system. For example, access to Interstate 80 from the site can be obtained by traveling east for approximately 10 miles or approximately 7 miles to the south through Alda, Nebraska. CAAP is also connected to the rail lines of the Union Pacific (one mile south) and the Sante Fe Burlington Northern Railroad (3/4 miles north). In addition, CAAP is only 12 miles west of the Central Nebraska Regional Airport in Grande Island.

THE PLANNING PROCESS

In preparing the CAAP Comprehensive Reuse Plan, initial planning efforts involved an extensive analysis of existing buildings and site conditions. Research was also conducted concerning local economic factors, off-site infrastructure and regional development trends. Three different development alternatives for the site were then prepared and the various impacts of the alternatives were evaluated. After a careful review of the development options a preferred land use plan for the site was identified. Strategies for implementing the land use plan were also suggested.

A key element in the CAAP reuse planning process was public involvement. During the preparation of this Reuse Plan numerous public meetings were held by the consulting team and members of the CAAP Reuse Committee with Department of Defense personnel, CAAP tenants and the general public in order to discuss important issues associated with the redevelopment of the Cornhusker Army Ammunition Plant. The recommendations contained in this Reuse Plan are, to a major extent, based on the comments and suggestions made at these meetings.

EXISTING CONDITIONS

The CAAP site contains 645 buildings, including 11 housing units and 219 ammunition storage magazines. The CAAP site, however, is dominated by four large munitions production facilities referred to as load lines. Three of the load lines are essentially identical facilities. A fourth load line, constructed in 1945, is somewhat larger. Each load line is basically a collection of large buildings interconnected with a series of covered walkways. Raw materials for munitions production was stored in large warehouses at the south end of each load line. A fifth load line, substantially smaller than the other four and arranged in the shape of a "T", was used for the production of fuses and boosters during the Korean War and the manufacturing of microgravel mines for the Vietnam War. Other facilities at the CAAP site includes buildings used for administrative and residential purposes as well as structures for maintenance and storage.

Most of the facilities at CAAP are now more than fifty years old and the vast majority of structures on the site are in poor condition. Production at the site was shut down by the Army in 1973, and the maintenance and operations contract at the site was terminated in 1989. Given the lack of occupancy and heat in the winter, as well as minimal preventive maintenance since 1990, it is not surprising that there are numerous structural problems at the site. In many cases wooden doors and window frames have either rotted away or been damaged by animals, vandals or the elements. There are also instances where roofs have failed and portions of buildings have been exposed to the elements.

Comments about each of the buildings, however, should not be interpreted to mean that there is no reuse potential for existing structures at CAAP. In fact, a number of facilities are presently leased by businesses and individuals, primarily for storage and warehousing type uses. There is also one large user on the site, Cornhusker Railcar Services, Inc. that employs more than 60 people in the repair and rehabilitation of railcars. However, given the potentially high costs of renovating existing facilities at CAAP, it probably is more cost effective to build new facilities at CAAP or elsewhere in Hall County.

In order to provide support services to the various structures at CAAP, an extensive infrastructure system was developed. Major utilities included a water distribution system, with eight enclosed wells on the site, and several sanitary and industrial wastewater treatment systems. Most of the wastewater on the site, however, was disposed through the use of septic tanks and leach fields. Stormwater, electric, natural gas and telecommunications systems are also located on the CAAP site. In addition, 46 miles of asphalt roads and 48 miles of gravel roads are located on the site as well as 32 miles of rail lines.

Currently about 85 percent of the land at CAAP is used for farming (corn, alfalfa and soybeans) or hay and pasture. Even though the site is intensely used for agricultural purposes a survey, conducted for the U.S. Fish and Wildlife Service, indicated that there are no threatened or endangered species at the CAAP site. In addition, there are no sites at CAAP currently listed on the National Register of Historic Places. However, the Nebraska State Historic Office has determined that the entire CAAP site is historically important because of its association with World War II. Also, two archeological sites have been identified as potentially significant and may be eligible for the National Register of Historic Places.

In July 1987, the U.S. Environmental Protection Agency declared CAAP a "Superfund" site due to

the contamination of soil and groundwater by explosive materials, heavy metals and organic solvents. The groundwater contamination extends eastward beyond the boundaries of the CAAP site. Most of the soil contaminated with explosive materials have been excavated and incinerated. The incineration occurred on CAAP property and the "ash" residue was disposed of in burial trenches on-site. In addition, construction was initiated in 1997 on a groundwater treatment plant at CAAP. The plant will treat extracted groundwater and then discharge the treated water into drainage ditches on the site. It is anticipated that the groundwater treatment plant could be in operation for up to 30 years.

REDEVELOPMENT GOALS

During the process of preparing the Reuse Plan, eight goals were identified for the redevelopment of the Cornhusker Army Ammunition Plant. These goals, which are outlined below, provide the foundation for most of the recommendations contained in the Comprehensive Reuse Plan.

- Goal 1 - The property at the Cornhusker Army Ammunition Plant should be returned to the county tax rolls as quickly as possible.
- Goal 2 - The continuation of Husker Harvest Days, a major three day trade show that focuses on the business of farming and ranching, is a priority for any redevelopment efforts at the CAAP site.
- Goal 3 - The redevelopment of CAAP should be undertaken in a manner that ensures that the environmental cleanup of hazardous waste sites is effective, efficient and relates to the redevelopment needs identified in the reuse plan.
- Goals 4 - The acquisition and redevelopment of property at CAAP should be accomplished in a fiscally responsible manner.
- Goal 5 - Reuse efforts should focus on those portions of the CAAP site that offer the greatest potential for successful redevelopment.
- Goal 6 - The continued use of property at CAAP for agricultural purposes should be encouraged.
- Goal 7 - Where practical, redevelopment efforts should encourage the retention and creation of new private sector employment opportunities.
- Goal 8 - The organization responsible for implementing the reuse plan should work with federal, state and local agencies in establishing conservation and/or recreation areas at CAAP.

PREFERRED REUSE PLAN

The Comprehensive Reuse Plan for the Cornhusker Army Ammunition Plant represents specific strategies for the redevelopment of the CAAP site. The plan, which is a synthesis of three land use alternatives evaluated during the planning process, is based on identified goals and objectives for redevelopment, as well as existing site conditions and limitations. The land use portion of the Reuse Plan also incorporates features that were viewed as most critical in the reuse of CAAP.

Four key factors contributed to the layout of the land use plan. First, the importance of agriculture to the region, as well as the CAAP site, resulted in agriculture being identified as the most significant land use at the site. Second, strong public sentiment to maintain and possibly expand Husker Harvest Days, initiated in 1978, contributed to the designation of a portion of the site for this type of use. Third, the desire to expand conservation and recreational activities in the county resulted in a portion of the site being identified for these types of activities. It should be emphasized, however, that conservation and recreation land uses are considered supplemental to the primary use of the site for agricultural purposes. Finally, due to the extensive existence of on-site rail lines, as well as the presence of Cornhusker Railcar Services, a major portion of CAAP was designated for the possible expansion of rail/industrial related activities. A map of the Preferred Reuse Plan is located on the next page. The four general land use categories identified for CAAP are outlined below.

Agriculture/Recreation/Conservation - This type of land use involves the majority of the northern one-third of the site, as well as the southeast corner of the property. The southeast corner is expected to be developed as a shooting club, as proposed by residents and officials of Hall County. The northern-most area of the site is expected to include agricultural uses, combined with walking and riding trails.

Agriculture/Warehouse - The existing north and south storage magazines areas are expected to be used for a combination of agricultural activities and storage-type uses. Warehousing is included in this land use category primarily due to the difficulty, and cost, of removing the storage magazines.

Industrial/Agriculture - This land use designation seeks to capitalize on CAAP's largest private sector employer, Cornhusker Railcar Services, Inc. and on the availability of support facilities including extensive rail lines. The majority of existing buildings at CAAP, excluding the magazines, is included in this area, together with a substantial amount of land which could be developed for rail/industrial uses. If the land is not used for industrial purposes it would continue to be used for agricultural activities.

Husker Harvest Days/Agriculture/Special Events - These land use areas are expected to support the retention of the Husker Harvest Days program and provide the opportunity for additional support activities on adjacent sites. The Agriculture/Special Events sites could be used to expand Husker

STATE
OF NE

STATE
OF NE

AGRICULTURE/
CONSERVATION/
RECREATION

AGRICULTURE/
WAREHOUSING

INDUSTRIAL/
AGRICULTURE

AGRICULTURE/
SPECIAL EVENTS

AGRICULTURE/
WAREHOUSING

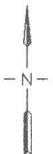
STATE
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CORNHUSKER ARMY AMMUNITION PLANT



RKG

BLACK & VEATCH

PREFERRED REUSE PLAN

DECEMBER 30, 1997

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Harvest Days, to provide for other activities relating to the proposed shooting club, or similar special activities that would require a large land area. However, land not used for Husker Harvest Days or special events could still be used for agricultural purposes. The overall concept of the preferred land use plan recognizes the desirability of placing the property at CAAP on the county tax rolls as soon as possible, while minimizing the financial burden on county government for property maintenance during the proposed transition period from federal ownership to other users. Significant in this effort is the identification of large land use areas, the efficient transfer of parcels to the end users, the minimization of infrastructure which must be maintained and/or developed by county government in support of the end use, and the control, through zoning, of future development activities. The estimated total acreage, by land use category, of the preferred land use plan is as follows:

Agriculture/Conservation/Recreation	4,309 Acres
Industrial/Agricultural	3,072 Acres
Agriculture/Warehousing	2,107 Acres
Agriculture/Special Events	1,508 Acres
Husker Harvest Days	<u>940 Acres</u>
Total	11,936 Acres

Given the possible demand for industrial land at CAAP, specifically near existing rail lines at the site, an overlay district has also been identified. The industrial/agricultural overlay is designed to allow for expansion of rail related industrial activities, if certain requirements are met, onto portions of adjacent sites. This could be particularly useful if major rail users locate or expand at the site or seek to create large scale rail yards at CAAP.

OPERATIONS AND IMPLEMENTATION STRATEGY

In 1994 special legislation (Public Law 103-337) dealing with the disposal of property at CAAP was passed by the United State Congress. The legislation states that "...[T]he Secretary of the Army may convey to Hall County, Nebraska, Board of Supervisors ... or the designee of the Board, all rights, title, and interest of the United States in and to the real property, together with any improvements thereon, located in Hall County, Nebraska, that is the site of the Cornhusker Army Ammunition Plant". This legislation also states "That the Secretary may not carry out the conveyance authorized until the Secretary completes any environmental restoration required with respect to the property to be conveyed". It is also noted in the legislation that "The Board [of Supervisors] or its designee... shall utilize the real property conveyed... in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan". Finally, it is noted in the special legislation that "[T]he Board or its designee...shall pay to the United States an amount equal to the fair market value of the real property to be conveyed, as determined by the Secretary". It is assumed that if Hall County decides not to acquire some or all of the property, or does not designate another

entity to acquire it, the Army will dispose of property at CAAP through a public sale. However, if the property is sold by the Army it is anticipated that the land and buildings would have to be disposed of for uses outlined in the preferred land use plan.

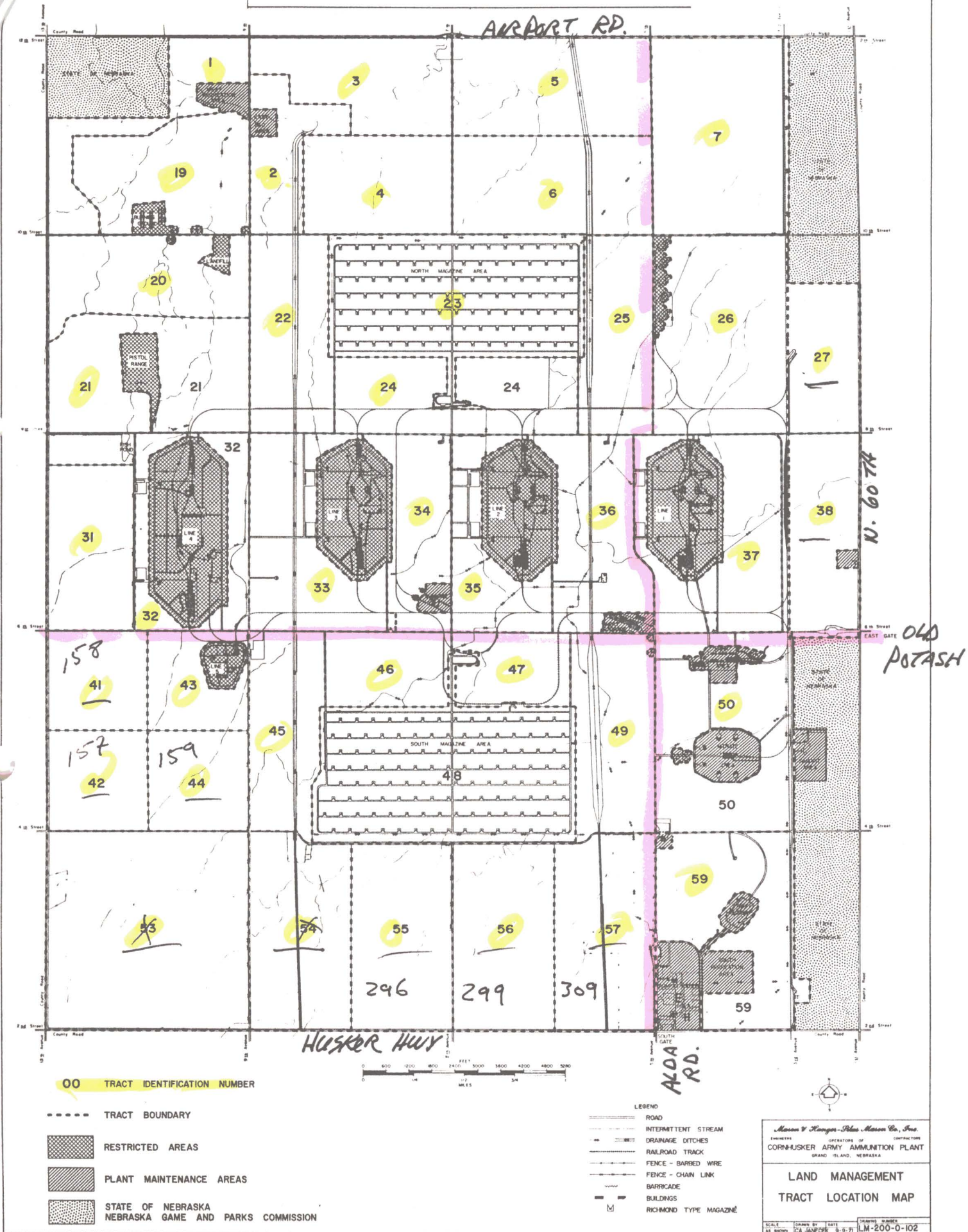
Currently, the Army generates approximately \$1 million in revenue annually through leasing activities at CAAP. The vast majority of this revenue is obtained from agricultural leases (\$763,000) at the site. However, this revenue is offset, to some extent, by the cost of operating and maintaining the site. In addition, it is anticipated that significant future capital investments could be required at the site to upgrade existing roadways, the rail line and other on-site infrastructure..

Due to high capital costs and liability concerns, it is recommended that Hall County avoid the direct acquisition of land parcels at CAAP, with the exception of specific recreation/conservation parcels or corridors as well as two specific roadway corridors that would be used to provide public access to the site. It is also recommended that Hall County pursue the least cost organizational structure possible for the redevelopment of the site. The organization established for the implementation of the Comprehensive Reuse Plan would primarily be responsible for identifying potential designees for acquiring the property directly from the Army. Either existing Hall County government staff or an outside contractor could be used to perform this function.

Finally it must be recognized that any redevelopment of CAAP will involve numerous restrictions on certain portions of the CAAP site. Possible restrictions include the retention of the "Burning Grounds" (used for the disposal of unexploded ordnance) portion of the site by the Army, as well as easements for a closed sanitary landfill, treated soil disposal trenches (used to bury ash obtained from burning contaminated soil), a groundwater pump and treatment plant, utility lines and drainage areas. Covenants will also be required to protect two identified archeological sites.

CORNHUSKER ARMY AMMUNITION PLANT

GRAND ISLAND, NEBRASKA



Entered as Instrument No.

0200004080

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STATE OF NEBRASKA)
COUNTY OF HALL) SS

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Kathy Bassel
REG OF DEEDS

CASH _____

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REFUNDS:

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NEBRASKA DOCUMENTARY	
STAMP TAX	
Date	<u>5-18-2000</u>
Exempt #	<u>2</u> By <u>KR</u>

RESERVED FOR REGISTER OF DEEDS RECORDING SPACE
(Sec. 23-1503.01)
HALL COUNTY, NE

Peg Richter

200004080

Cornhusker Army Ammunition Plant
Hall County, Nebraska
Acquisition Tract No. 89
Land Management Tract 42

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 18th day of April, 2000, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as **Grantor**, acting by and through the Deputy Assistant Secretary of the Army (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and **Doug Petersen, 1414 E. Capital, Grand Island, Nebraska 68801**, hereinafter referred to as **Grantee**.

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be sold by public auction; and

WHEREAS, the **Grantee** was the successful bidder at said auction; and

WHEREAS, the property to be conveyed herein has been identified by **Grantor** pursuant to 42 U.S.C. 9620(h)(4)(A) as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of and appropriate concurrence in such identification has been obtained pursuant to 42 U.S.C. 9620(h)(4)(B); and

WHEREAS, the **Grantee's** use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above referred laws, regulations and orders.

NOW, THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of **Four Hundred Seventy-Five Thousand Five Hundred Forty and No/100 dollars (\$475,540)**; the receipt of which is hereby acknowledged by **Grantor**; and, (2) the specific agreements hereinafter made by **Grantee**, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the **Grantee**, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

A tract of land comprising all of the Southwest Quarter (SW1/4) of Section 23, Township 11 North, Range 11 West of the Sixth Principal Meridian, containing 161.278 acres, more or less, (hereinafter referred to as the "Property"), and being more particularly shown and described on **Exhibit "A"**, which is attached hereto and made a part hereof.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the **Grantee**, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of **Grantor**, and its assigns:

a. **SAVE AND EXCEPT** and there is hereby reserved unto **Grantor**, and its assigns, all rights and interests that have been previously reserved to **Grantor** in any Patent(s) covering the Property.

b. **SAVE AND EXCEPT** and there is hereby reserved unto **Grantor**, and its assigns, all rents and other beneficial interests in favor of **Grantor** in and to the following lease to the extent, and only to the extent that such rents and other beneficial interests cover the Property:

Department of the Army Lease DACA45-1-95-6016 (Land Management Parcel #42) granted to Bob Nunnenkamp for the period March 1, 1995 through February 29, 2000.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120(h)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Section 9601 et seq. (CERCLA), the **Grantor** has identified the Property as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of. The **Grantor** covenants and warrants to the **Grantee** that in the event that any response action or corrective action is found to be necessary after the date of this conveyance as a result of hazardous substances or petroleum products or their derivatives existing on the Property prior to the date of this conveyance, such response action or corrective action shall be conducted by the **Grantor**.

b. **Grantor** reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to **Grantor**. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, **Grantor**, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. **Grantor** will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCEPTIONS, RESTRICTIONS AND COVENANTS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exceptions, restrictions and covenants affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property:

Federal Facility Agreement:

A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army effective September 1990, and a copy of any amendments thereto, are available for the **Grantee's** review at the Office of the Commander's Representative. The person or entity to which the property is transferred agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provisions of this property transfer, the terms of the FFA will take precedence. The **Grantee** further agrees that notwithstanding any other provisions of the property transfer, the United States assumes no liability to the person or entity to whom the property is transferred should implementation of the FFA interfere with their use of the property. The **Grantee** or any subsequent transferee, shall have no claim on account of any such interference against the United States or any officer, agent, employee or contractor thereof.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to those previously mentioned.

b. Any zoning laws, ordinance, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original grantor(s) in chain of title unto said grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

g. Cropland Lease No. DACA45-1-95-6016, until February 29, 2000, and all other existing outgrants, and installation commander agreements, whether or not of record or otherwise approved in writing by **Grantee**.

h. Subject to easements for county roads over and across the west 50 feet and the south 33 feet of the Property. Also, subject to an easement for a recreation trail over and across a triangle shaped parcel containing 450 square feet situated in the northeast corner of the Property. **Grantee** is not permitted to disturb the area lying within the recreation trail easement. The locations and extent of these easements are indicated on the attached Exhibit "A".

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land hereinabove identified in this Quitclaim Deed. In addition, **Grantor** and its assigns shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, **Grantor**, and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

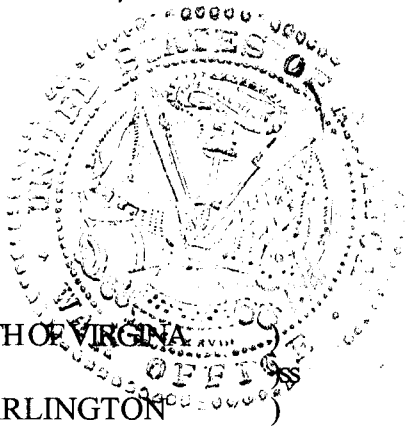
a. It is understood and agreed by **Grantee**, for itself and its successors and assigns, that the Property is conveyed "**as is**" and "**where is**" without any representation or warranty on the part of **Grantor** to make any alterations, repairs or additions. **Grantor** shall not be liable for any latent or patent defects in the Property. **Grantee**, for itself and its successors and assigns, acknowledges that **Grantor** has made no representations or warranty concerning the condition and state of repair of the Property nor in any agreement or promise to alter, improve, adapt or repair the Property.

b. The **Grantee** shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions set out in Section IV herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grant of any interest, privilege, or license.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

IN WITNESS WHEREOF, the **Grantor** has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be affixed this 18th day of April, 2000.

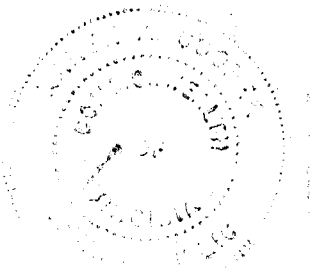


UNITED STATES OF AMERICA

By Paul W. Johnson
PAUL W. JOHNSON
Deputy Assistant Secretary of the Army (I&H)

COMMONWEALTH OF VIRGINIA
COUNTY OF ARLINGTON

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 30th day of November, 2002, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Paul W. Johnson, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and acknowledged the foregoing instrument to be his free act and deed, dated this 18th day of April, 2000, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.



Karen A. Cooper
Notary Public

My commission expires: 30 November 2002

200004080

GRANTEE ACCEPTANCE

I, the undersigned Grantee, do hereby accept the herein described property, subject to the reservations, restrictions, conditions and exceptions hereinabove expressed.

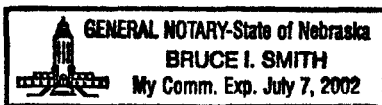
Executed this 27th day of Oct, 99, in Hall County, State of Nebraska.

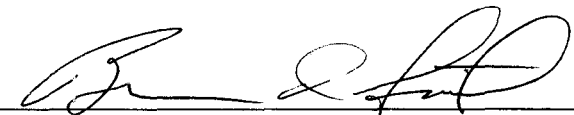


Doug Petersen

STATE OF NEBRASKA)
)ss
COUNTY OF HALL)

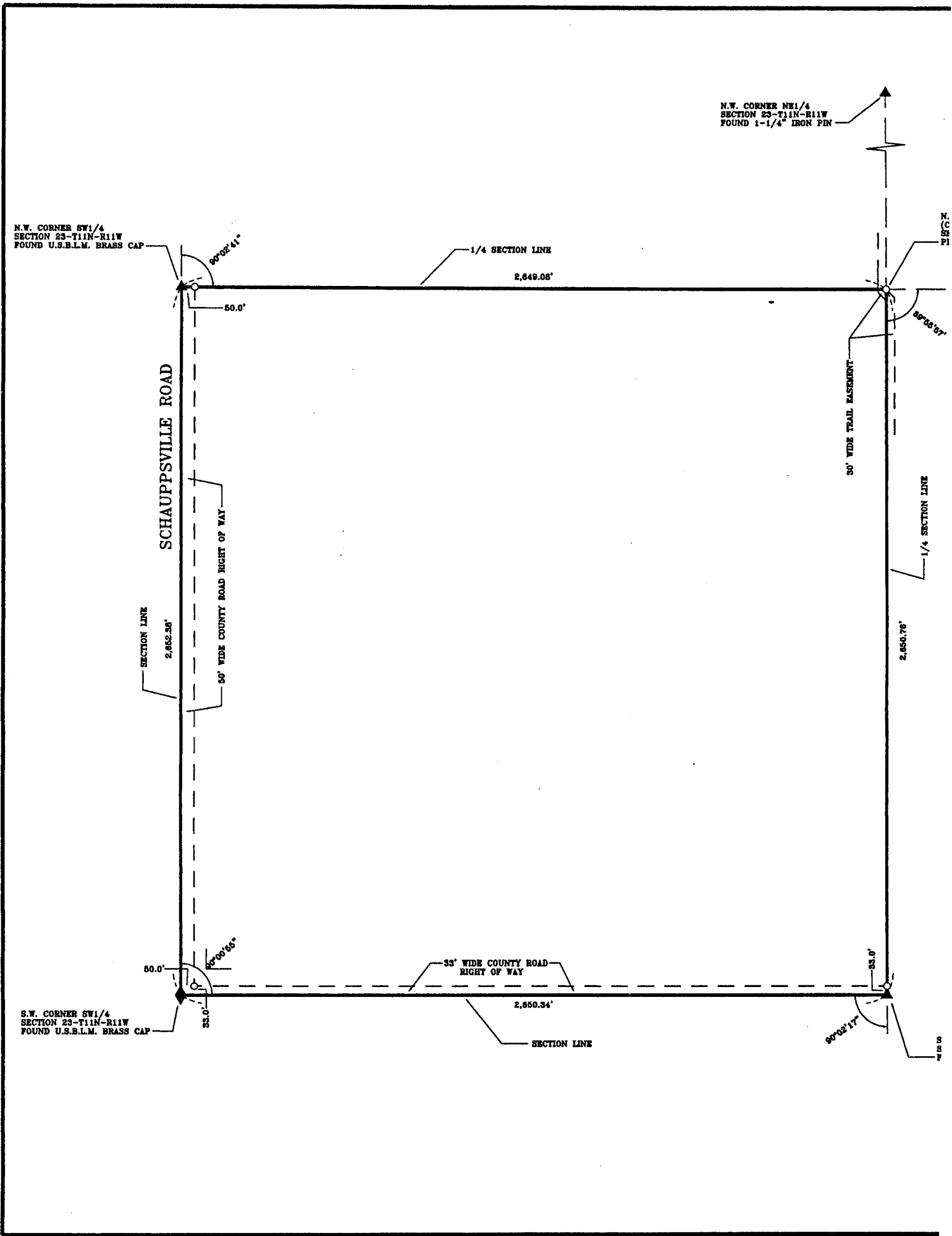
The foregoing Quitclaim Deed was acknowledged before me this 27th day of October, 1999, by Doug Petersen.





Notary Public

My commission expires: July 7, 2002



200004080

○ - INDICATES 1/2" IRON PIPE PLACED

NOTE: ALL PROPERTY DIMENSION AND ANGLES SHOWN ARE
ACTUAL DISTANCES AND ANGLES



N.E. CORNER SW1/4
(CENTER OF SECTION)
SECTION 23-T11N-R11W
PLACED 1/2" IRON PIPE

S.E. CORNER NE1/4
SECTION 23-T11N-R11W
FOUND 3/4" X 2" IRON PIN WELDED
TO 1/2" IRON PIPE WITH WOOD
STAKE ALONGSIDE (1' DEEP)

89°55'07"

LEGAL DESCRIPTION

A tract of land comprising all of the Southwest Quarter (SW1/4) of Section Twenty Three (23), Township Eleven (11) North, Range Eleven (11) West of the 6th P.M., Hall County, Nebraska, and more particularly described as follows:

Beginning at the southwest corner of said Southwest Quarter (SW1/4); thence running northerly, along and upon the west line of said Southwest Quarter (SW1/4), a distance of Two Thousand Six Hundred Fifty Two and Thirty Eight Hundredths (2,652.38) feet to the northwest corner of said Southwest Quarter (SW1/4); thence deflecting right 90°02'41" and running easterly, along and upon the north line of said Southwest Quarter (SW1/4), a distance of Two Thousand Six Hundred Forty Nine and Eight Hundredths (2,649.08) feet to the northeast corner of said Southwest Quarter (SW1/4); thence deflecting right 89°55'57" and running southerly, along and upon the east line of said Southwest Quarter (SW1/4), a distance of Two Thousand Six Hundred Fifty and Seventy Six Hundredths (2,650.76) feet to the southeast corner of said Southwest Quarter (SW1/4); thence deflecting right 90°02'17" and running westerly, along and upon the south line of said Southwest Quarter (SW1/4), a distance of Two Thousand Six Hundred Fifty and Thirty Four Hundredths (2,650.34) feet to the point of beginning and containing 161.276 acres, more or less.

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Daniel J. Hostler
Daniel J. Hostler, Registered Land Surveyor No. 15-263



1/4 SECTION LINE

2,650.76'

33.0'

S.E. CORNER SW1/4
SECTION 23-T11N-R11W
FOUND 1/2" IRON PIPE

EXHIBIT "A"

TRACT NO. 42

ALL OF THE SW1/4 SECTION 23-T11N-R11W HALL COUNTY, NEBRASKA	06-24-99 L.W.
LAND SURVEY	06-24-99 PLANNED R.O.V. & TRAILS
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 339 - PHONE 362-6466 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68802-0339	

Entered as Instrument No.
0200004082

45.50

200004082

STATE OF NEBRASKA)
COUNTY OF HALL) SS

'00 MAY 18 PM 12 22

Kathy Baasch
REG OF DEEDS

CASH _____

CHECK 45.50

REFUNDS:

CASH _____

CHECK _____

NEBRASKA DOCUMENTARY STAMP TAX	
Date	<u>5-18-2000</u>
Exempt #	<u>2</u> By <u>KB</u>

RESERVED FOR REGISTER OF DEEDS RECORDING SPACE
(Sec. 23-1503.01)
HALL COUNTY, NE

Peg Richter

200004082

Cornhusker Army Ammunition Plant
Hall County, Nebraska
Acquisition Tract Nos. 86 and 87
Land Management Tract 44

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 18th day of April, 2000, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as **Grantor**, acting by and through the Deputy Assistant Secretary of the Army (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and **Doug Petersen, 1414 E. Capital, Grand Island, Nebraska 68801**, hereinafter referred to as **Grantee**.

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be sold by public auction; and

WHEREAS, the **Grantee** was the successful bidder at said auction; and

WHEREAS, the property to be conveyed herein has been identified by **Grantor** pursuant to 42 U.S.C. 9620(h)(4)(A) as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of and appropriate concurrence in such identification has been obtained pursuant to 42 U.S.C. 9620(h)(4)(B); and

WHEREAS, the **Grantee's** use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above referred laws, regulations and orders.

NOW, THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of **Three Hundred Eighty-Seven Thousand Three Hundred Sixty and No/100 dollars (\$387,360)**; the receipt of which is hereby acknowledged by **Grantor**; and, (2) the specific agreements hereinafter made by **Grantee**, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the **Grantee**, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

A tract of land lying comprising the Southeast Quarter (SE1/4) of Section 23, Township 11 North, Range 11 West of the Sixth Principal Meridian, containing 161.437 acres, more or less, (hereinafter referred to as the "Property"), and being more particularly shown and described on **Exhibit "A"**, which is attached hereto and made a part hereof.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the **Grantee**, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of **Grantor**, and its assigns:

a. **SAVE AND EXCEPT** and there is hereby reserved unto **Grantor**, and its assigns, all rights and interests that have been previously reserved to **Grantor** in any Patent(s) covering the Property.

b. **SAVE AND EXCEPT** and there is hereby reserved unto **Grantor**, and its assigns, all rents and other beneficial interests in favor of **Grantor** in and to the following lease to the extent, and only to the extent that such rents and other beneficial interests cover the Property:

Department of the Army Lease DACA45-1-99-6068 (Land Management Parcel #44) granted to Bob Peters for the period March 1, 1999 through February 29, 2000.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120(h)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Section 9601 et seq. (CERCLA), the **Grantor** has identified the Property as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of. The **Grantor** covenants and warrants to the **Grantee** that in the event that any response action or corrective action is found to be necessary after the date of this conveyance as a result of hazardous substances or petroleum products or their derivatives existing on the Property prior to the date of this conveyance, such response action or corrective action shall be conducted by the **Grantor**.

b. **Grantor** reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to **Grantor**. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, **Grantor**, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. **Grantor** will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCEPTIONS, RESTRICTIONS AND COVENANTS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exceptions, restrictions and covenants affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property:

Federal Facility Agreement:

A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army effective September 1990, and a copy of any amendments thereto, are available for the **Grantee's** review at the Office of the Commander's Representative. The person or entity to which the property is transferred agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provisions of this property transfer, the terms of the FFA will take precedence. The **Grantee** further agrees that notwithstanding any other provisions of the property transfer, the United States assumes no liability to the person or entity to whom the property is transferred should implementation of the FFA interfere with their use of the property. The **Grantee** or any subsequent transferee, shall have no claim on account of any such interference against the United States or any officer, agent, employee or contractor thereof.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to those previously mentioned.

b. Any zoning laws, ordinance, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original grantor(s) in chain of title unto said grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

g. Cropland Lease No. DACA45-1-99-6068, until February 29, 2000, and all other existing outgrants, and Installation Commander agreements, whether or not of record or otherwise approved in writing by **Grantee**.

h. Subject to easements for county roads over and across the south 33 feet and the east 33 feet of the Property. Also, subject to an easement for a recreation trail over and across the west 30 feet of the Property and the north 30 feet of the south 63 feet of the Property. **Grantee** is not permitted to disturb the area lying within the recreation trail easement. The locations and extent of these easements are indicated on the attached Exhibit "A".

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land hereinabove identified in this Quitclaim Deed. In addition, **Grantor** and its assigns shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, **Grantor**, and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by **Grantee**, for itself and its successors and assigns, that the Property is conveyed "**as is**" and "**where is**" without any representation or warranty on the part of **Grantor** to make any alterations, repairs or additions. **Grantor** shall not be liable for any latent or patent defects in the Property. **Grantee**, for itself and its successors and assigns, acknowledges that **Grantor** has made no representations or warranty concerning the condition and state of repair of the Property nor in any agreement or promise to alter, improve, adapt or repair the Property.

b. The **Grantee** shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions set out in Section IV herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grant of any interest, privilege, or license.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

IN WITNESS WHEREOF, the **Grantor** has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be affixed this 18th day of April, 2000.

UNITED STATES OF AMERICA

By:

Paul W. Johnson
PAUL W. JOHNSON

Deputy Assistant Secretary of the Army (I&H)

COMMONWEALTH OF VIRGINIA

COUNTY OF ARLINGTON

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 30th day of November, 2002, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Paul W. Johnson, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and acknowledged the foregoing instrument to be his free act and deed, dated this 18th day of April, 2000, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.

Karen A. Cooper
Notary Public

My commission expires: 30 November 2002

200004082

GRANTEE ACCEPTANCE

I, the undersigned Grantee, do hereby accept the herein described property, subject to the reservations, restrictions, conditions and exceptions hereinabove expressed.

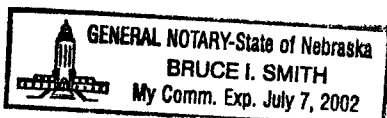
Executed this 27th day of Oct, 99, in Hall County, State of Nebraska.

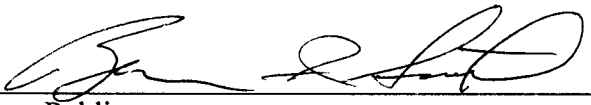


Doug Petersen

STATE OF NEBRASKA)
)ss
COUNTY OF HALL)

The foregoing Quitclaim Deed was acknowledged before me this 27th day of October, 1999, by Doug Petersen.

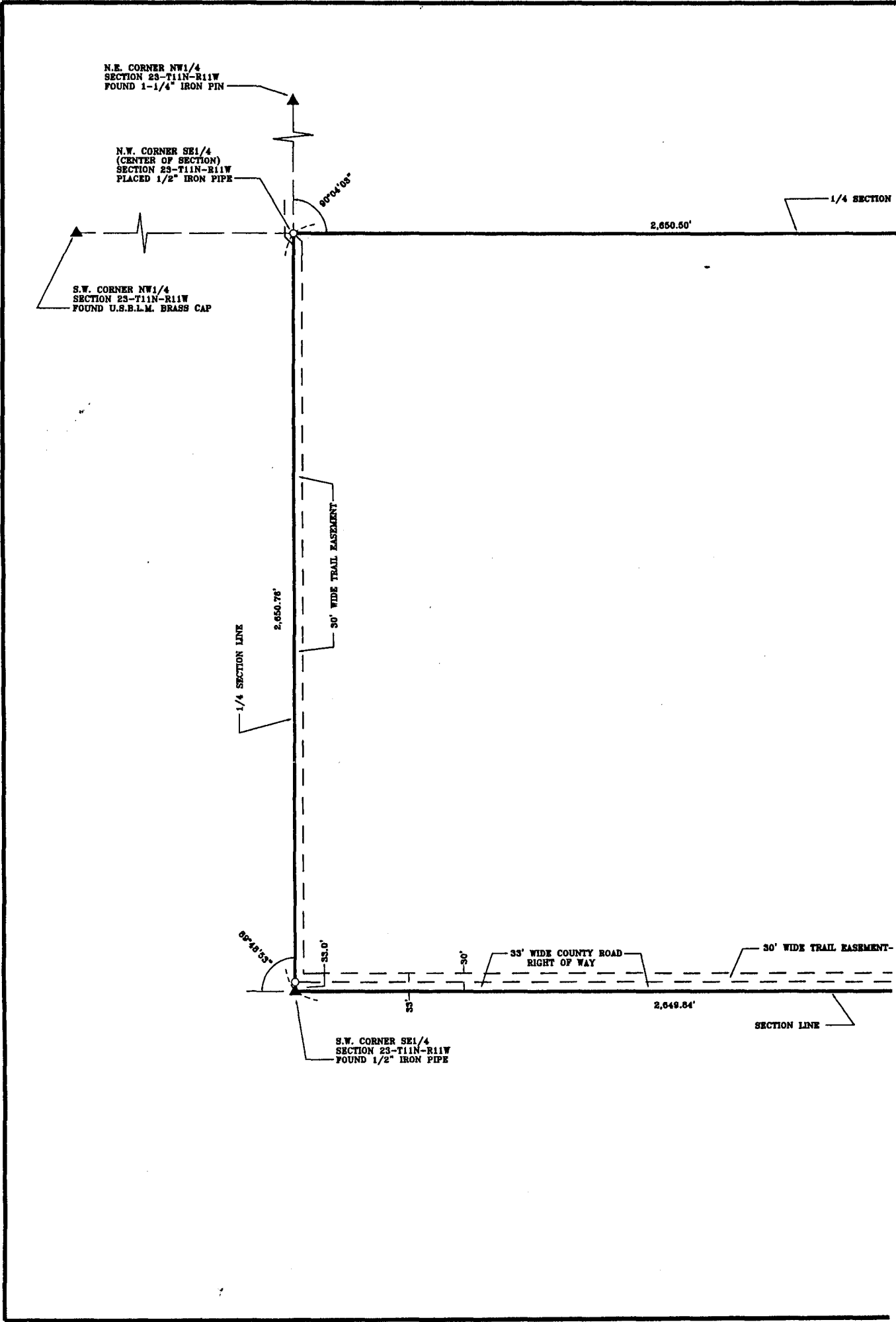




Notary Public

My commission expires: July 7, 2002

200004082



200004082

○ - INDICATES 1/2" IRON PIPE PLACED

NOTE: ALL PROPERTY DIMENSIONS AND ANGLES SHOWN ARE
ACTUAL DISTANCES AND ANGLES

N.E. CORNER SE1/4
SECTION 23-T11N-R11W
FOUND 3/4" X 2" IRON PIN WELDED
TO 1/2" IRON PIPE WITH WOOD
STAKE ALONGSIDE (1' DEEP)



LEGAL DESCRIPTION

A tract of land comprising all of the Southeast Quarter (SE1/4) of Section Twenty Three (23), Township Eleven (11) North, Range Eleven (11) West of the 6th P.M., Hall County, Nebraska, and more particularly described as follows:

Beginning at the southeast corner of said Southeast Quarter (SE1/4); thence running westerly, along and upon the south line of said Southeast Quarter (SE1/4), a distance of Two Thousand Six Hundred Forty Nine and Eighty Four Hundredths (2,649.84) feet to the southwest corner of said Southeast Quarter (SE1/4); thence deflecting right 89°45'53" and running northerly, along and upon the west line of said Southeast Quarter (SE1/4), a distance of Two Thousand Six Hundred Fifty and Seventy Six Hundredths (2,650.76) feet to the northwest corner of said Southeast Quarter (SE1/4); thence deflecting right 90°04'03" and running easterly, along and upon the north line of said Southeast Quarter (SE1/4), a distance of Two Thousand Six Hundred Fifty and Five Tenths (2,650.50) feet to the northeast corner of said Southeast Quarter (SE1/4); thence deflecting right 89°56'49" and running southerly, along and upon the east line of said Southeast Quarter (SE1/4), a distance of Two Thousand Six Hundred Fifty Six and Twenty One Hundredths (2,656.21) feet to the point of beginning and containing 161.437 acres, more or less.

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Daniel J. Hostler
Daniel J. Hostler, Registered Land Surveyor No. 13-263



S.E. CORNER SE1/4
SECTION 23-T11N-R11W
FOUND 1-1/4" IRON PIPE (6" DEEP)

EXHIBIT "A"

TRACT NO. 44

ALL OF THE SE1/4
SECTION 23-T11N-R11W
HALL COUNTY, NEBRASKA

LAND SURVEY

BENJAMIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
P. O. BOX 339 - PHONE 262-8466 - AREA CODE 308
GRAND ISLAND, NEBRASKA 68802-0339

00-23-99

L.W.

08-04-99
DANIEL J. HOSTLER
& TRAILS

Entered as Instrument No.
0200005065

STATE OF NEBRASKA) SS
COUNTY OF HALL)

'00 JUN 21 AM 9 13

Kathy Board

REC OF DEEDS

CASH

CHECK

REFUNDS:

CASH

CHECK

QUITCLAIM DEED

NEBRASKA DOCUMENTARY	
STAMP TAX	
Date	6-21-2000
Exempt	2 By <i>JK</i>

Cornhusker Army Ammunition Plant
Hall County, Nebraska
Acquisition Tract No. 88
Land Management Tract 41

John Cunningham
P.O. Box 2280
Grand Island NE 68802

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 18th day of April, 2000, by and between the UNITED STATES OF AMERICA, hereinafter referred to as Grantor, acting by and through the Deputy Assistant Secretary of the Army (I&H) pursuant to a delegation of authority from the SECRETARY OF THE ARMY, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and John B. McDermott, P.O. Box 2280, Grand Island, Nebraska 68802, hereinafter referred to as Grantee.

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be sold by public auction; and

WHEREAS, the Grantee was the successful bidder at said auction; and

WHEREAS, the property to be conveyed herein has been identified by Grantor pursuant to 42 U.S.C. 9620(h)(4)(A) as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of and appropriate concurrence in such identification has been obtained pursuant to 42 U.S.C. 9620(h)(4)(B); and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above referred laws, regulations and orders.

NOW, THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of **Four Hundred Fifty One Thousand Eighty and No/100 Dollars (\$451,080)**; the receipt of which is hereby acknowledged by **Grantor**; and, (2) the specific agreements hereinafter made by **Grantee**, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the **Grantee**, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

A tract of land comprising all of the Northwest Quarter (NW1/4) of Section 23, Township 11 North, Range 11 West of the Sixth Principal Meridian, containing 161.109 acres, more or less, (hereinafter referred to as the "Property"), and being more particularly shown and described on **Exhibit "A"**, which is attached hereto and made a part hereof.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the **Grantee**, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of **Grantor**, and its assigns:

a. **SAVE AND EXCEPT** and there is hereby reserved unto **Grantor**, and its assigns, all rights and interests that have been previously reserved to **Grantor** in any Patent(s) covering the Property.

b. **SAVE AND EXCEPT** and there is hereby reserved unto **Grantor**, and its assigns, all rents and other beneficial interests in favor of **Grantor** in and to the following lease to the extent, and only to the extent that such rents and other beneficial interests cover the Property:

Department of the Army Lease DACA45-1-98-6019 (Land Management Parcel #41) granted to August Peters for the period March 1, 1998 through February 29, 2000.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120(h)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Section 9601 et seq. (CERCLA), the **Grantor** has identified the Property as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of. The **Grantor** covenants and warrants to the **Grantee** that in the event that any response action or corrective action is found to be necessary after the date of this conveyance as a result of hazardous substances or petroleum products or their derivatives existing on the Property prior to the date of this conveyance, such response action or corrective action shall be conducted by the **Grantor**.

b. **Grantor** reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to **Grantor**. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, **Grantor**, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. **Grantor** will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCEPTIONS, RESTRICTIONS AND COVENANTS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exceptions, restrictions and covenants affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property:

Federal Facility Agreement

A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army effective September 1990, and a copy of any amendments thereto, are available for the **Grantee's** review at the Office of the Commander's Representative. The person or entity to which the property is transferred agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provisions of this property transfer, the terms of the FFA will take precedence. The **Grantee** further agrees that notwithstanding any other provisions of the property transfer, the United States assumes no liability to the person or entity to whom the property is transferred should implementation of the FFA interfere with their use of the property. The **Grantee** or any subsequent transferee, shall have no claim on account of any such interference against the United States or any officer, agent, employee or contractor thereof.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

- a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to those previously mentioned.
- b. Any zoning laws, ordinance, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.
- c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.
- d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the property.
- e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.
- f. All other existing interests reserved by any original grantor(s) in chain of title unto said grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.
- g. Cropland Lease No. DACA45-1-98-6019, until February 29, 2000, and all other existing outgrants, and Installation Commander agreements, whether or not of record or otherwise approved in writing by **Grantee**.
- h. Subject to easements for county roads over and across the north 33 feet and the west 50 feet of the Property. Also subject to an easement for a recreational trail over and across the east 30 feet and the south 30 feet of the north 63 feet of the east 422 feet of the Property. **Grantee** is not permitted to disturb the area lying within the recreation trail easement. The locations and extent of these easements are indicated on the attached Exhibit "A".

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land hereinabove identified in this Quitclaim Deed. In addition, **Grantor** and its assigns shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, **Grantor**, and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by **Grantee**, for itself and its successors and assigns, that the Property is conveyed "*as is*" and "*where is*" without any representation or warranty on the part of **Grantor** to make any alterations, repairs or additions. **Grantor** shall not be liable for any latent or patent defects in the Property. **Grantee**, for itself and its successors and assigns, acknowledges that **Grantor** has made no representations or warranty concerning the condition and state of repair of the Property nor in any agreement or promise to alter, improve, adapt or repair the Property.

b. The **Grantee** shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions set out in Section IV herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grant of any interest, privilege, or license.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

IN WITNESS WHEREOF, the **Grantor** has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be affixed this 18th day of April, 2000.

UNITED STATES OF AMERICA

By: Paul W. Johnson
PAUL W. JOHNSON
 Deputy Assistant Secretary of the Army (I&H)

COMMONWEALTH OF VIRGINIA)

COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 30th day of November, 2002, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Paul W. Johnson, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and acknowledged the foregoing instrument to be his free act and deed, dated this 18th day of April, 2000, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.


Karen A. Cooper
 Notary Public

My commission expires: 30 November 2002

GRANTEE ACCEPTANCE

I, the undersigned **Grantee**, do hereby accept the herein described property, subject to the reservations, restrictions, conditions and exceptions hereinabove expressed.

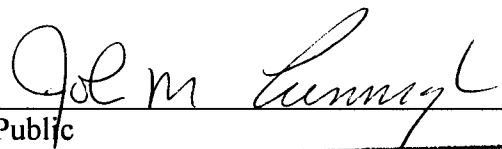
Executed this 29 day of October, 1999, in Hall County, State of Nebraska.



John B. McDermott

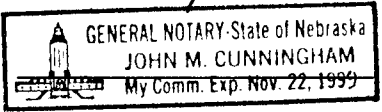
STATE OF NEBRASKA)
)ss
COUNTY OF HALL)

The foregoing Quitclaim Deed was acknowledged before me this 29 day of October 29, 1999, by John B McDermott.



Notary Public

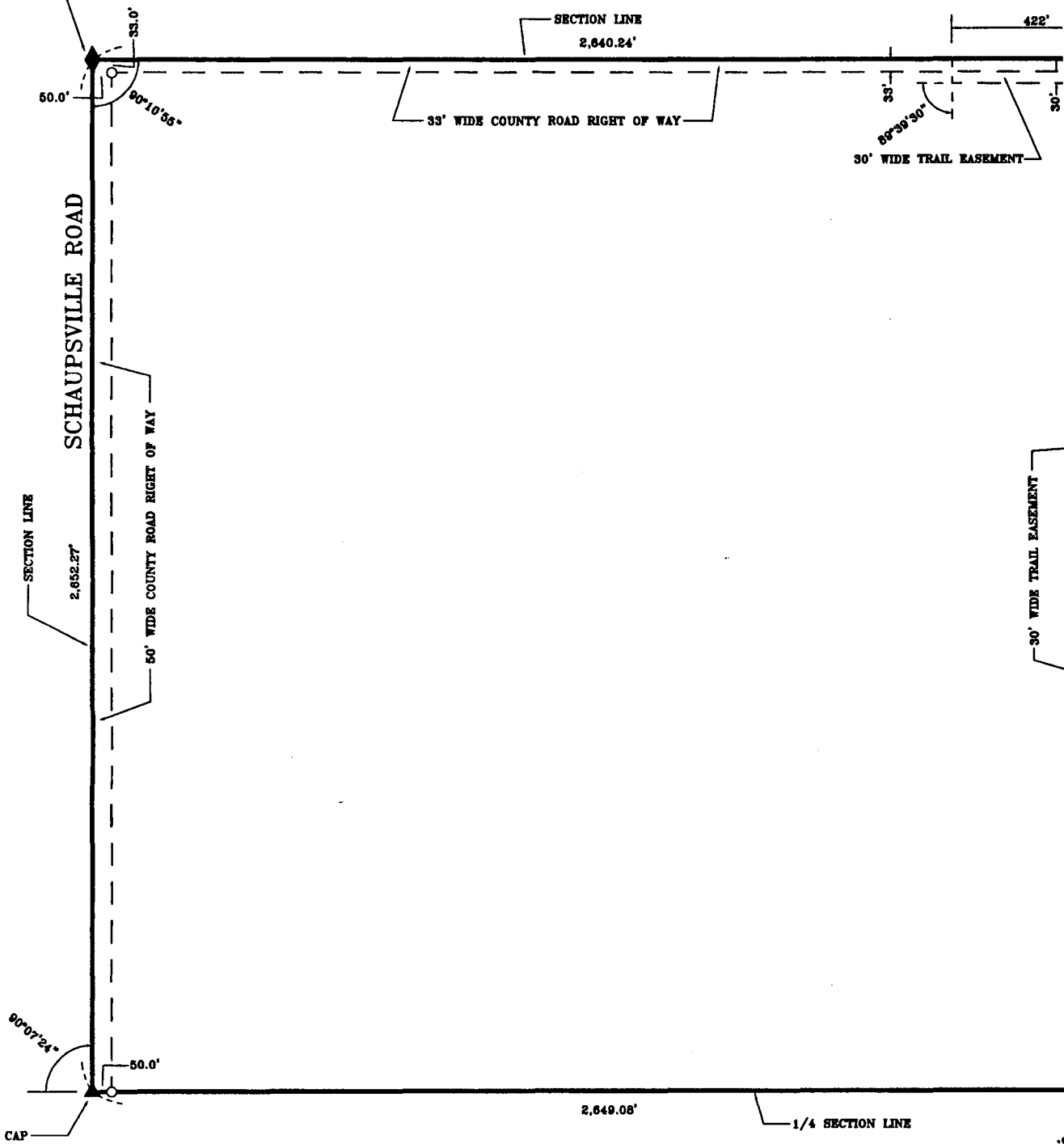
My commission expires:



200005065

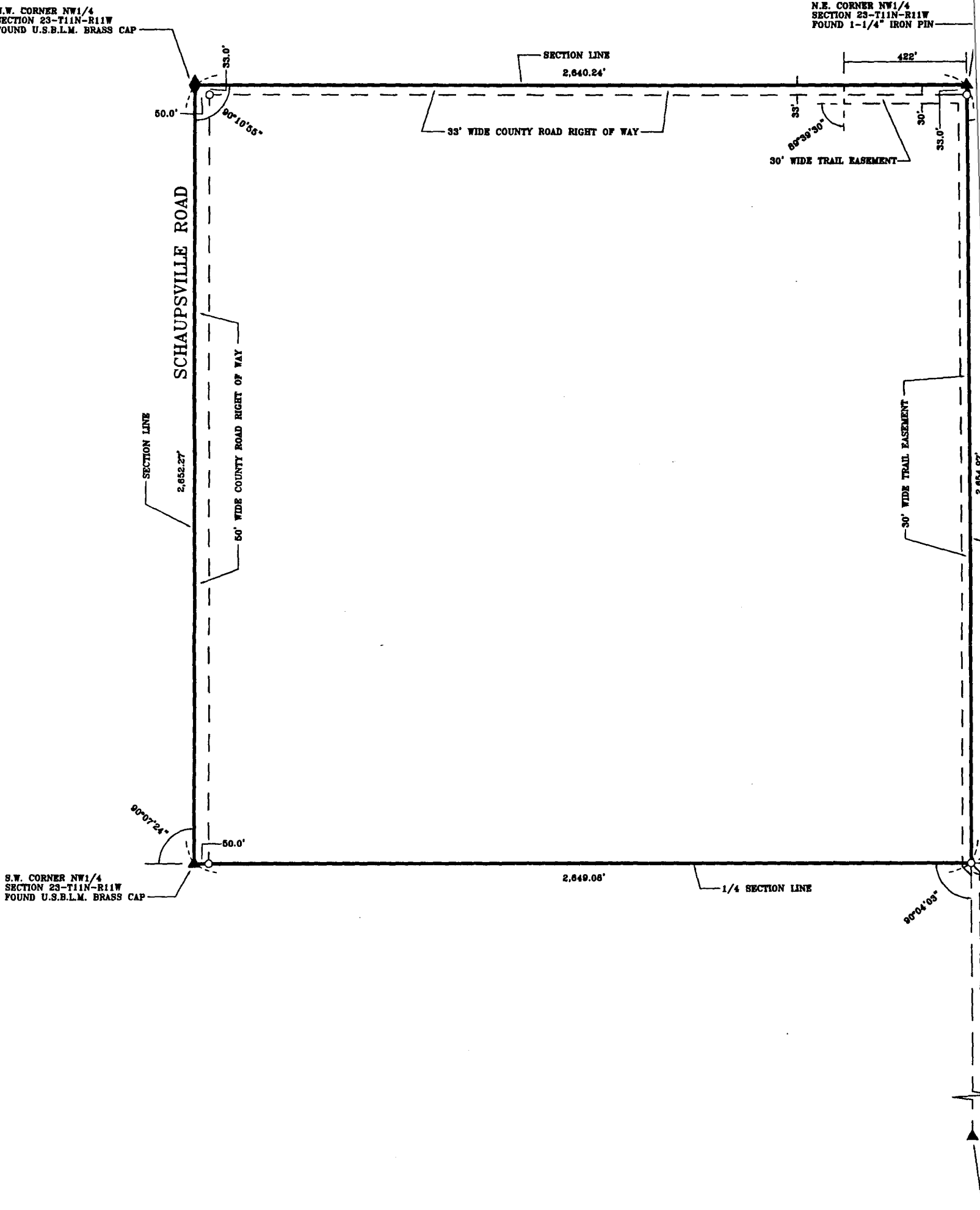
N.W. CORNER NW1/4
SECTION 23-T11N-R11W
FOUND U.S.B.L.M. BRASS CAP

N.E. CORNER NW1/4
SECTION 23-T11N-R11W
FOUND 1-1/4" IRON PI



200005065

20



05065

○ - INDICATES 1/2" IRON PIPE PLACED

200005065

NOTE: ALL PROPERTY DIMENSIONS AND ANGLES SHOWN ARE
ACTUAL DISTANCES AND ANGLES



LEGAL DESCRIPTION

A tract of land comprising all of the Northwest Quarter (NW1/4) of Section Twenty Three (23), Township Eleven (11) North, Range Eleven (11) West of the 6th P.M., Hall County, Nebraska, and more particularly described as follows:

Beginning at the northwest corner of said Northwest Quarter (NW1/4); thence running easterly, along and upon the north line of said Northwest Quarter (NW1/4), a distance of Two Thousand Six Hundred Forty and Twenty Four Hundredths (2,640.24) feet to the northeast corner of said Northwest Quarter (NW1/4); thence deflecting right 89°59'28" and running southerly, along and upon the east line of said Northwest Quarter (NW1/4), a distance of Two Thousand Six Hundred Fifty Four and Ninety Seven Hundredths (2,654.97) feet to the southeast corner of said Northwest Quarter (NW1/4); thence deflecting right 90°04'03" and running westerly, along and upon the south line of said Northwest Quarter (NW1/4), a distance of Two Thousand Six Hundred Forty Nine and Eight Hundredths (2,649.08) feet to the southwest corner of said Northwest Quarter (NW1/4); thence deflecting right 90°07'24" and running northerly, along and upon the west line of said Northwest Quarter (NW1/4), a distance of Two Thousand Six Hundred Fifty Two and Twenty Seven Hundredths (2,652.27) feet to the point of beginning and containing 161.109 acres, more or less.

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Daniel J. Hostler
Daniel J. Hostler, Registered Land Surveyor



S.E. CORNER NW1/4
(CENTER OF SECTION)
SECTION 23-T11N-R11W
PLACED 1/2" IRON PIPE

N.E. CORNER SE1/4
SECTION 23-T11N-R11W
FOUND 3/4" X 2" IRON PIN
WELDED TO 1/2" IRON PIPE
WITH WOOD STAKE ALONGSIDE

S.W. CORNER SE1/4
SECTION 23-T11N-R11W
FOUND 1/2" IRON PIPE

EXHIBIT "A"

TRACT NO. 41

ALL OF THE NW1/4 SECTION 23-T11N-R11W HALL COUNTY, NEBRASKA	06-25-99
LAND SURVEY	L.W.
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 339 - PHONE 388-8445 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68602-0339	08-08-99 LABLED TRAILS

Entered As Instrument No. 0200203896

STATE OF NEBRASKA)
COUNTY OF HALL) SS

02 APR 10 AM 9 25

Kathy Beach
REC OF DEEDS

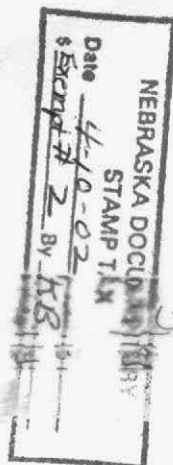
CASH _____

CHECK 6600

REFUNDS: _____

CASH _____

CHECK _____



200203896

66.00

WHEN RECORDED RETURN TO:
KUTAK ROCK LLP
1101 CONNECTICUT AVENUE, NW
WASHINGTON, DC 20036
ATTN: GEORGE SCHLOSSBERG, ESQ.

RECORDER STAMP

QUITCLAIM DEED

Cornhusker Army Ammunition Plant
Hall County, Nebraska

Acquisition Tracts Nos. 90, 91, 92, 94, 95, 96, 97 and the W½ of 99
Land Management Tracts 53 and 54

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 26th day of February, 2002, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as **GRANTOR**, acting by and through the Deputy Assistant Secretary of the Army (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and **FARM PROGRESS COMPANIES, INC.**, an Illinois corporation, with its principal office located at 191 South Gary Avenue, Carol Stream, Illinois 60188-2995, hereinafter referred to as **GRANTEE**.

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be transferred to its designee, Farm Progress Companies, Inc, Grantee herein; and

WHEREAS, previous to such designation, Agricultural Institute of Nebraska, Inc., a Nebraska non-profit corporation leased 937 acres of the property to be conveyed herein; and

WHEREAS, Agricultural Institute of Nebraska, Inc., contracted with Farm Progress Companies, Inc., during the term of the said lease to conduct the annual Husker Harvest Days show on the property to be conveyed herein; and

WHEREAS, the property to be conveyed herein has been identified by Grantor pursuant to 42 U.S.C. 9620(h)(4)(A) as real property on which no hazardous substances and no petroleum

CORNHUSKER ARMY AMMUNITION PLANT QUITCLAIM DEED

products or their derivatives were known to have been released or disposed of and appropriate concurrence in such identification has been obtained pursuant to 42 U.S.C. 9620(h)(4)(B); and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal, and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above referred laws, regulations and orders.

NOW, THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of **One million nine hundred sixty-eight thousand dollars (\$1,968,000.00)**, the receipt of which is hereby acknowledged by Grantor; and, (2) the specific agreements hereinafter made by Grantee, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements, hereinafter set forth, all right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

A tract of land comprising all of Section 26, Township 11 North, Range 11 West of the Sixth Principal Meridian, and part of the northwest quarter and all of the southwest quarter of Section 25, Township 11 North, Range 11 West of the Sixth Principal Meridian, all being in Hall County, Nebraska, containing **959.103** acres, more or less, and being more particularly shown and described on **Exhibit "A"**, which is attached hereto and made a part hereof (hereinafter referred to as the "Property").

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, its successors and assigns in perpetuity.

CORNHUSKER ARMY AMMUNITION PLANT QUITCLAIM DEED

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

SAVE AND EXCEPT and there is hereby reserved unto Grantor, and its assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) of record covering the Property.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120(h)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Section 9601 et seq. (CERCLA), the Finding of Suitability to Transfer (FOST) dated October 1998, as amended 12 July 1999, has identified the Property as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of. A copy of the FOST, as amended, has been provided the Grantee. The Grantor covenants and warrants to the Grantee that in the event any response action or corrective action is found to be necessary after the date of this conveyance as a result of hazardous substances or petroleum products or their derivatives existing on the Property prior to the date of this conveyance, such response action or corrective action shall be conducted by the **GRANTOR**. This covenant shall not apply in any case in which a person or entity to whom all or a portion of the Property is transferred or the Agricultural Institute of Nebraska, Inc. (the former lessee of the property) is a potentially responsible party with respect to the Property. The Grantor shall not incur liability for additional response action or corrective action found to be necessary after the date of conveyance **as a result of hazardous substances or petroleum products or their derivatives existing on the property prior to the date of this conveyance**, in any case in which any other non-Grantor entity is identified as the party responsible for contamination of the Property.

b. Grantor reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, Grantor, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. Grantor will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions.

CORNHUSKER ARMY AMMUNITION PLANT QUITCLAIM DEED**IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCEPTIONS, RESTRICTIONS AND COVENANTS AFFECTING THE PROPERTY**

This conveyance is expressly made subject to the following environmental notices, exceptions, restrictions and covenants affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the property, or any part thereof, their heirs, successors and assigns:

A. FEDERAL FACILITY AGREEMENT: A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army effective September 1990, and a copy of any amendments thereto, are available for the Grantee's review at the Office of the Commander's Representative. The Grantee agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee further agrees that notwithstanding any other provisions of the property transfer, the United States assumes no liability to the Grantee should implementation of the FFA interfere with its use of the property. The Grantee or any subsequent transferee, shall have no claim on account of any such interference against the United States or any officer, agent, employee or contractor thereof.

B. FLOODPLAINS: To the extent that any portion of the Property lies within a floodplain as defined in Section 6(c) of Executive Order No. 11988, dated May 24, 1977, the use of that portion of the Property may be subject to the National Flood Insurance Program.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

a. All existing permits, easements, and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record.

b. Any zoning laws, ordinances, or regulations governing the subject property or regulations of other regulatory authority having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

CORNHUSKER ARMY AMMUNITION PLANT QUITCLAIM DEED

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the subject property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests of record reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective heirs, successors and assigns, which affect any portion of the property interest(s) hereinabove described.

g. Easements for county roads over the north 33 feet, south 50 feet and the west 50 feet of the property; and also subject to an easement for a drainage ditch, 86 feet in width, running north and south, generally in the center of the west half of Section 25, Township 11 North, Range 11 West of the Sixth Principal Meridian, Hall County, Nebraska. The location and extent of these easements are indicated on the attached Exhibit "A".

h. All existing outgrants (including Easement No. DACA45-2-83-6038 granted to Southern Nebraska Rural Public Power District, for an overhead electric distribution line right-of-way, 18 feet in width, beginning near the southwest corner of Section 26, then running generally west to east, near the southern edge of the Land Management Tract 53 for a distance of 2,650 feet), and Installation Commander's agreements, whether or not of record or otherwise approved in writing by Grantee.

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land hereinabove identified in this Quitclaim Deed. In addition, Grantor and its assigns shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, Grantor, and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. Except as otherwise stated herein, it is understood and agreed by Grantee, for itself and its successors and assigns, that the Property is conveyed "*as is*" and "*where is*" without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property. Grantee, for itself and

CORNHUSKER ARMY AMMUNITION PLANT QUITCLAIM DEED

its successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property nor in any agreement or promise to alter, improve, adapt or repair the Property.

b. The Grantee shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions set out in Section IV herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grant of any interest, privilege, or license.

c. The Grantee covenants not to discriminate upon the basis of race, color, religion, disability, sex, age or national origin in the use, occupancy, sale, or lease of the Property, or in its employment practices conducted thereon. This covenant shall not apply however, to the lease or rental of a room or rooms within a family dwelling unit, nor shall it apply with respect to religion if the Property is on premises used primarily for religious purposes. The Grantor shall be deemed a beneficiary of this covenant without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have the sole right to enforce this covenant in any court of competent jurisdiction.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R. S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

[SIGNATURE PAGES FOLLOW]

CORNHUSKER ARMY AMMUNITION PLANT QUITCLAIM DEED

200203896

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Acting Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be hereunto affixed this 26th day of February, 2002.

UNITED STATES OF AMERICA

By: 
JOSEPH W. WHITAKER
 Acting Deputy Assistant Secretary of the Army (I&H)

COMMONWEALTH OF VIRGINIA)
) ss.
COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on the 30th day of November, 2002, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Acting Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and acknowledged the foregoing instrument to be his free act and deed, dated this 26th day of February, 2002, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.

Karen A. Cooper
Notary Public



CORNHUSKER ARMY AMMUNITION PLANT QUITCLAIM DEED
ACCEPTANCE:

200203896

IN TESTIMONY WHEREOF, witness the Grantee, Farm Progress Companies, Inc., this 18th day of January, 2002, hereby accepts and approves this Quitclaim Deed for itself, its successors and assigns, and agrees to all the conditions, reservations, restrictions, covenants, and terms contained therein.

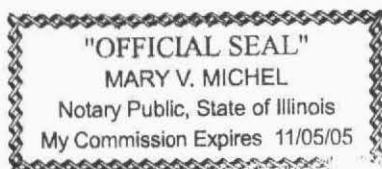
FARM PROGRESS COMPANIES, INC.

By: *Charles Roth*
[NAME] Charles Roth
[TITLE] President

STATE OF ILLINOIS)
) ss.
COUNTY OF DuPage)

On January 18, 2002 before me, the undersigned, a Notary Public in and for the State of Illinois, personally appeared Charles Roth personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

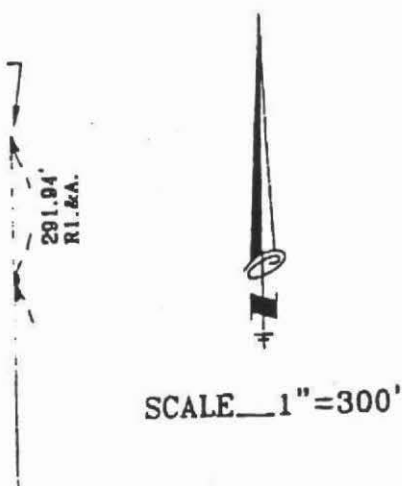


Mary V. Michel
Notary Public, State of Illinois

My commission expires: 11-05-05

Exhibit A

200203896



LEGAL DESCRIPTION

A tract of land comprising all of the Southwest Quarter (SW1/4) and a part of the Northwest Quarter (NW1/4) of Section Twenty Five (25), Township Eleven (11) North, Range Eleven (11) West of the 6th P.M., and all of the Northeast Quarter (NE1/4), all of the Northwest Quarter (NW1/4), all of the Southwest Quarter (SW1/4), and all of the Southeast Quarter (SE1/4) of Section Twenty Six (26), Township Eleven (11) North, Range Eleven (11) West of the 6th P.M., all being in Hall County, Nebraska and more particularly described as follows:

Beginning at the southeast corner of the Southwest Quarter (SW1/4) of said Section Twenty Five (25); thence running northerly, along and upon the east line of the Southwest Quarter (SW1/4) and the Northwest Quarter (NW1/4) of said Section Twenty Five (25), a distance of Five Thousand Six and Seventy Three Hundredths (5,006.73) feet to a point which is Two Hundred Ninety One and Ninety Four Hundredths (291.94) feet south of the northeast corner of the Northwest Quarter (NW1/4) of said Section Twenty Five (25); thence deflecting left $90^{\circ}01'54''$ and running westerly, a distance of One Thousand Nineteen and Forty Three Hundredths (1,019.43) feet to a point of curvature; thence running northwesterly, along and upon the arc of a curve to the right whose radius is 360.56 feet, of which, the initial tangent of said curve coincides with the previously described course, a distance of Three Hundred Twenty Two and Eighty Five Hundredths (322.85) feet (long chord distance = 312.17' - long chord deflecting right $25^{\circ}39'05''$ from the previously described course) to a point of tangency; thence running northwesterly, along and upon the northwesterly prolongation of the final tangent of the previously described curve, said prolongation deflecting right $25^{\circ}39'05''$ from the chord of the previously described curve, a distance of Eighty Five and Six Tenths (85.60) feet to a point of curvature; thence running northwesterly, along and upon the arc of a curve to the left whose radius is 257.73 feet, of which, the initial tangent of said curve coincides with the previously described course, a distance of Two Hundred Twenty Nine and Fifty Nine Hundredths (229.59) feet (long chord distance = 222.07' - long chord deflecting left $25^{\circ}31'12.5''$ from the previously described course) to a point of tangency, said point also being on the north line of the

S.006.73' R1.&A.

Northwest Quarter (NW1/4) of said Section Twenty Five (25); thence running westerly, along and upon the north line of the Northwest Quarter (NW1/4) of said Section Twenty Five (25) and also being along and upon the westerly prolongation of the final tangent of the previously described curve, said prolongation deflecting left $25^{\circ}31'12.5''$ from the chord of the previously described curve, a distance of One Thousand One Hundred One and Nineteen Hundredths (1,101.19) feet to the northeast corner of the Northeast Quarter (NE1/4) of said Section Twenty Six (26); thence deflecting left $00^{\circ}12'35''$ and running westerly, along and upon the north line of the Northeast Quarter (NE1/4) of said Section Twenty Six (26), a distance of Two Thousand Six Hundred Forty Nine and Eighty Four Hundredths (2,649.84) feet to the northeast corner of the Northwest Quarter (NW1/4) of said Section Twenty Six (26); thence deflecting left $00^{\circ}08'50''$ and running westerly, along and upon the north line of the Northwest Quarter (NW1/4) of said Section Twenty Six (26), a distance of Two Thousand Six Hundred Fifty and Thirty Four Hundredths (2,650.34) feet to the northwest corner of the Northwest Quarter (NW1/4) of said Section Twenty Six (26); thence deflecting left $89^{\circ}54'10''$ and running southerly, along and upon the west line of the Northwest Quarter (NW1/4) of said Section Twenty Six (26), a distance of Two Thousand Six Hundred Fifty Two and Thirty Two Hundredths (2,652.32) feet to the northwest corner of the Southwest Quarter (SW1/4) of said Section Twenty Six (26); thence deflecting right $00^{\circ}02'40''$ and running southerly, along and upon the west line of the Southwest Quarter (SW1/4) of said Section Twenty Six (26), a distance of Two Thousand Six Hundred Fifty Two and Ninety Four Hundredths (2,652.94) feet to the southwest corner of the Southwest Quarter (SW1/4) of said Section Twenty Six (26); thence deflecting left $90^{\circ}19'25''$ and running easterly, along and upon the south line of the Southwest Quarter (SW1/4), a distance of Two Thousand Six Hundred Fifty Four and Fifty Two Hundredths (2,654.52) feet to the southwest corner of the Southeast Quarter (SE1/4) of said Section Twenty Six (26); thence deflecting right $00^{\circ}28'50''$ and running easterly, along and upon the south line of the Southeast Quarter (SE1/4) of said Section Twenty Six (26), a distance of Two Thousand Six Hundred Fifty Three and Ninety Four Hundredths (2,653.94) feet to the southwest corner of the Southwest Quarter (SW1/4) of said Section Twenty Five (25); thence deflecting left $00^{\circ}03'10''$ and running easterly, along and upon the south line of the Southwest Quarter (SW1/4) of said Section Twenty Five (25), a distance of Two Thousand Six Hundred Forty Six and Ninety Four Hundredths (2,646.94) feet to the point of beginning and containing 959.103 acres, more or less.

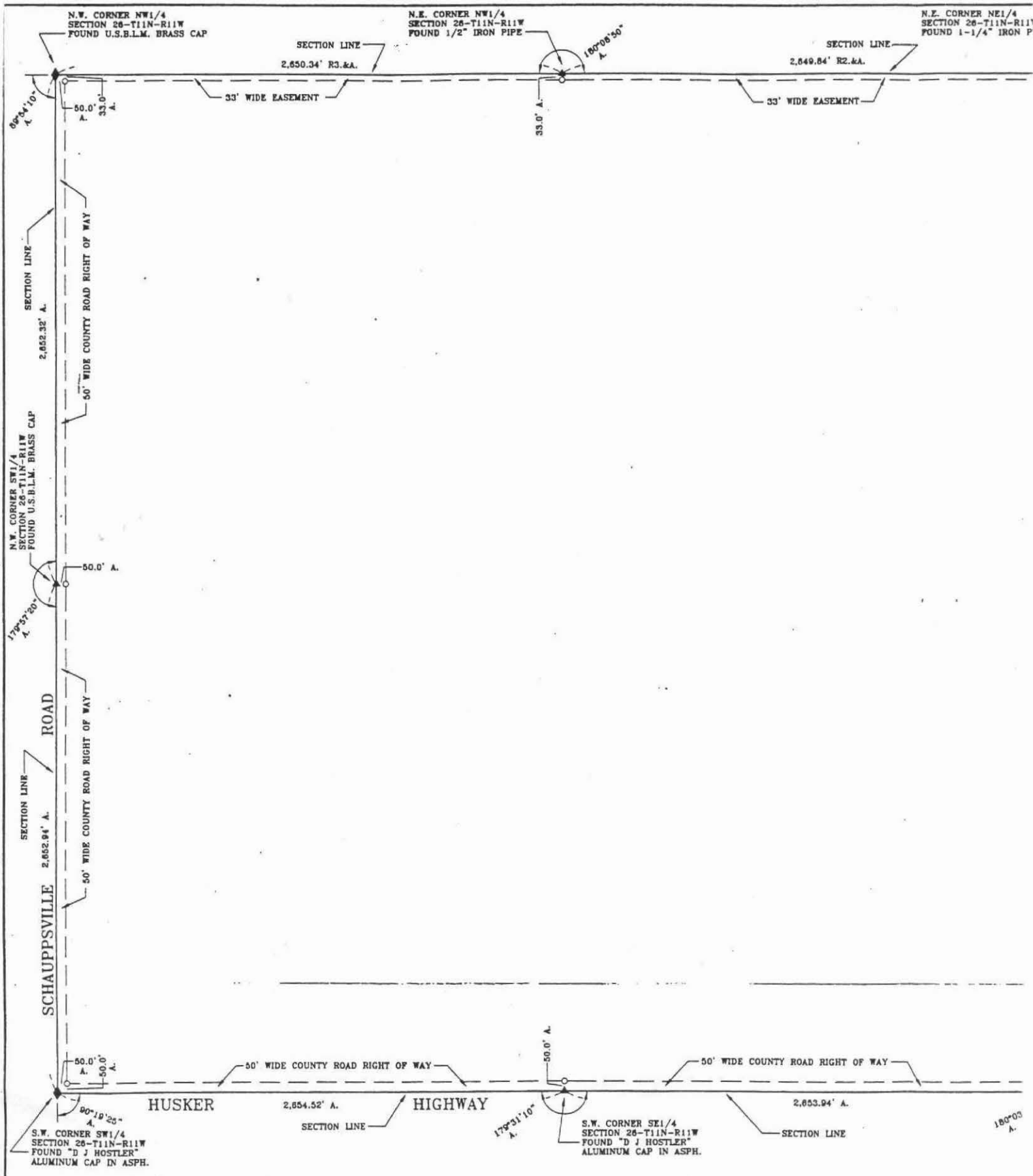
200203896

R1.=RECORDED DISTANCE ON SURVEY BY DANIEL J. HOSTLER,
L. S. NO. 263, DATED JUNE 5, 1999
R2.=RECORDED DISTANCE ON SURVEY BY DANIEL J. HOSTLER,
L. S. NO. 263, DATED JUNE 23, 1999
R3.=RECORDED DISTANCE ON SURVEY BY DANIEL J. HOSTLER,
L. S. NO. 263, DATED JUNE 24, 1999
A.=ACTUAL DISTANCE AND/OR ANGLE

- - INDICATES 1/2" IRON PIPE FOUND
- - INDICATES 1/2" IRON PIPE PLACED

S.E. CORNER SW1/4
SECTION 25-T11N-R11W
FOUND CONC. NAIL IN ASPH.

ALL OF THE SW1/4 AND PART OF THE NW1/4 OF SECTION 25-T11N-R11W, AND OF THE NE1/4, NW1/4, SW1/4 AND SE1/4 OF SECTION 26-T11N-R11W HALL COUNTY, NEBRASKA	PLS-MINOR-ADJUST RDAY235825-11-11 Q:\rds\nd04-08-2000 DATE 04-08-2000 L.V.
LAND SURVEY	
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 339 - PHONE 382-8485 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68802-0339	



SURVEYOR'S CERTIFICATE
I hereby certify that to the best of my knowledge

N.E. CORNER NE1/4
SECTION 26-T11N-R11W
FOUND 1-1/4" IRON PIPE

N.E. CORNER NW1/4
SECTION 25-T11N-R11W
FOUND 1-1/2" IRON PIPE

200203896

SCALE 1"=300'

CURVE DATA

CURVE "A"
RADIUS = 360.56'
DELTA = 51°18'10"
ARC DISTANCE = 322.85'
CHORD DISTANCE = 312.17'

CURVE "B"
RADIUS = 257.73'
DELTA = 51°02'25"
ARC DISTANCE = 228.59'
CHORD DISTANCE = 222.07'

LEGAL DESCRIPTION

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S.E. CORNER SW1/4
SECTION 25-T11N-R11W
FOUND CONC. NAIL IN ASPH.

S.W. CORNER SW1/4
SECTION 25-T11N-R11W
FOUND "D J HOSTLER"
ALUMINUM CAP IN ASPH.

CERTIFICATE

I, the undersigned, being a duly qualified and licensed Surveyor of the State of Nebraska, do hereby certify that to the best of my knowledge and belief, the accompanying plot is from an accurate survey of the described property made under my supervision.

Lee D. Wagner, Registered Land Surveyor No. 357



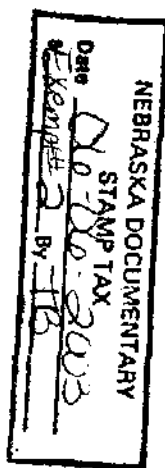
ALL OF THE SW1/4 AND PART OF THE NW1/4 OF SECTION 25-T11N-R11W, AND OF THE NE1/4, NW1/4, SW1/4 AND SE1/4 OF SECTION 26-T11N-R11W HALL COUNTY, NEBRASKA		FILED 04-08-2000 L.W.
LAND SURVEY		
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 335 - PHONE 382-8480 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68802-0339		

200307151

STATE OF NEBRASKA
COUNTY OF HALL) SS

2003 JUN 6 PM 1 17

Kathy Hines
REG OF DEEDS



CASH _____
CHECK 91.50

REFUNDS: _____
CASH _____
CHECK _____

Cornhusker Army Ammunition Plant
Hall County, Nebraska

All or Parts of Acquisition Tracts Nos. 14, 26, 27, 28, 57, 58, 59, 60A, 60B, 61 and 109
Tracts 26A, 27A, 37B and 38B

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 30th day of May, 2003, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as Grantor, acting by and through the Deputy Assistant Secretary of the Army (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and **Southern Public Power District**, a public corporation and political subdivision of the State of Nebraska, with its principal office located at 4550 West Husker Highway, P.O. Box 1687, Grand Island, Nebraska 68803-1687, hereinafter referred to as Grantee.

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be transferred to Grantee; and

WHEREAS, the property to be conveyed herein has been identified by Grantor pursuant to 42 U.S.C. 9620(h)(4)(A) as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of and appropriate concurrence in such identification has been obtained pursuant to 42 U.S.C. 9620(h)(4)(B); and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above mentioned laws, regulations and orders.

NOW THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of One Million Two Hundred Thousand and No/100 Dollars (\$1,200,000.00); the receipt of which is hereby acknowledged by Grantor; and, (2) the specific agreements hereinafter made by Grantee, for himself and his successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, his successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

Four tracts of land comprising parts of the Sections Eight (8), Seventeen (17), and Twenty (20), Township Eleven (11) North, Range Ten (10) West of the Sixth Principal Meridian, all being in Hall County, Nebraska, containing 743.426 acres, more or less (hereinafter referred to as the "Property"), and being more particularly shown and described on **Exhibits "A-1, A-2, A-3 and A-4"**, which are attached hereto and made a part hereof.

RESERVING, however, to the Grantor, perpetual and assignable easements and rights-of-way, thirty (30) feet in width, in, on, over, and across the property for the installation, operation, use, repair, replacement, and maintenance of a railroad, railroad tracks, ballast, and associated railroad facilities, as shown on Exhibits "A-1" (Tract 26A) and "A-3" (Tract 37B).

RESERVING, however, to the Grantor, ownership and exclusive use of the existing monitoring wells/piezometers located on the property together with access across the property for the purpose of monitoring and/or removing the wells/piezometers. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same. One monitoring well/piezometer is located in the northwest corner of Tract 27A and the other monitoring well/piezometer is located in the southeast corner of Tract 38B.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, his successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of Grantor, and its assigns:

SAVE AND EXCEPT and there is hereby reserved unto Grantor, and its assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) covering the Property.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120 (h) (4) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Section 9601 et seq. (CERCLA), the Grantor has identified the Property as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of. The Grantor covenants and warrants to the Grantee that in the event that any response action or corrective action is found to be necessary after the date of this conveyance as a result of hazardous substances or petroleum products or their derivatives existing on the Property prior to the date of this conveyance, such response action or corrective action shall be conducted by the Grantor.

b. Grantor reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, Grantor, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. Grantor will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions. This subparagraph shall not affect the Grantor's future responsibilities, if any, to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCEPTIONS, RESERVATIONS AND COVENANTS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exceptions, reservations, and covenants affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the property, or any part thereof, their heirs, successors and assigns.

a. Federal Facility Agreement

The Grantee acknowledges that Cornhusker Army Ammunition Plant has been identified as a National Priority List (NPL) site under the Comprehensive, Environmental, Response, Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army, effective September 1990, and a copy of any amendments thereto, are available for the Grantee's review at the Office of the Commander's Representative. The Grantee agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee further agrees that notwithstanding any other provisions of the property transfer, the United States assumes no liability to the person or entity to whom the property is transferred should implementation of the FFA interfere with their use of the property. The Grantee or any subsequent transferee, shall have no claim on account of any such interference against the United States or any officer, agent, employee or contractor thereof.

b. Environmental Baseline Survey (EBS) and Finding of Suitability to Transfer (FOST)

1. The Grantee has received the technical environmental reports, including the Environmental Baseline Survey for the Property dated 9-20 November 1998, as amended by Amendment No. 1, signed April 2002, and the FOST for the property dated November 2002, prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use.

2. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for

any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Subsection IV.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

c. Polychlorinated Biphenyls (PCBs) Containing Equipment Notification

The Grantee is hereby informed and does acknowledge that equipment containing polychlorinated biphenyls (PCBs) exists on the property being conveyed. Southern Public Power District (SPPD) owns said equipment.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to the following:

1. Easement DACA45-2-99-6157 granted to Hall County for road rights-of-way.
2. Easement DACA45-2-00-6023 granted to Hall County for road rights-of-way.
3. Easement DACA45-2-97-6024 granted to Southern Nebraska Rural Public Power District for overhead electric power lines.
4. Easement DACA45-2-01-6078 granted to City of Grand Island for recreation trail rights-of-way. Grantee is not permitted to disturb the area lying within the recreation trail easement.

b. Any zoning laws, ordinances, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements that may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

g. Installation commander agreements, whether or not of record or otherwise approved in writing by Grantee.

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for himself, and his successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land described in Section IV of this Quitclaim Deed. In addition, Grantor and its assigns shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, Grantor, and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by Grantee, for himself and his successors and assigns, that the Property is conveyed "*as is*" and "*where is*" without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property. Grantee, for himself and his successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property nor in any agreement or promise to alter, improve, adapt or repair the Property.

b. The Grantee shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions set out in Section IV herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grant of any interest, privilege, or license.

VII. AGREEMENTS, NOTICES AND CONDITIONS

a. Non-Discrimination

With respect to activities related to the property, the Grantee hereby agrees that it will comply with the requirements of Title VI of the Civil Rights Act of 1964 (Public Law No. 88-352) and all requirements imposed by or pursuant to the regulations issued pursuant to the Act and now in effect, to the end that, in accordance with said Act and regulations, no person in the United States shall, on the ground of race, color, national origin, sex, or handicap be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity related to the property of the Grantee, its successors or assigns.

b. **Anti-Deficiency Act**

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of appropriated funds to the Department of the Army, and nothing in this deed shall be interpreted to require obligations or payment by the Grantor in violation of the Anti-Deficiency Act.

c. **Wetlands Notice**

A portion the property contains wetlands.


THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

200307151

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be hereunto affixed this 30th day of May, 2003.

UNITED STATES OF AMERICA

By  _____
JOSEPH W. WHITAKER
 Deputy Assistant Secretary of the Army
 (Installations and Housing)
 OASA(I&E)

[illegible]

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 30th day of November, 2006, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and acknowledged the foregoing instrument to be his free act and deed, dated this 30th day of May, 2003, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.

Varen A. Cooper
Notary Public

My commission expires: 30 November 2006

200307151

GRANTEE ACCEPTANCE

I, the undersigned Grantee, do hereby accept the herein-described property, subject to the notices, agreements, reservations, restrictions, conditions, covenants and exceptions hereinabove expressed.

Executed this 14th day of March, 2003, in Hall County, State of Nebraska.

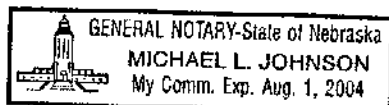
SOUTHERN PUBLIC POWER DISTRICT

BY: 

TITLE: GENERAL MANAGER

STATE OF NEBRASKA)
) ss
COUNTY OF HALL)

The foregoing Quitclaim Deed was acknowledged before me this 14th day of March, 2003, by Gary Helmer, General Manager



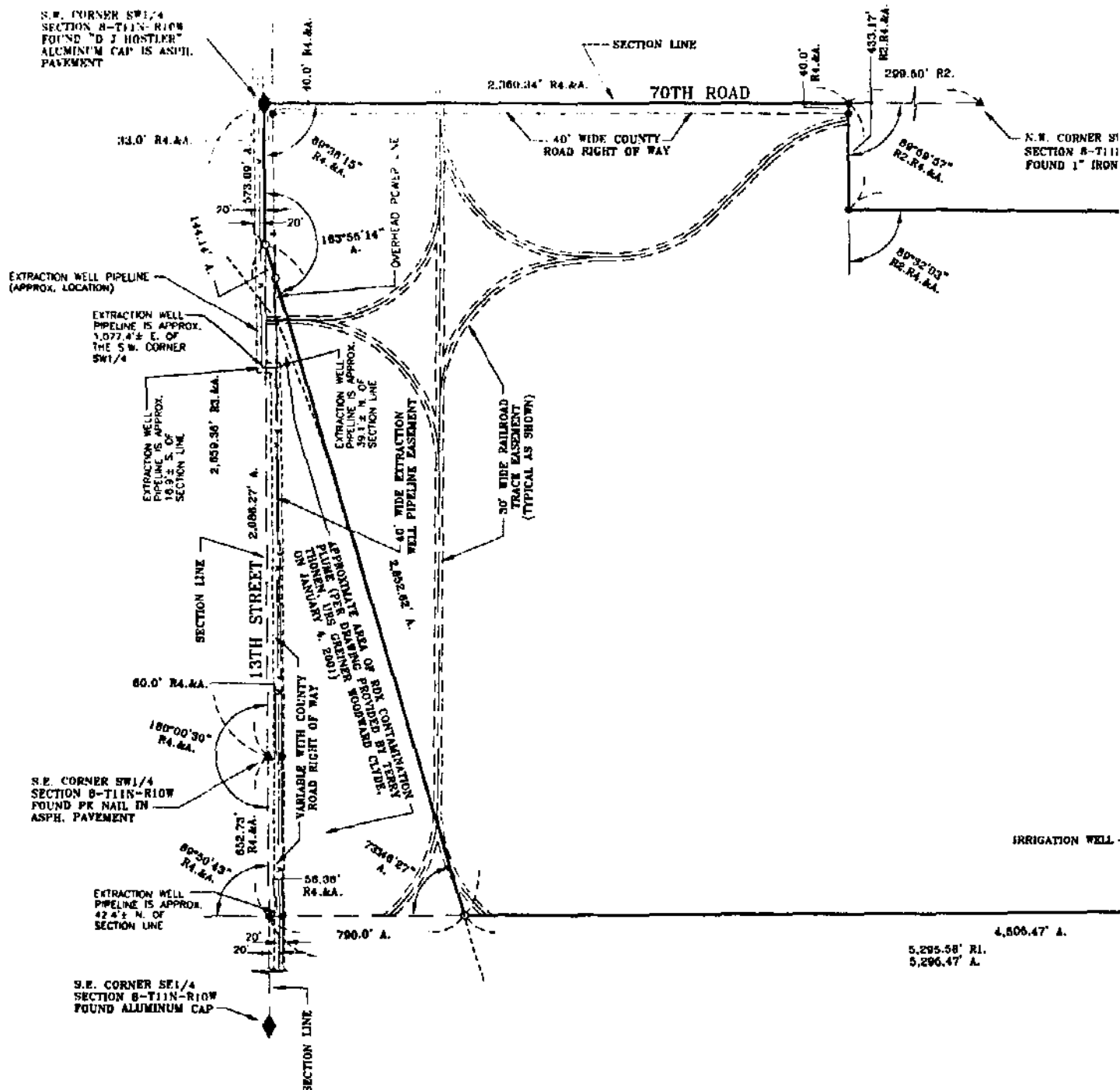

Notary Public

My commission expires: Aug 1, 2004

200307151

- R1 - RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY RONALD R. ROCKWELL,
L. S. NO. 340, DATED JANUARY 24, 2001 (PARCEL NO. 1)
R2 - RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY RONALD R. ROCKWELL,
L. S. NO. 348, DATED JANUARY 24, 2001 (PARCEL NO. 4)
R3 - RECORDED DISTANCE ON SECTION CORNER TIE SHEET BY DANIEL J. HOSTLER,
COUNTY SURVEYOR, L. S. NO. 283, DATED MARCH 24, 1999
A - ACTUAL DISTANCE AND/OR ANGLE

● = INDICATES 1/2" IRON PIPE FOUND
○ = INDICATES 1/2" IRON PIPE PLACED



LEGAL DESCRIPTION

A tract of land comprising a part of the Southwest Quarter (SW1/4), part of the Northwest Quarter (NW1/4), part of the Northeast Quarter (NE1/4), and a part of the Southeast Quarter (SE1/4), all being in Section Eight (8), Township Eleven (11) North, Range Ten (10) West of the 8th P.M., Hall County, Nebraska, and more particularly described as follows:

Beginning at the southwest corner of said Southwest Quarter (SW1/4); thence running northerly, along and upon the west line of said Southwest Quarter (SW1/4), a distance of Two Thousand Three Hundred Sixty and Thirty Four Hundredths (2,360.34) feet; thence deflecting right 89°59'57" and running easterly, a distance of Four Hundred Thirty Three and Seventeen Hundredths (433.17) feet; thence deflecting left 89°32'03" and running northerly, a distance of Two Thousand Nine Hundred Fifty Seven and Fifty Four Hundredths (2,957.54) feet to a point on the north line of said Northwest Quarter (NW1/4); said point being Four Hundred Fifty Seven and Fifty Four Hundredths (457.54) feet east of the northwest corner of said Northwest Quarter (NW1/4); thence deflecting right 89°31'17" and running easterly, along and upon the north line of said Northwest Quarter (NW1/4), a distance of Two Thousand Two Hundred Eleven and Sixty Seven Hundredths (2,211.67) feet to the northwest corner of said Northeast Quarter (NE1/4); thence deflecting right 89°01'10" and running easterly, along and upon the north line of said Northeast Quarter (NE1/4), a distance of Six Hundred Twenty and Forty Seven Hundredths (620.47) feet; thence deflecting right 89°44'41" and running southerly, a distance of Four Thousand Five Hundred Five and Forty Seven Hundredths (4,505.47) feet to a point, said point being Seven Hundred Ninety (700.0) feet north of (as measured along and upon the southerly prolongation of the aforementioned course) the south line of said Southwest Quarter (SE1/4); thence deflecting right 73°48'27" and running southwesterly, a distance of Two Thousand Eight Hundred Fifty Two and Sixty Two Hundredths (2,852.62) feet to a point on the south line of said Southwest Quarter (SW1/4); said point being Two Thousand Eighty Six and Twenty Seven Hundredths (2,086.27) feet west of the southeast corner of said Southwest Quarter (SW1/4); thence deflecting right 16°04'46" and running westerly, along and upon the south line of said Southwest Quarter (SW1/4), a distance of Five Hundred Seventy Three and Nine Hundredths (573.09) feet to the point of beginning and containing 347.070 acres, more or less.

SCALE 1"=300'

8-T11N-R10W

12.

N.W. CORNER SW1/4
SECTION 8-T11N-R10W
FOUND 1" IRON PIPE

2,957.31'
R2.R4.&A.

33.0'
R4.&A.

457.54' R2.

09°31'17"
R2.R4.&A.

CAPITAL AVENUE

2,211.67'
R4.&A.

SECTION LINE

33' WIDE COUNTY
ROAD RIGHT OF WAY

IRRIGATION WELL

96°00'00" R1.

4,808.47' A.

15' R1.

1514' R1.

33.0'
R4.&A.

33.0'
R4.&A.

820.47'
R1.R4.&A.

180°01'10"
R1.R4.&A.

N.W. SEC. FOUN.

80°44'41"
R1.R4.&A.

SECTION LINE

8 20' WIDE ACCESS
EASEMENT

N.E. CO. SECTION FOUN.

N.E. CORNER NW1/4 - FOUND ALUMINUM CAP
48.10' S.W. TO NAIL IN TELEPHONE POLE
47.00' N.E. TO NAIL IN POWER POLE
48.48' N.W. TO NAIL IN POWER POLE

N.W. CORNER NW1/4 - FOUND 1/2" IRON PIPE
71.74' N.W. TO NAIL IN 18" TREE
89.22' N.E. TO NAIL IN 10" TREE
81.10' N.N.W. TO NAIL IN 8" TREE

N.W. CORNER NW1/4 - FOUND 1" IRON PIPE
73.18' S.W. TO NAIL IN POWER POLE
86.75' S.E. TO NAIL IN 6" TREE
73.89' N.E. TO NAIL IN 14" TREE

N.W. CORNER SW1/4 - FOUND 1" IRON PIPE
12.80' N.W. TO NAIL IN POWER POLE
14.50' W. TO 1/2" IRON PIPE
14.50' E. TO 1/2" IRON PIPE

S.W. CORNER SW1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
74.45' N.W. TO NAIL IN POWER POLE
35.90' S.S.E. TO 1/2" IRON PIPE
74.21' N.E. TO 1/2" IRON PIPE

S.E. CORNER SW1/4 - FOUND PE NAIL IN ASPH. PAVEMENT
85.40' S.W. TO NAIL IN 20" TREE
36.40' S.E. TO NAIL IN 12" TREE
85.40' N.E. TO NAIL IN POWER POLE

S.E. CORNER SW1/4 - FOUND ALUMINUM CAP
81.00' N.W. TO NAIL IN FENCE BRACE POST
81.28' S.E. TO NAIL IN POWER POLE
45.49' N.E. TO TOP CENTER OF FIRE HYDRANT

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Lee D. Wagner, Registered Land Surveyor No. 557

PT. OF THE SW1/4, PT. OF THE NW1/4,
PT. OF THE NE1/4, & PT. OF THE SE1/4
SECTION 8 T11N-R10W
HALL COUNTY, NEBRASKA

LAND SURVEY

BENJAMIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
P. O. BOX 326 PHONE 382-8406 AREA CODE 306
GRAND ISLAND, NEBRASKA 68802 G339

TRACT NO. 26A

EXHIBIT "A-1" ATTACHED TO AND MADE

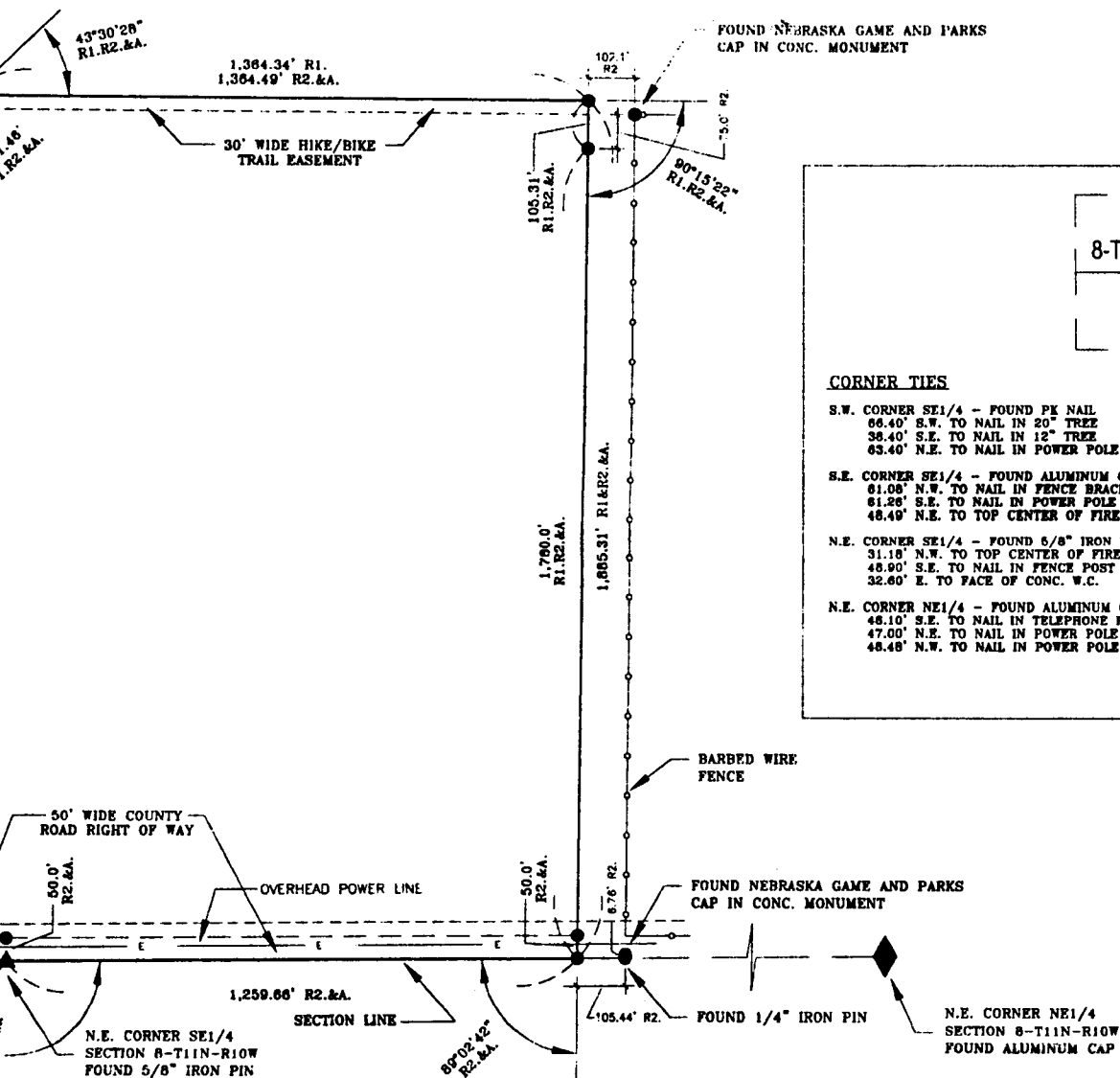
A PART OF QUITCLAIM DEED

A tract of land comprising a part of the Southeast Quarter (SE1/4) and a part of the Northeast Quarter (NE1/4), all being in Section Eight (8), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., Hall County, Nebraska, and more particularly described as follows:

Beginning at the northeast corner of said Southeast Quarter (SE1/4); thence running southerly, along and upon the east line of said Southeast Quarter (SE1/4), a distance of One Thousand Forty and One Hundredth (1,040.01) feet to a point, said point being One Thousand Six Hundred (1,600.0) feet north of the southeast corner of said Southeast Quarter (SE1/4); thence deflecting right 71°46'39" and running southwesterly, a distance of One Thousand Nine Hundred Sixty Nine and Thirty Four Hundredths (1,969.34) feet; thence deflecting right 107°35'50" and running northerly, a distance of Nine Hundred Fifty Eight and Eighty Six Hundredths (958.86) feet; thence deflecting right 53°44'45" and running northeasterly, a distance of Three Hundred Fifty Three and Fourteen Hundredths (353.14) feet to a point of curvature; thence running northerly, along and upon the arc of a curve to the left whose radius is 91.58 feet, a distance of One Hundred Seventy Eight and Forty Two Hundredths (178.42) feet (long chord distance = 161.51, long chord deflecting left 55°48'35" from the previously described course) to a point of tangency; thence deflecting left 55°48'35" from the chord of the previously described curve and running northwesterly, a distance of Two Hundred Fourteen and Forty Four Hundredths (214.44) feet; thence deflecting right 14°43'50" and running northwesterly, a distance of One Hundred Sixty One and Forty Six Hundredths (161.46) feet; thence deflecting right 13°30'28" and running northerly, a distance of One Thousand Three Hundred Sixty Four and Forty Nine Hundredths (1,364.49) feet; thence deflecting right 80°15'22" and running easterly, a distance of One Thousand Eight Hundred Eighty Five and Thirty One Hundredths (1,885.31) feet to a point on the east line of said Northeast Quarter (NE1/4); thence deflecting right 80°02'42" and running southerly, along and upon the east line of said Northeast Quarter (NE1/4), a distance of One Thousand Two Hundred Fifty Nine and Sixty Six Hundredths (1,259.66) feet to the point of beginning and containing 10.37 acres, more or less.

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

by D. Wagner, Registered Land Surveyor No. 553



CORNER TIES

- S.W. CORNER SE1/4 - FOUND PK NAIL
66.40' S.W. TO NAIL IN 20" TREE
38.40' S.E. TO NAIL IN 12" TREE
63.40' N.E. TO NAIL IN POWER POLE
- S.E. CORNER SE1/4 - FOUND ALUMINUM CAP
61.08' N.W. TO NAIL IN FENCE BRACE POST
61.28' S.E. TO NAIL IN POWER POLE
48.49' N.E. TO TOP CENTER OF FIRE HYDRANT
- N.E. CORNER SE1/4 - FOUND 5/8" IRON PIN
31.18' N.W. TO TOP CENTER OF FIRE HYDRANT
48.90' S.E. TO NAIL IN FENCE POST
32.80' E. TO FACE OF CONC. W.C.
- N.E. CORNER NE1/4 - FOUND ALUMINUM CAP
48.10' S.E. TO NAIL IN TELEPHONE POLE
47.00' N.E. TO NAIL IN POWER POLE
48.48' N.W. TO NAIL IN POWER POLE

8-T11N-R10W

PART OF THE SE1/4 AND
PART OF THE NE1/4
SECTION 8-T11N-R10W
HALL COUNTY, NEBRASKA

LAND SURVEY

BENJAMIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
P. O. BOX 339 PHONE 382-8485 - AREA CODE 308
GRAND ISLAND, NEBRASKA 68802-0339

TRACT NO. 27A

EXHIBIT "A-2" ATTACHED TO AND MADE

A PART OF QUITCLAIM DEED

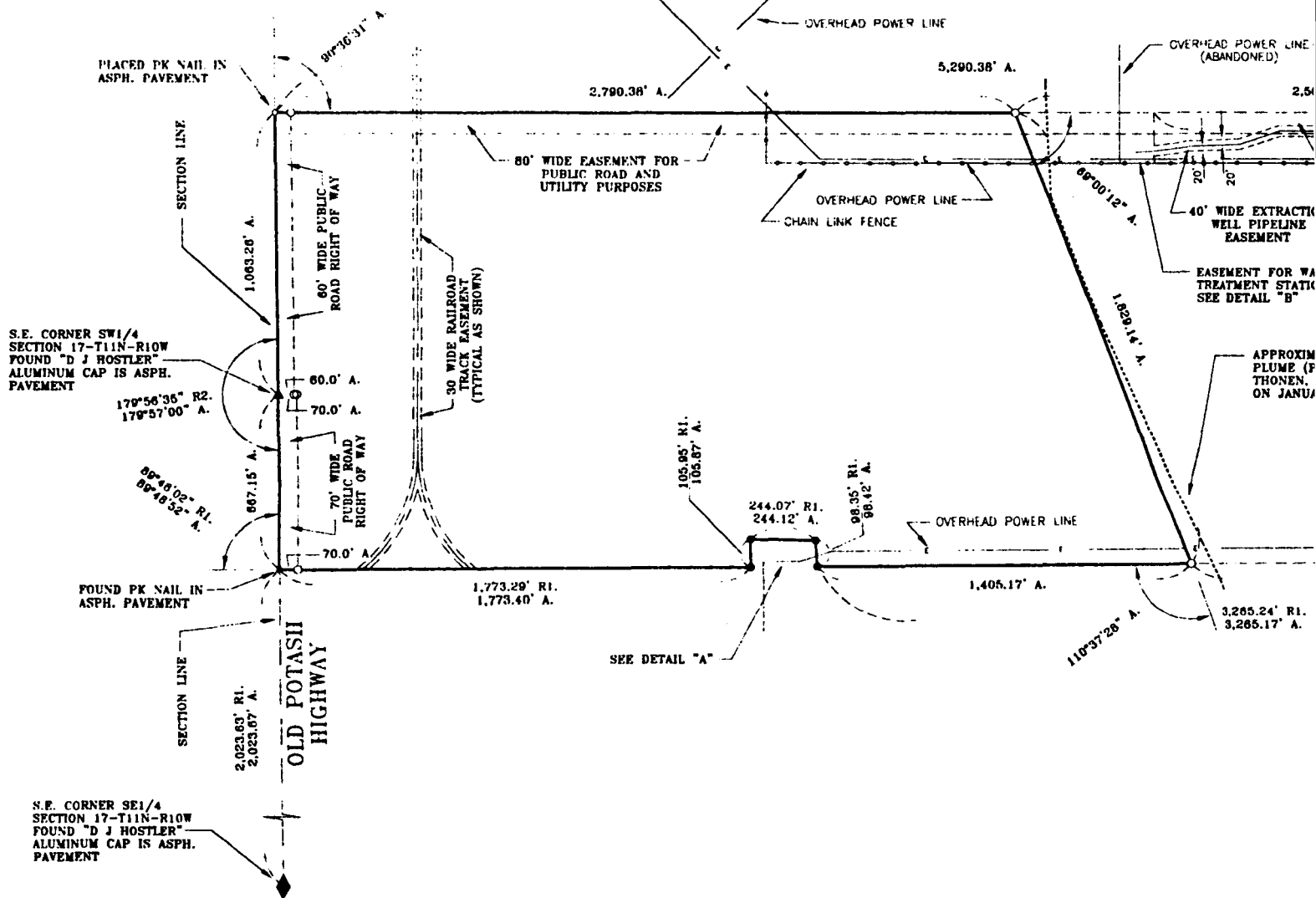
200307151

S.W. CORNER SW1/4
SECTION 17-T11N-R10W
FOUND "D J HOSTLER"
ALUMINUM CAP IS ASPH.
PAVEMENT

- R1. - RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY
RONALD R. ROCKWELL, L. S. NO. 349, DATED JUNE 29,
2000 (PARCEL NO. 7)
R2. - RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY
LEE D. WAGNER, L. S. NO. 557, DATED JULY 27, 2001
(TRACT NO. 50A)
R3. - RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY
LEE D. WAGNER, L. S. NO. 557, DATED AUGUST 28, 2001
(TRACT NO. 26)
A. - ACTUAL DISTANCE AND/OR ANGLE

SCALE 1"=300'

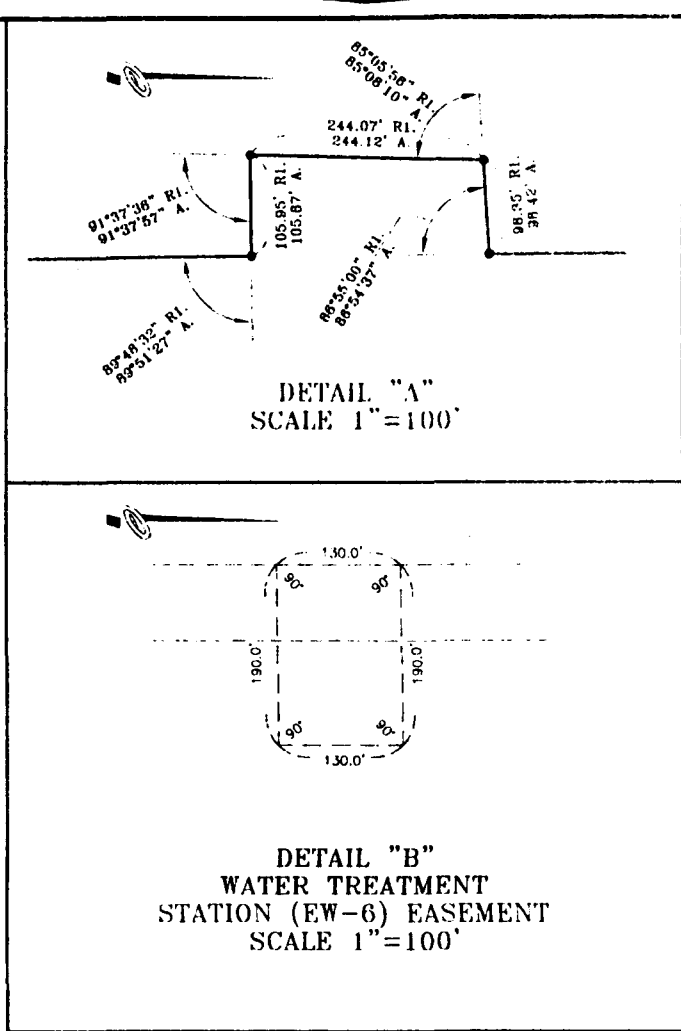
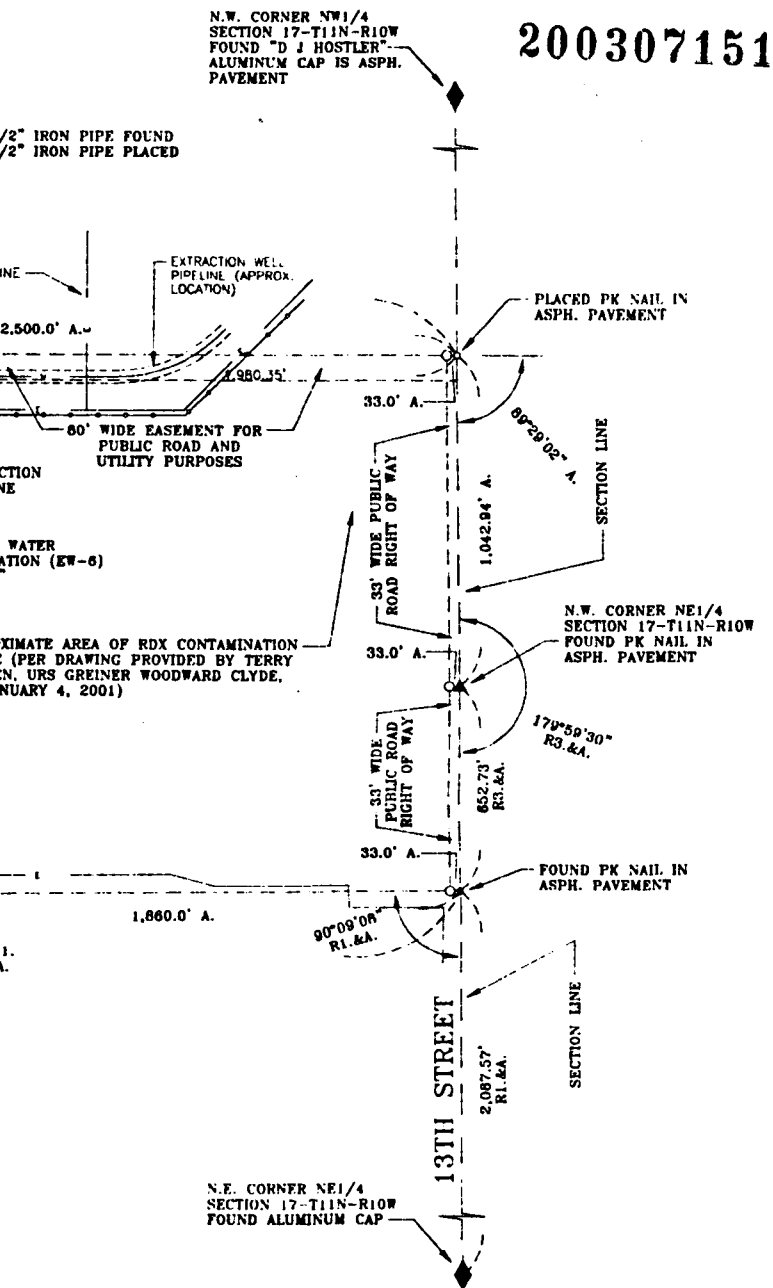
● = INDICATES 1/2"
○ = INDICATES 1/2"



17-T11N-R10W

CORNER TIES

- N.W. CORNER NW1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
74.45' N.W. TO NAIL IN POWER POLE
35.90' S.E. TO 1/2" IRON PIPE
74.21' N.E. TO 1/2" IRON PIPE
- N.W. CORNER NE1/4 - FOUND PK NAIL
66.40' S.W. TO NAIL IN 20" TREE
36.40' S.E. TO NAIL IN 12" TREE
63.40' N.E. TO NAIL IN POWER POLE
- N.E. CORNER NE1/4 - FOUND ALUMINUM CAP
61.08' N.W. TO NAIL IN FENCE BRACE POST
61.26' S.E. TO NAIL IN POWER POLE
48.49' N.E. TO TOP CENTER OF FIRE HYDRANT
- S.E. CORNER SE1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
70.88' N.W. TO NAIL IN FENCE CORNER POST
72.20' S.W. TO NAIL IN FENCE CORNER POST
64.50' S.E. TO "X" NAILS IN FENCE CORNER POST
- S.W. CORNER SW1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
67.00' S.W. TO NAIL IN 18" TREE
78.90' S.S.W. TO NAIL IN POWER POLE
57.20' N.E. TO NAIL IN 8" TREE
- S.W. CORNER SW1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
79.29' N.W. TO NAIL IN POWER POLE
48.05' S.W. TO "X" NAILS IN POWER GUY POLE
95.20' N.E. TO NAIL IN POWER POLE



LEGAL DESCRIPTION

A tract of land comprising a part of the Southwest Quarter (SW1/4), a part of the Northwest Quarter (NW1/4), a part of the Northeast Quarter (NE1/4), and a part of the Southeast Quarter (SE1/4), all being in Section Seventeen (17), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., Hall County, Nebraska, and more particularly described as follows:

Beginning at the southeast corner of said Southwest Quarter (SW1/4), thence running westerly, along and upon the south line of said Southwest Quarter (SW1/4), a distance of One Thousand Sixty Three and Twenty Six Hundredths (1,063.26) feet; thence deflecting right 90°36'31" and running northerly, a distance of Two Thousand Seven Hundred Ninety and Thirty Eight Hundredths (2,790.38) feet; thence deflecting right 89°00'12" and running northeasterly, a distance of One Thousand Eight Hundred Twenty Nine and Fourteen Hundredths (1,829.14) feet; thence deflecting right 140°37'28" and running southerly, a distance of One Thousand Four Hundred Five and Seventeen Hundredths (1,405.17) feet; thence deflecting right 88°54'37" and running westerly, a distance of Ninety Eight and Forty Two Hundredths (98.42) feet; thence deflecting left 85°08'10" and running southerly, a distance of Two Hundred Forty Four and Twelve Hundredths (244.12) feet; thence deflecting left 91°37'57" and running easterly, a distance of One Hundred Five and Eighty Seven Hundredths (105.87) feet; thence deflecting right 89°51'27" and running southerly, a distance of One Thousand Seven Hundred Seventy Three and Four Tenths (1,773.40) feet to a point on the south line of said Southeast Quarter (SE1/4), said point being Two Thousand Twenty Three and Sixty Seven Hundredths (2,023.67) feet west of the southeast corner of said Southeast Quarter (SE1/4); thence deflecting right 89°48'52" and running westerly, along and upon the south line of said Southeast Quarter (SE1/4), a distance of Six Hundred Sixty Seven and Fifteen Hundredths (667.15) feet to the point of beginning and containing 122.210 acres, more or less.

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Lee D. Wagner, Registered Land Surveyor No. 557

PT. OF THE SW1/4, PT. OF THE NW1/4, PT. OF THE NE1/4, & PT. OF THE SE1/4 SECTION 17-T11N-R10W HALL COUNTY, NEBRASKA	PT. OF THE SW1/4, PT. OF THE NW1/4, PT. OF THE NE1/4, & PT. OF THE SE1/4 SECTION 17-T11N-R10W HALL COUNTY, NEBRASKA
LAND SURVEY	
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 539 PHONE 382-8485 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68802-0339	

TRACT NO. 37B

EXHIBIT "A-3" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED

● = INDICATES 1/2" IRON PIPE FOUND
() = INDICATES 1/2" IRON PIPE PLACED

N.W. CORNER WEI/4 OF SECTION 20-T11N-R10W - FOUND
IN ASPH. PAYMENT
67.00' S.W. TO NAIL IN 16" TREE
78.00' S.S.W. TO NAIL IN POWER POLE
67.20' N.E. TO NAIL IN 8" TREE

S.E. CORNER WEI/4 OF SECTION 20-T11N-R10W - FOUND
43.84' S.E. TO NAIL IN GATE POST
32.30' E. TO NAIL IN POWER POLE
40.59' N.E. TO NAIL IN GATE POST

S.E. CORNER SEI/4 OF SECTION 17-T11N-R10W - FOUND
IN ASPH. PAYMENT
70.98' N.W. TO NAIL IN FENCE CORNER POST
72.20' S.W. TO NAIL IN FENCE CORNER POST
64.50' S.E. TO "X" NAILS IN FENCE CORNER POST



Beginning at the southeast corner of said Southeast Quarter (SE1/4) of said Section Seventeen (17); thence running northerly, along and upon the east line of the Southeast Quarter (SE1/4) of said Section Seventeen (17), a distance of One Thousand Six Hundred Eighty Three and Sixty Nine Hundredths (1,683.69) feet to the southeast corner of Cornhusker Subdivision; thence deflecting left 89°30'50" and running westerly, along and upon the south line of said Cornhusker Subdivision, a distance of Five Hundred Eighty Two and Sixty Four Hundredths (582.64) feet to the southwest corner of said Cornhusker Subdivision; thence deflecting right 88°31'50" and running northerly, along and upon the west line of said Cornhusker Subdivision, a distance of Four Hundred Fifty Four and Sixty Nine Hundredths (454.89) feet to the northwest corner of said Cornhusker Subdivision; thence deflecting right 90°25'25" and running easterly, along and upon the north line of said Cornhusker Subdivision, a distance of Five Hundred Ninety and Forty Six Hundredths (590.46) feet to the northeast corner of said Cornhusker Subdivision, said point also being on the east line of the Southeast Quarter (SE1/4) of said Section Seventeen (17); thence deflecting left 89°25'40" and running southerly, along and upon the south line of the Southeast Quarter (SE1/4) of said Section Seventeen (17), a distance of Four Hundred Ninety and Forty Six Hundredths (490.46) feet to the southeast corner of the Northeast Quarter (NE1/4) of said Section Seventeen (17); thence deflecting right 00°37'39" and running northerly, along and upon the east line of the Northeast Quarter (NE1/4) of said Section Seventeen (17), a distance of One Thousand Six Hundred Ninety Seven and Sixty Four Hundredths (1,697.64) feet to a point which is Nine Hundred Fifty (950.0) feet south of the northeast corner of the Northeast Quarter (NE1/4) of said Section Seventeen (17); thence deflecting left 117°18'11" and running southwestwesterly, a distance of Two Thousand Sixty Five and Five Hundredths (2,065.05) feet; thence deflecting left 83°26'38" and running southerly, a distance of Three Thousand Four Hundred Twenty Seven and Eighty Eight Hundredths (3,427.88) feet to a point on the south line of the Southeast Quarter (SE1/4) of said Section Seventeen (17); thence deflecting left 90°26'42" and running easterly, along and upon the south line of the Southeast Quarter (SE1/4) of said Section Seventeen (17), a distance of Seventy Nine and Seventy Two Hundredths (79.72) feet; thence deflecting right 90°00'00" and running southerly, a distance of One Hundred Seventy Three and Sixty Seven Hundredths (173.67) feet; thence deflecting left 90°40'22" and running easterly, along and upon the east line of the Southeast Quarter (SE1/4) of said Section Seventeen (17), a distance of One Thousand Six Hundred Ninety Seven and Sixty Four Hundredths (1,697.64) feet to a point on the east line of the Northeast Quarter (NE1/4) of said Section Twenty (20); thence deflecting left 89°19'02" and running northerly, along and upon the east line of the Northeast Quarter (NE1/4) of said Section Twenty (20), a distance of One Hundred Seventy Six and Sixty Seven Hundredths (176.67) feet to the point of beginning and containing 163.529 acres, more or less.

UND "D J HOSTLER" ALUMINUM CAP

UND 1/2" IRON PIPE

UND "D J HOSTLER" ALUMINUM CAP

S.E. CORNER NE1/4 OF SECTION 17-T11N-R10W - FOUND 1 3/4" CRIMPED IRON PIPE
51.80' N.W. TO NAIL IN FENCE BRACE POST
51.80' S.W. TO NAIL IN FENCE BRACE POST
52.80' E. TO REBAR IN CONC. W.C.

N.E. CORNER NE1/4 OF SECTION 17-T11N-R10W - FOUND ALUMINUM CAP
61.06' N.W. TO NAIL IN FENCE BRACE POST
61.26' S.E. TO NAIL IN POWER POLE
48.49' N.E. TO TOP CENTER OF FIRE HYDRANT

N.W. CORNER NE1/4 OF SECTION 17-T11N-R10W - FOUND PK NAIL
66.40' S.W. TO NAIL IN 20" TREE
38.40' S.E. TO NAIL IN 12" TREE
63.40' N.E. TO NAIL IN POWER POLE

17-T11N-R10W

20-T11N-R10W

N.W. CORNER NE1/4
SECTION 17-T11N-R10W
FOUND PK NAIL

200307151

5,286.06' R2.
5,287.88' A.

63°28'36" A.

1,860.0' A.

33.0'
R6.&A.

SECTION LINE

1,659.61' R2.R6.&A.

13TH STREET

APPROXIMATE AREA OF RDX CONTAMINATION
PLUME (PER DRAWING PROVIDED BY TERRY
THONEN, URS GREINER WOODWARD CLYDE,
ON JANUARY 4, 2001)

2,005.05' A.

50' WIDE COUNTY
ROAD RIGHT OF WAY

30' WIDE HIKE/BIKE
TRAIL EASEMENT

10°22'21"
R6.&A.

S.E. CORNER NE1/4
SECTION 17-T11N-R10W
FOUND 1 3/4" CRIMPED PIPE

SECTION LINE

1,697.64' A.

2,647.64' R6.&A.

60TH ROAD

950.0' A.

N.E. CORNER NE1/4
SECTION 17-T11N-R10W
FOUND ALUMINUM CAP

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Lee D. Wagner
Lee D. Wagner, Registered Land Surveyor No. 557

TRACT NO. 38B

PART SE1/4 AND NE1/4 OF SECTION
17-T11N-R10W, AND PART NE1/4
OF SECTION 20-T11N-R10W
HALL COUNTY, NEBRASKA

LAND SURVEY

BENJAMIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
P. O. BOX 339 - PHONE 382-6465 - AREA CODE 308
GRAND ISLAND, NEBRASKA 68801-0339

RECORD
BOOK
PAGE
12-31-2002
L. W.
07-13-2003
REVISION
BY
C. H. TOWNE

EXHIBIT "A-4" ATTACHED TO AND MADE

A PART OF QUITCLAIM DEED

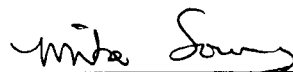
CERTIFICATE OF AUTHORITY

200307151

I hereby certify that I am the Secretary, of
(Secretary or Attesting Officer)
the organization named in the foregoing agreement with the United States of
America; that said organization is organized under the laws of the state of
Nebraska;
(State)
that the seal, if applicable, affixed to said instrument
is the seal of said organization; that Gary Hedman,
(Name of Officer)
who signed said agreement was then General Manager, of said
(Title of Officer)
organization and has been duly authorized to sign the foregoing agreement on
behalf of said organization, binding said organization to the terms therein.

I, as the Secretary/Attesting Officer, hereby attest to the validity of the
Signature of said Officer; and that said signature affixed to such agreement is
genuine.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal,
if applicable, of said organization, this 17th day of March, 2003.



Secretary or Attesting Officer
Mike Lowry, Secretary

SOUTHERN PUBLIC POWER DISTRICT,
a public corporation and political
subdivision of the State of Nebraska
Corporation or Organization

*This form certifies that the person signing the attached instrument has the authority to do so. The signature of
the Secretary/Attesting Officer and the individual signing the attached instrument cannot be the same.*

0200407897

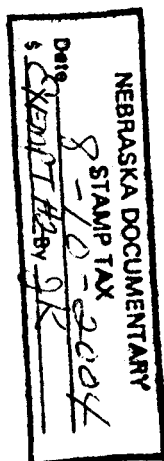
STATE OF NEBRASKA)
COUNTY OF HALL)

2004 AUG 10 PM 2 26

REG OF DEEDS

Nancy Macask

Cornhusker Army Ammunition Plant
Hall County, NebraskaPortions of Acquisition Tracts 14, 17, 18, 19,
26, 27, 58, 60B, 61, 72, 73, 106 and 108CASH 157.50
CHECK _____

REFUNDS:
CASH _____
CHECK _____

G.I. ABSTRACT

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 19th day of July, 2004, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as Grantor, acting by and through the Deputy Assistant Secretary of the Army (I&H) pursuant to a delegation of authority from the SECRETARY OF THE ARMY, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and **DTE Rail Services, Inc.**, a Michigan corporation, with its principal office located at 425 South Main Street, Ann Arbor, Michigan 48104, hereinafter referred to as Grantee.

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the Property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the Property to be conveyed herein be transferred to Grantee; and

WHEREAS, the Department of the Army has completed environmental restoration required, if any, with respect to the Property conveyed herein; and

WHEREAS, the Grantee's use of the Property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the Property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above mentioned laws, regulations and orders.

NOW THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

3

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of Seven Hundred Fifty Two Thousand and No/100 Dollars (\$752,000.00), the receipt of which is hereby acknowledged by Grantor; and (2) the specific agreements hereinafter made by Grantee, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, his successors and assigns, including a non-exclusive 20-foot wide access easement located on Tract 26A that is shown on Exhibit "A-1" to the quitclaim deed dated 30 May 2003, conveying said Tract 26A to Southern Public Power District, recorded as Instrument Number 0200307151 on 6 June 2003 in the land records of Hall County, Nebraska, and also shown and described on Exhibit "A-1" hereto, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all right, title and interest, in and to the following described Property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

Four parcels of land comprising parts of Sections Five (5), Eight (8), Seventeen (17), Twenty (20) and Twenty Nine (29), Township Eleven (11) North, Range Ten (10) West of the Sixth Principal Meridian, all being located in Hall County, Nebraska, containing 145.719 acres, more or less (hereinafter referred to as the "Property"), and more particularly shown and described in **Exhibits "A-1", "A-2", "A-3" and "A-4"**, attached hereto and made a part hereof.

RESERVING, however, to the Grantor and its assigns, a perpetual and assignable easement for the operation of the existing water lines (hereinafter "facilities") that cross the Property (Parcel 1), as shown in Exhibit "A-1", and connects Well Houses EW-6 (Tract 37A) and EW-7 (Tract 38A), associated with the Pump and Treatment Plant located in Section Seven (7), Township Eleven (11) North, Range Ten (10) West of the Sixth Principal Meridian, together with access to the facilities for monitoring and/or maintenance purposes. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same.

RESERVING, however, to the Grantor, its successors and assigns, ownership and exclusive use of the existing monitoring wells located on the Property together with access across the Property for the purpose of monitoring and/or closing the two wells located on the Property. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same. One monitoring well is located in the northern part of Parcel No. 1 (G0004) and the other monitoring well is located near the middle of Parcel No. 1 (G0009).

RESERVING, however, to the Grantor and its assigns a perpetual and assignable right, power, and easement in, upon, over and across the above described Property as follows: no new water wells shall be constructed and maintained on the land for domestic purposes; no existing water wells shall be utilized on the land for domestic purposes; and no ground water shall be used for domestic purposes. Domestic purposes include human consumption, sanitation, bathing, cooking, laundering, and swimming. Domestic purposes do not include crop irrigation,

watering of livestock, and fire control. Ground water means that water which occurs in or moves, seeps, filters, or percolates through ground under the surface of the land. Grantor and its assigns also reserve a perpetual right of access to any and all portions of the above described real Property for the purposes of monitoring compliance with and enforcing said easement, including the right, at Grantee, its successors, and assigns sole expense, to close and decommission any water wells being constructed, maintained, or utilized on the land for domestic purposes and to disconnect and remove any related pumping equipment, piping and utilities. Grantor and its assigns shall have the right to enforce said easement in any court of competent jurisdiction. In the event that explosive contamination in the groundwater, as identified in the Record of Decision, is attenuated to less than the cleanup levels established in Table 1 of the final revised Operable Unit 1 Record of Decision Amendment signed on 28 September 2001, or any later amendments to this Record of Decision, the underlying fee owner(s) may file a written application with the U.S. Army Corps of Engineers, Omaha District, Real Estate Division, Omaha, Nebraska, for a written release of said easement. A copy of this application shall be furnished to the U.S. Environmental Protection Agency and the Nebraska Department of Environmental Quality. Said release will be issued to the underlying fee owner(s) only in the event that the Army Corps of Engineers, in its sole discretion, gives its approval. In the event such a release is issued, the underlying fee owner(s) will bear all costs of recording the release in the local county records.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of Grantor, its successors and assigns:

a. SAVE AND EXCEPT and there is hereby reserved unto Grantor, its successors and assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) covering the Property.

b. SAVE AND EXCEPT and there is hereby reserved unto Grantor, and its assigns, all rents and other beneficial interests in favor of Grantor in and to the following leases to the extent, and only to the extent that such rents and other beneficial interests cover the Property:

Department of the Army Lease No. DACA45-1-79-6041 granted to DTE Rail Services, Inc., for lease of certain land, buildings and railroad facilities located on the CHAAP.

III. CERCLA COVENANT AND RESERVED ACCESS EASEMENT

a. Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA) 42 U.S.C. 9620(h)(3), the Grantor has

made a complete search of its records concerning the Property subject to this deed. Those records indicate that the hazardous substances, as defined by Section 101(14) of CERCLA, shown on **Exhibit "B"**, attached hereto and made a part hereof, have been stored for one year or more (S), released (R), or disposed of (D) on the Property during the time the Property was owned by the Grantor. The Grantee should review the Final Environmental Baseline Survey No. 38-EH-8519-99, dated 9-20 November 1998, as amended by Amendment No. 1, signed April 2002, the Environmental Baseline Survey for the Property, dated 3 May 1999, and the Finding of Suitability for Transfer, dated August 2001, for further details.

b. The Grantor covenants and warrants that all remedial action necessary to protect human health and the environment with respect to any such substances remaining on the Property has been taken prior to the date hereof. Furthermore, excepting those situations where the Grantee hereunder (who was a lessee of the Property), its successors or assigns, or any other lessee of the Property subsequent to 14 September 1979, is a potentially responsible party, as defined by CERCLA, any additional remedial action found to be necessary with respect to any such substance remaining on the Property after the date hereof shall be conducted by the United States.

c. The Grantor reserves a right of access to any and all portions of the herein-described parcels of land for purposes of environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of, to the extent permitted by law, available utilities at reasonable cost to the Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of conveyance of the herein described parcels of land, or such access is necessary to carry out a remedial action, response action or corrective action on adjoining property. Pursuant to this reservation, the United States and its officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the Grantee or the then owner and any authorized occupant of the Property) to enter upon the herein described parcels of land and conduct investigations and surveys, to include drilling, test-pitting, borings, data and/or record compilation, and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary under applicable authorities, including but not limited to monitoring wells, pumping wells, and treatment facilities.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCLUSIONS, COVENANTS, AND RESTRICTIONS AFFECTING THE PROPERTY FEDERAL FACILITY AGREEMENT

This conveyance is expressly made subject to the following environmental notices, exclusions, exceptions, restrictions and covenants affecting the Property hereby conveyed to the extent and only to the extent the same are valid and affect the Property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the Property, or any part thereof, their heirs, successors and assigns.

a. Federal Facility Agreement

The Grantee acknowledges that Cornhusker Army Ammunition Plant has been identified as a National Priority List (NPL) site under the Comprehensive, Environmental, Response,

Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army, effective September 1990, and a copy of any amendments thereto, have been provided the Grantee. The Grantee, its successors and assigns, agree that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee, its successors and assigns, further agree that notwithstanding any other provisions of this Deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the Property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof.

b. Environmental Baseline Survey (EBS) and Finding of Suitability to Transfer (FOST)

The Grantee has received the technical environmental reports, including the Environmental Baseline Surveys for the Property dated 9-20 November 1998, as amended, the Environmental Baseline Survey dated 3 May 1999, and the FOST for the Property dated August 2001, prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use.

If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property on or after 15 September 1979, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property prior to 15 September 1979. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring on or after 15 September 1979, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, on or after 15 September 1979. This Subparagraph VI.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

c. Notice of the Presence of Lead-Based Paint and Covenant Against the Use of the Property for Residential Purposes

1. The Grantee is hereby informed and does acknowledge that all buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential

dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in Residential Real Property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead-based paint hazards. "Residential Real Property" means any housing constructed prior to 1978, except housing for the elderly (households reserved for and composed of one or more persons 62 years of age or more at the time of initial occupancy) or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

2. Available information concerning known lead-based paint and/or lead-based paint hazards, the location of lead-based paint and/or lead-based paint hazards, and the condition of painted surfaces is contained in the Environmental Baseline Survey and (for residential properties) the lead-based paint assessment, which have been provided to the Grantee. All purchasers must receive the federally-approved pamphlet on lead poisoning prevention. The Grantee hereby acknowledges receipt of all of the information described in this subparagraph.

3. The Grantee acknowledges that it has received the opportunity to conduct its own risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards prior to execution of this document.

4. The Grantee covenants and agrees that it shall not permit the occupancy or use of the buildings or structures on the Property as Residential Real Property without complying with this section and all applicable Federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the Grantee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992) (hereinafter Title X).

5. The Grantee shall, after consideration of the guidelines and regulations established pursuant to Title X: (1) Comply with the joint HUD and EPA Disclosure Rule (24 CFR 35, Subpart H, 40 CFR 745, Subpart F), when applicable, by disclosing to prospective purchasers the known presence of lead-based paint and/or lead-based paint hazards as determined by previous risk assessments; (2) Abate lead-based paint hazards in pre-1978 buildings and structures in paint, dust and bare soil in accordance with the HUD Guidelines, and (3) Comply with the EPA lead-based paint work standards when conducting lead-based paint activities (40 CFR 745, Subpart L).

6. In complying with these requirements, the Grantee covenants and agrees to be responsible for any abatement or remediation of lead-based paint or lead-based paint hazards on the Property found to be necessary as a result of the subsequent use of the Property for residential purposes. The Grantee covenants and agrees to comply with solid or hazardous waste laws that may apply to any waste that may be generated during the course of lead-based paint abatement activities.

7. The Grantee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorney's fees arising out of, or in a manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of lead-based paint hazards on the Property if used for residential purposes.

8. The covenants, restrictions, requirements and obligations of this Subsection IV.c. shall be binding upon the Grantee, its successors and assigns and all future owners and shall be deemed to run with the land. The Grantee on behalf of itself, its successors and assigns covenants that it will include and make legally binding, this Subsection IV.c. in all subsequent transfers, leases, or conveyance documents.

d. Notice of the Presence of Asbestos and Covenant

1. The Grantee is hereby informed and does acknowledge that friable and non-friable asbestos or asbestos-containing materials ("ACM") has been found on the Property, as described in the EBS/FOST. The ACM on the Property does not currently pose a threat to human health or the environment. All friable asbestos that posed a risk to human health has been removed.

2. The Grantee covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos; and that the Grantor assumes no liability for future remediation of asbestos or damages for personal injury, illness, disability, or death, to the Grantee, its successors or assigns, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos on the Property, whether the Grantee, its successors or assigns have properly warned or failed to properly warn the individual(s) injured. The Grantee agrees to be responsible for any future remediation of asbestos found to be necessary on the Property.

3. Unprotected or unregulated exposures to asbestos in product manufacturing, shipyard, and building construction workplaces have been associated with asbestos-related diseases. Both the Occupational Safety and Health Administration (OSHA) and the EPA regulate asbestos because of the potential hazards associated with exposure to airborne asbestos fibers. Both OSHA and EPA have determined that such exposure increases the risk of asbestos-related diseases, which include certain cancers and which can result in disability or death.

4. The Grantee acknowledges that it has inspected the Property as to its asbestos content and condition and any hazardous or environmental conditions relating thereto. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos hazards or concerns.

5. The Grantor assumes no liability for any damages to person or property, and gives no warranties, either express or implied, with regard to the presence or absence of asbestos or ACM in buildings and structures, or whether the Property is or is not suitable for a particular purpose. The Grantee further agrees to indemnify and hold harmless the Grantor, its officers, agents and employees from and against all suits, claims, demands or actions, liabilities, judgments, penalties, costs and attorneys' fees arising out of or in any manner predicated upon, future asbestos abatement or remediation from within buildings and structures on the Property; disposal of ACM or asbestos after conveyance to the Grantee; personal injury, death or property damages resulting from, related to, caused by or arising out of exposure to asbestos within buildings and structures on the Property on or after conveyance of such portion of the Property to the Grantee. The Grantee's obligation hereunder shall apply whenever the United States incurs costs or liabilities for actions giving rise to liability under this Subsection. The Grantee shall not be responsible for indemnifying or holding the Grantor harmless from any loss, claims, liabilities, judgments, penalties, costs, or damages arising out of exposure to asbestos that occurred prior to the date of this Deed.

e. Polychlorinated Biphenyls (PCBs) Containing Equipment Notification

The Grantee is hereby informed and does acknowledge that equipment-containing polychlorinated biphenyls (PCBs) exist on the Property to be conveyed and that said equipment is owned by Southern Public Power District.

f. Land Use Restrictions

The Department of the Army has undertaken careful environmental study of the Property and concluded that the highest and best use of the Property is limited by its environmental condition to commercial/industrial/agricultural uses. In order to protect human health and the environment, promote community objectives, and further the common environmental objectives and land use plans of the Grantor, State of Nebraska, and Grantee, the following covenants and restrictions are included in this deed to assure the use of the Property is consistent with the environmental condition of the Property. The following restrictions and covenants benefit both the lands retained by the Grantor and the general public welfare and are consistent with the State of Nebraska and Federal environmental statutes.

1. Commercial/Industrial/Agricultural Use Restrictions

(a) The Grantee covenants for itself, its successors and assigns, that the Property shall be used solely for commercial industrial and agricultural purposes and not for residential

purposes, the Property having been remediated only for commercial, industrial and agricultural uses. Commercial, Industrial and Agricultural uses include, but are not limited to, administrative/office space, manufacturing, warehousing, restaurants, hotels/motels, and retail activities. Residential use includes, but is not limited to, housing, day care facilities, and schools (excluding education and training programs for persons over 18 years of age), and assisted living facilities.

(b) Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations, such additional remediation necessary to allow for residential use of the Property. Any such additional remediation will be at no additional cost to the Grantor and with the Grantor's prior written consent. Consent may be conditioned upon such terms and conditions, as the Grantor deems reasonable and appropriate, including performance and payment bonds and insurance. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's obtaining the approval of the Army Corps of Engineers, the Environmental Protection Agency (EPA) and the Nebraska Department of Environmental Quality (DEQ) and, if required, any other regulatory agency, the Grantor agrees to release or, if appropriate, modify this restriction by executing and recording, in the same land records of Nebraska, Hall County, as this deed, a Partial Release of Covenant. Grantee shall bear the cost of recording and reasonable administrative fees.

2. Ground Water Notice

Due to past munitions loading, assembly, and packing operations, there is groundwater contamination under portions of the Property. The groundwater contamination consists of RDX, HMX, and TNT. The Grantor has installed a Pump and Treatment Plant, which is in operation to remediate the groundwater contamination. The groundwater remediation operations are expected to continue until 2030. This remediation action was approved by the EPA and Nebraska DEQ in a Record of Decision (ROD), Operable Unit One-Groundwater dated November 1994 and Amendment thereto dated 28 September 2001. Grantor, at its expense, shall remove all equipment and close all monitoring wells in accordance with applicable Nebraska law when the remediation is completed.

3. Enforcement

(a) The above covenant/restrictions shall inure to the benefit of the public in general and adjacent lands, including lands retained by the United States, and, therefore, are enforceable by the United States Government and State of Nebraska. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable.

(b) The Grantee covenants for itself, its successors and assigns that it shall include and otherwise make legally binding the above land use restrictions in all subsequent leases, transfer or conveyance documents relating to the Property subject hereto. Notwithstanding this

provision, failure to include these land use restrictions in subsequent conveyances does not abrogate the status of these restrictions as binding upon the parties, its successors and assigns.

(c) The Grantee, for itself, its successors and assigns, covenants that it will not undertake or allow any activity on or use of the Property that would violate the land use restrictions contained herein.

(d) Notwithstanding any other provision of this Deed; any agreement between the Grantee and the Grantor; the provisions of CERCLA, including CERCLA Section 120(h)(3), as amended, the Grantee on behalf of itself, its successors and assigns, covenants and agrees that the Grantee or the then record owner of the Property will be fully responsible for any investigation and/or remediation of hazardous substances, pollutants or contaminants, or petroleum or petroleum derivatives, to the extent that such investigation and/or remediation becomes necessary in response to a violation of this Subsection IV.f., or of the negative easement in Section I.

4. Submissions

Modifications of Restrictions. The Grantee shall submit any requests to use the Property for residential purposes, access or use the ground water, install monitoring wells, or other modification to the above restrictions to Grantor, with a copy to EPA and Nebraska DEQ, by first class mail, postage prepaid, addressed as follows:

- | | |
|-------------------|---|
| (a) to Grantor: | Corps of Engineers, Omaha District
ATTN: CENWO-RE-M
106 South 15th Street
Omaha, NE 68102-1618 |
| (b) to EPA: | U.S. Environmental Protection Agency, Region VII
901 North 5th Street
Kansas City, KS 66101 |
| (c) to STATE EPA: | Nebraska Department of Environmental Quality
P.O. Box 98922
Lincoln, NE 68509-8922 |

V. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land described in Section IV of this Quitclaim Deed. In addition, Grantor and its successors and assigns, shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in

any court of competent jurisdiction. Notwithstanding the foregoing, Grantor, and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by Grantee, for itself and its successors and assigns, that except for warranties, responsibilities and agreements of Grantor specifically set forth herein, the Property is conveyed "*as is*" and "*where is*" without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property. Grantee, for itself and its successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property nor any agreement or promise to alter, improve, adapt or repair the Property.

b. The Grantee, its successors and assigns, shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grants of any interest, privilege, or license.

VI. AGREEMENTS, NOTICES AND CONDITIONS

a. Anti-Deficiency Act

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of appropriated funds to the Department of the Army, and nothing in this deed shall be interpreted to require obligations or payment by the Grantor in violation of the Anti-Deficiency Act.

b. Wetlands Notice

A portion of the Property contains wetlands.

c. Rail Use Agreement Between DTE Rail Services, Inc., and County of Hall, Nebraska

Use of the conveyed railroad facilities and rights-of-way will be in accordance with the provisions set forth in the AGREEMENT AND DECLARATION OF COVENANTS, RESTRICTIONS AND CONDITIONS, dated 17 December 2002, between DTE Rail Services, Inc., and County of Hall, Nebraska, attached hereto as **Exhibit "C"** and made a part hereof.

VII. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to the following:

1. Easement No. DACA45-2-99-6157 granted to Hall County for road rights-of-way.
2. Easement No. DACA45-2-99-6023 granted to Hall County for road rights of way.
3. Easement No. DACA45-2-97-6024 granted to Southern Nebraska Rural Public Power District for electric power-line and substation rights-of-way.
4. Department of the Army Lease No. DACA45-1-79-6041 granted to DTE Rail Services, Inc., for lease of certain railroad facilities located on the CHAAP. The Grantor upon conveyance of the Property described in this deed will amend the said lease and delete the conveyed Property from the leased premises.

b. Any zoning laws, ordinances, or regulations governing the subject Property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the Property or the property records and by a properly conducted survey of the Property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements that may affect the Property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective successors and assigns, which affects any portion of the Property interest(s) hereinabove described.

g. Installation Commander agreements, whether or not of record or otherwise approved in writing by Grantee.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

200407897

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be hereunto affixed this 19th day of July, 2004.

UNITED STATES OF AMERICA

By: Joseph W. Whitaker
JOSEPH W. WHITAKER
Deputy Assistant Secretary of the Army
(Installations and Housing)
DASA(I&E)

COMMONWEALTH OF VIRGINIA)
)ss
COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 30th day of November, 2006, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and acknowledged the foregoing instrument to be his free act and deed, dated this 19th day of July, 2004, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.

Laura A. Cooper
Notary Public

My commission expires: 30 November 2006



GRANTEE ACCEPTANCE

The undersigned Grantee, does hereby accept the herein-described Property, subject to the notices, agreements, reservations, restrictions, conditions, covenants and exceptions hereinabove expressed.

Executed this 13th day of April, 2004, in Washtenaw County, State of Michigan.

DTE Rail Services, Inc.

BY: Evan J. O'Neal

TITLE: Chief Executive Officer

STATE OF MICHIGAN)
) ss
COUNTY OF WASHTENAW)

The foregoing Quitclaim Deed was acknowledged before me this 13 day of April, 2004, by Evan J. O'Neal.

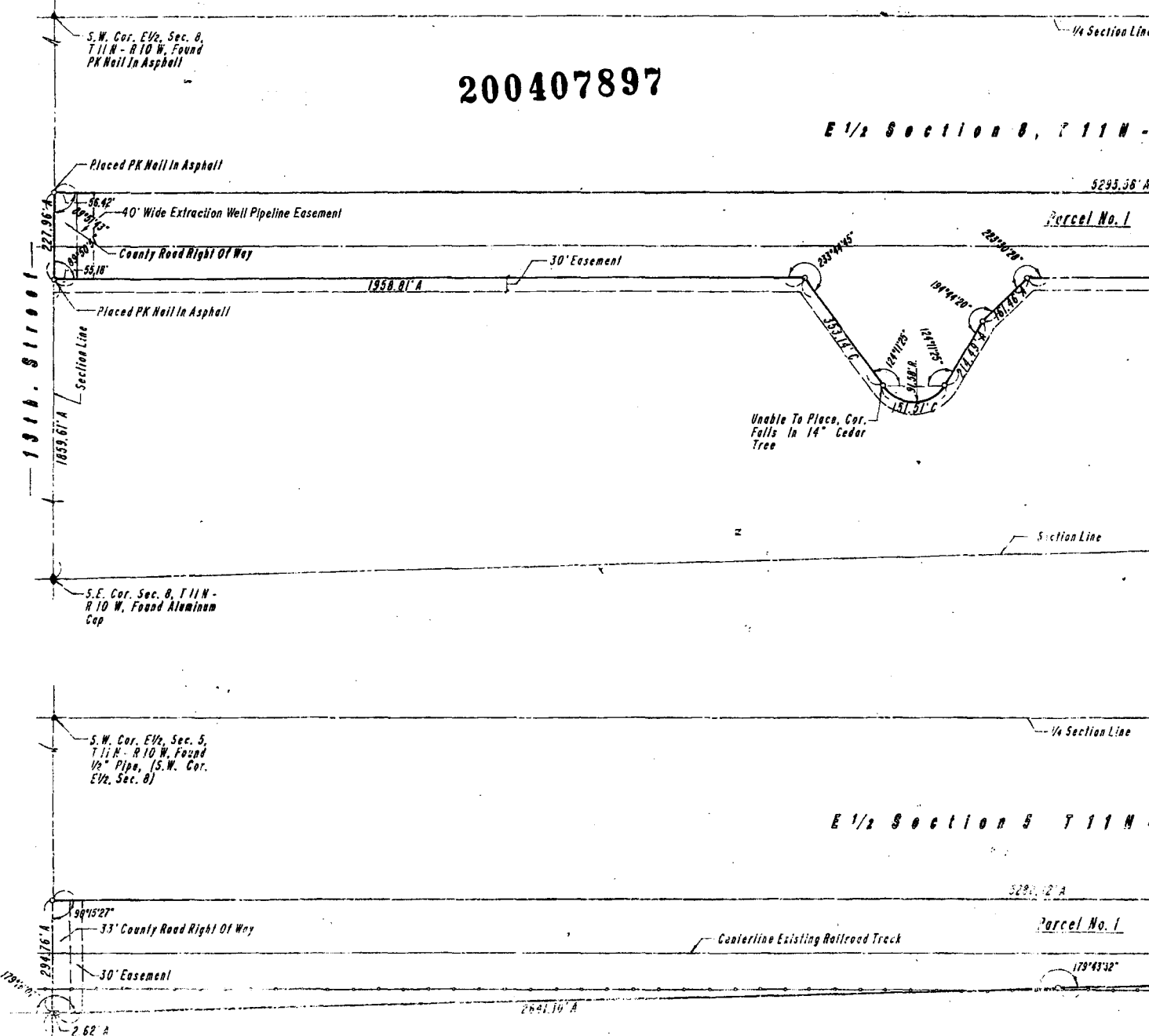
Jorie Bowbeer
Notary Public

My commission expires: 9/2/2007



200407897

E 1/2 Section 8, T 11 N -



LEGAL DESCRIPTION (Parcel No. 1)

A tract of land located in the east half (E1/2) of Sections Five (5) and Eight (8), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., in Hall County, Nebraska, more particularly described as follows:

Beginning at the northeast corner of said Section Five (5); thence running westerly along the north line of said Section Five (5), a distance of One Thousand Seven Hundred Eighty (1780.0) feet, to the ACTUAL point of beginning; thence deflecting left 9°55'37" and running southerly a distance of Two Thousand Six Hundred Forty Seven and Seventeen Hundredths (2647.17) feet; thence deflecting right 00°16'28" and running southerly a distance of Two Thousand Six Hundred Forty One and One Tenth (2641.10) feet; thence deflecting right 00°41'53" and running southerly a distance of Two and Sixty Two Hundredths (2.62) feet, to a point on the south line of said Section Five (5), and to a point on the north line of said Section Eight (8), said point being One Thousand Seven Hundred Seventy Nine and Ninety Six Hundredths (1779.96) feet west of the northeast corner of said Section Eight (8); thence continuing southerly along the last described course, a distance of One Thousand Three Hundred Seventy Nine and Eleven Hundredths (1379.11) feet; thence deflecting right 90°57'16" and running westerly a distance of One Hundred Five and Thirty One Hundredths (105.31) feet; thence deflecting left 90°15'22" and running southerly a distance of One Thousand Three Hundred Sixty Four and Thirty Four Hundredths (1364.34) feet; thence deflecting left 43°30'28" and running southeasterly a distance of One Hundred Sixty One and Forty Six Tenths (161.46) feet; thence deflecting left 14°44'20" and running southeasterly a distance of Two Hundred Fourteen and Forty Nine Hundredths (214.49) feet, to a point of curvature; thence running southwestwesterly along the arc of a curve to the right whose radius is Ninety One and Fifty Eight Hundredths (91.58) feet, the long chord of which deflects right 55°48'35" from the last described course, a long chord distance of One Hundred Fifty One and Fifty One Hundredths (151.51) feet, to a point of tangency; thence deflecting right 55°48'35" from the last described course and running southwestwesterly a distance of Three Hundred Fifty Three and Fourteen Hundredths (353.14) feet; thence deflecting left 53°44'45" and running southerly a distance of One Thousand Nine Hundred Fifty Eight and Eighty One Hundredths (1958.81) feet, to a point on the south line of said Section Eight (8), said point being One Thousand Eight Hundred Fifty Nine and Sixty One Hundredths (1859.61) feet west of the southeast corner of said Section Eight (8); thence deflecting right 30°09'09" and running westerly along the south line of said Section Eight (8), a distance of Two Hundred Twenty Seven and Ninety Six Hundredths (227.96) feet; thence deflecting right 90°08'17" and running northerly a distance of Five Thousand Two Hundred Ninety Five and Fifty Eight Hundredths (5295.58) feet, to a point on the north line of said Section Eight (8) and the south line of said Section Five (5); thence deflecting left 00°00'08" and running northerly a distance of Five Thousand Two Hundred Eighty Eight and Eighty Two Hundredths (5288.82) feet, to a point on the north line of said Section Five (5); thence deflecting right 90°20'27" and running easterly along the north line of said Section Five (5), a distance of One Hundred Sixty and Seventy Five Hundredths (160.75) feet, to the ACTUAL point of beginning and containing 59.328 acres more or less, of which 0.921 acres more or less is presently occupied by public road right of way. Net 58.405 acres more or less.

ACCESS

A tract of land located in the east half (E1/2) of Sections Five (5) and Eight (8), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., in Hall County, Nebraska, more particularly described as follows:

Beginning at the northeast corner of said Section Five (5); thence running westerly along the north line of said Section Five (5), a distance of One Thousand Seven Hundred Eighty (1780.0) feet, to the ACTUAL point of beginning; thence deflecting left 9°55'37" and running southerly a distance of Two Thousand Six Hundred Forty Seven and Seventeen Hundredths (2647.17) feet; thence deflecting right 00°16'28" and running southerly a distance of Two Thousand Six Hundred Forty One and One Tenth (2641.10) feet; thence deflecting right 00°41'53" and running southerly a distance of Two and Sixty Two Hundredths (2.62) feet, to a point on the south line of said Section Five (5), and to a point on the north line of said Section Eight (8), said point being One Thousand Seven Hundred Seventy Nine and Ninety Six Hundredths (1779.96) feet west of the northeast corner of said Section Eight (8); thence continuing southerly along the last described course, a distance of One Thousand Three Hundred Seventy Nine and Eleven Hundredths (1379.11) feet; thence deflecting right 90°57'16" and running westerly a distance of One Hundred Five and Thirty One Hundredths (105.31) feet; thence deflecting left 90°15'22" and running southerly a distance of One Thousand Three Hundred Sixty Four and Thirty Four Hundredths (1364.34) feet; thence deflecting left 43°30'28" and running southeasterly a distance of One Hundred Sixty One and Forty Six Tenths (161.46) feet; thence deflecting left 14°44'20" and running southeasterly a distance of Two Hundred Fourteen and Forty Nine Hundredths (214.49) feet, to a point of curvature; thence running southwestwesterly along the arc of a curve to the right whose radius is Ninety One and Fifty Eight Hundredths (91.58) feet, the long chord of which deflects right 55°48'35" from the last described course, a long chord distance of One Hundred Fifty One and Fifty One Hundredths (151.51) feet, to a point of tangency; thence deflecting right 55°48'35" from the last described course and running southwestwesterly a distance of Three Hundred Fifty Three and Fourteen Hundredths (353.14) feet; thence deflecting left 53°44'45" and running southerly a distance of One Thousand Nine Hundred Fifty Eight and Eighty One Hundredths (1958.81) feet, to a point on the south line of said Section Eight (8), said point being One Thousand Eight Hundred Fifty Nine and Sixty One Hundredths (1859.61) feet west of the southeast corner of said Section Eight (8); thence deflecting right 30°09'09" and running westerly along the south line of said Section Eight (8), a distance of Two Hundred Twenty Seven and Ninety Six Hundredths (227.96) feet; thence deflecting right 90°08'17" and running northerly a distance of Five Thousand Two Hundred Ninety Five and Fifty Eight Hundredths (5295.58) feet, to a point on the north line of said Section Eight (8) and the south line of said Section Five (5); thence deflecting left 00°00'08" and running northerly a distance of Five Thousand Two Hundred Eighty Eight and Eighty Two Hundredths (5288.82) feet, to a point on the north line of said Section Five (5); thence deflecting right 90°20'27" and running easterly along the north line of said Section Five (5), a distance of One Hundred Sixty and Seventy Five Hundredths (160.75) feet, to the ACTUAL point of beginning and containing 59.328 acres more or less, of which 0.921 acres more or less is presently occupied by public road right of way. Net 58.405 acres more or less.

[illegible]

Old Road — Section Line 2647.17' A

2510 NORTH WEBB ROAD GRAND ISLAND, NEBRASKA 68802		P.O. BOX 54 PHONE (308) 382-1471	
<u>LAND SURVEY</u>			
Pl. E1/2, Sections 5 And 8, T11N - R10W Hall County, Nebraska			
SUBMITTED BY:		DRAWN BY: Deryl S.	
CHECKED BY: A.R.R.		SHEET No.	OWN. No.
APPROVED BY:		101	
DATE: June 29, 2000		REVISIONS December 4, 2000 June 24, 2001 January 24, 2001	
SHEET No.			

- 1/4 Section Line

E 1/2, Section 29, T 11 N - R

-E 1/4 Cor. Sec. 2
T 11 N - R 10
Found 1/2" Pipe

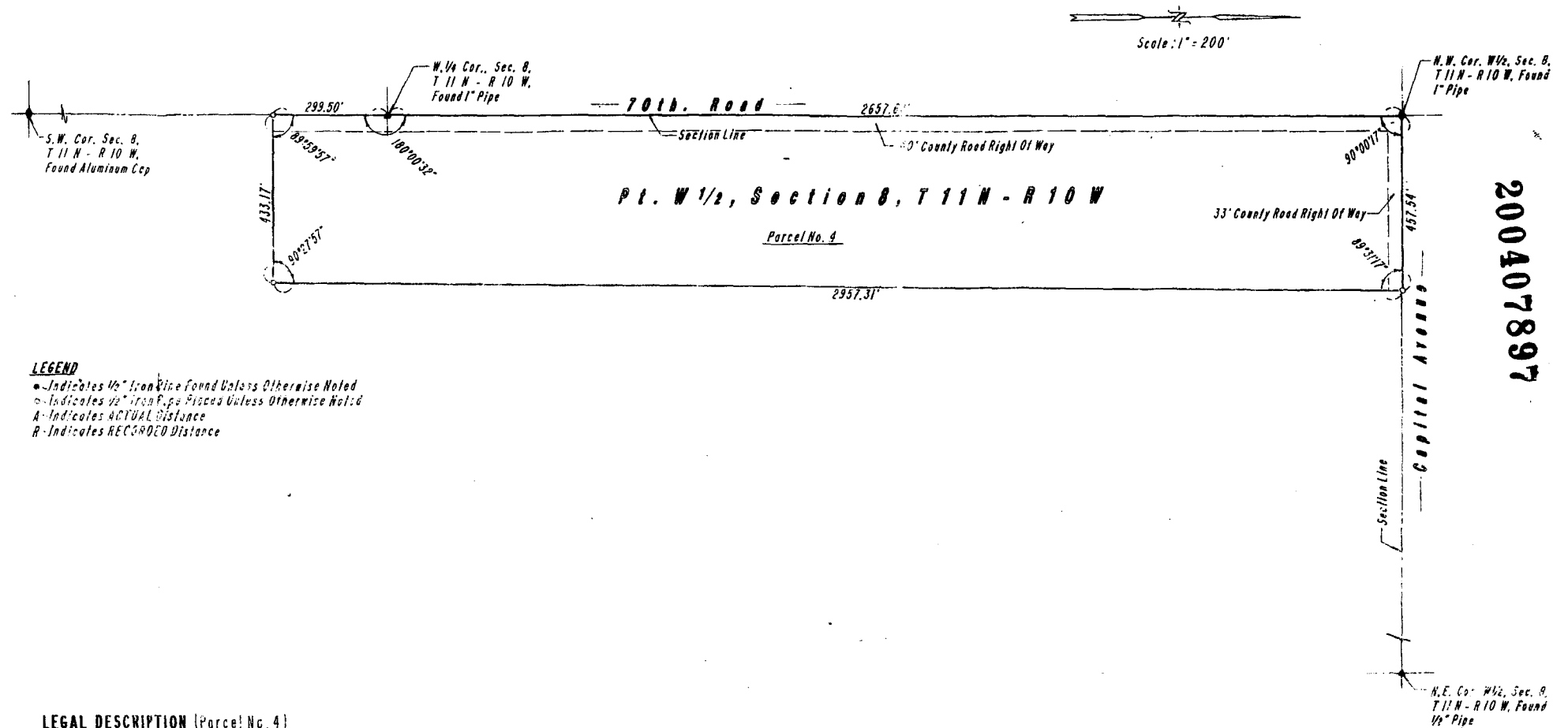
E 1/2, Section 20, T 11 N. R

— 1/4 Section Line

E 1/4 Cor. Sec.
 T 11 N - R 10
 Found 1/2" Pipe

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.





LEGAL DESCRIPTION [Parcel No. 4]

A tract of land comprising a part of the West Half (W $\frac{1}{2}$), of Section Eight (8), Township Eleven (11) North, Range Ten (10) West of the 6th P.M. in Hall County, Nebraska, more particularly described as follows:

Beginning at the northwest corner of said West Half (W $\frac{1}{2}$); thence running easterly along the north line of said West Half (W $\frac{1}{2}$), a distance of Four Hundred Fifty Seven and Fifty Four Hundredths (457.54) feet; thence deflecting right 90° 28' 43" and running southerly a distance of Two Thousand Nine Hundred Fifty Seven and Thirty One Hundredths (2957.31) feet; thence deflecting right 89° 32' 03" and running westerly a distance of Four Hundred Thirty Three and Seventeen Hundredths (433.17) feet, to a point on the west line of said West Half (W $\frac{1}{2}$); thence deflecting right 90° 00' 03" and running northerly along the west line of said West Half (W $\frac{1}{2}$), a distance of Two Hundred Ninety Nine and Five Tenths (299.50) feet, to the West Quarter Corner of said Section Eight (8); thence deflecting left 00° 00' 32" and continuing northerly along the west line of said West Half (W $\frac{1}{2}$), a distance of Two Thousand Six Hundred Fifty Seven and Sixty Two Hundredths (2657.62) feet, to the point of beginning, and containing 30.221 acres more or less, of which 3.032 acres more or less is presently occupied by public road right of way. Net 27.199 acres more or less.

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

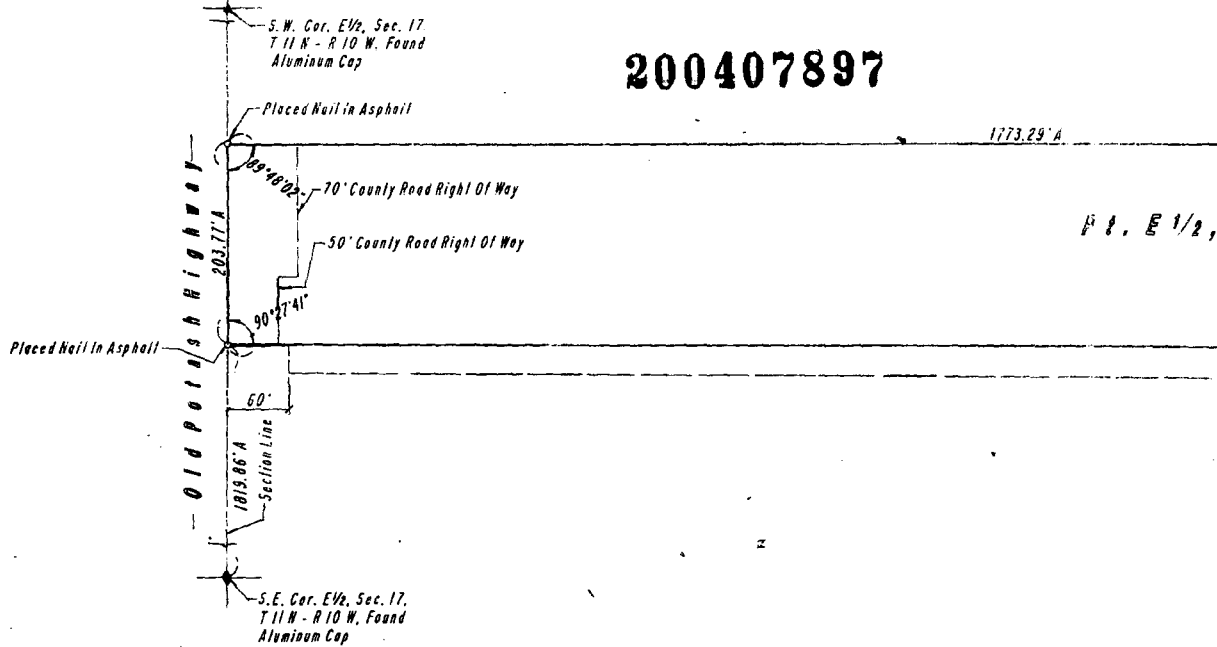


Ronald R. Rockwell
Ronald R. Rockwell L.S. 349

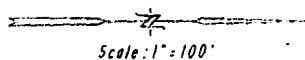
**EXHIBIT "A-3" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED**

LAND SURVEY			
Pt. W $\frac{1}{2}$, Section 8, T 11 N - R 10 W			
Hall County, Nebraska			
SUBMITTED BY:	DRAWN BY: Deryl S.	CHECKED BY: R.R.R.	DATE: No.
		SHEET No.	QWS. No.

200407897



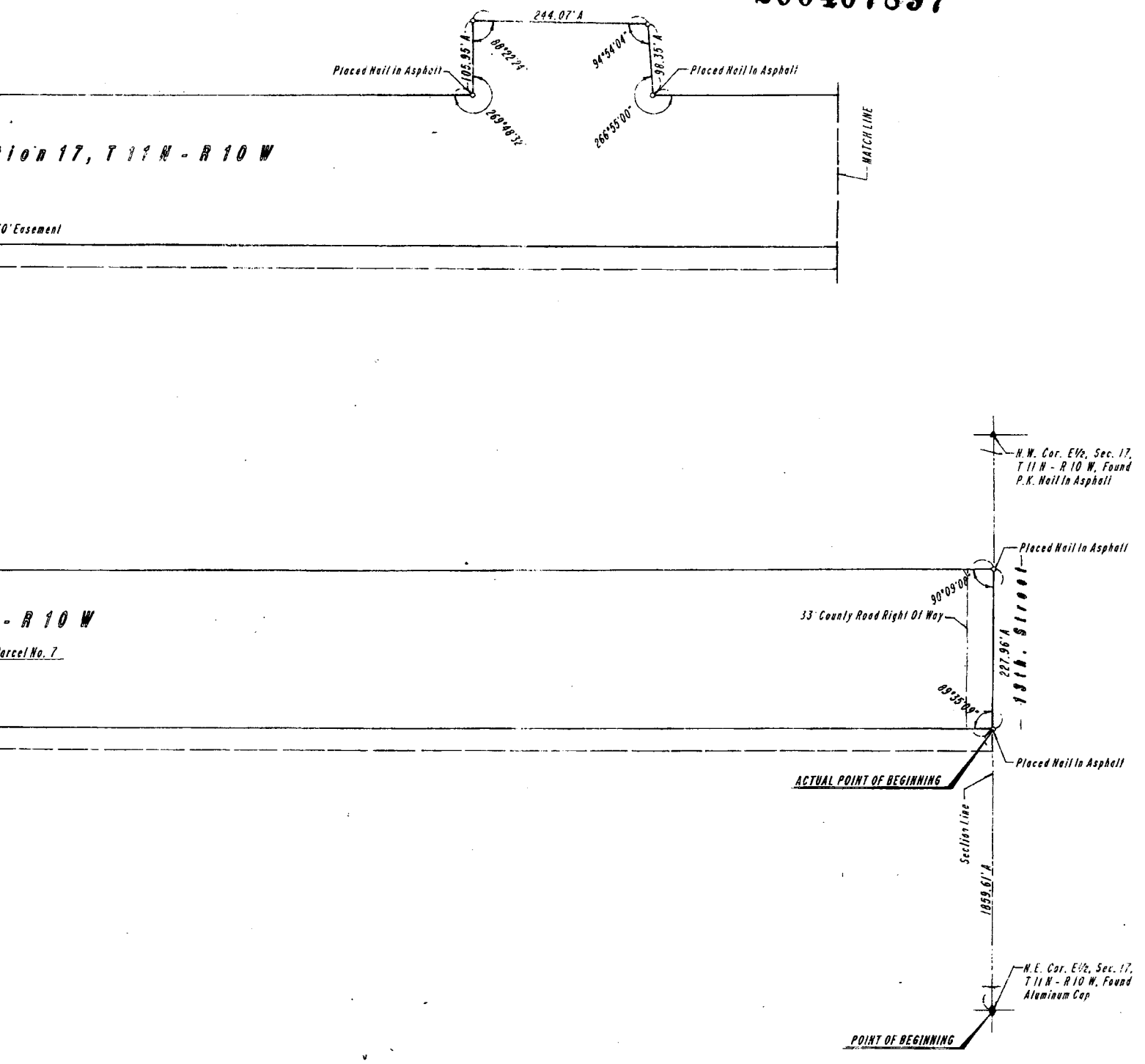
LEGEND
• Indicates 1/2" Iron Pipe Found Unless Otherwise Noted
○ Indicates 1/2" Iron Pipe Placed Unless Otherwise Noted
A - Indicates ACTUAL Distance
R - Indicates RECORDED Distance



LEGAL DESCRIPTION (Parcel No. 7)

A tract of land comprising a part of the East Half (E1/2) of Section Seventeen (17), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., Hall County, Nebraska, more particularly described as follows:
Beginning at the northeast corner of said East Half (E1/2); thence running westerly along the north line of said East Half (E1/2), a distance of One Thousand Eight Hundred Fifty Nine and Sixty One Hundredths (1859.61) feet, to the ACTUAL point of beginning; thence deflecting left 89°35'09" and running southerly a distance of Five Thousand Two Hundred Eighty Eight and Six Hundredths (5288.06) feet, to a point on the south line of said East Half (E1/2); thence deflecting right 89°32'19" and running westerly along the south line of said East Half (E1/2), a distance of Two Hundred Three and Seventy Seven Hundredths (203.77) feet; thence deflecting right 90°11'58" and running northerly a distance of One Thousand Seven Hundred Seventy Three and Twenty Nine Hundredths (1773.29) feet; thence deflecting left 89°48'32" and running westerly a distance of One Hundred Five and Ninety Five Hundredths (105.95) feet; thence deflecting right 91°37'36" and running northerly a distance of Two Hundred Forty Four and Seven Hundredths (244.07) feet; thence deflecting right 85°05'56" and running easterly a distance of Ninety Eight and Thirty Five Hundredths (98.35) feet; thence deflecting left 86°55'00" and running northerly a distance of Three Thousand Two Hundred Sixty Five and Twenty Four Hundredths (3265.24) feet, to a point on the north line of said East Half (E1/2); thence deflecting right 89°50'52" and running easterly along the north line of said East Half (E1/2), a distance of Two Hundred Twenty Seven and Ninety Six Hundredths (227.96) feet, to the ACTUAL point of beginning and containing 26.784 acres more or less of which 0.471 acres more or less is presently occupied by public road right of way Net 26.313 acres more or less

200407897



SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.



Ronald R. Rockwell
Ronald R. Rockwell, Reg. Land Surveyor No. 349

**EXHIBIT "A-4" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED**

ROCKWELL ASSOC. 2540 NORTH WEST HORN GRAND ISLAND, NEBRASKA 68802 P.O. BOX 549 PHONE (308) 382-1472	
LAND SURVEY Pl. E1/2, Section 17, T11N - R10W Hall County, Nebraska	
SUBMITTED BY:	DRAWN BY: Deryl S.
CHECKED BY: R.R.R.	SHEET No. 1011
APPROVED BY:	DWG. No.
DATE: June 29, 2000	REVISIONS
PROJECT No.	January 24, 2001

Notification Hazardous Substance Storage, Release, and Disposal			
Parcel Description	Name of Hazardous Substance(s)	Date of Storage, Release, or Disposal	Remedial Actions
RAILROAD TRACKS	RDX and other explosive compounds	Past ordnance production and disposal since 1942. (Released)	Portions of the tracks lie over the RDX plume. CHAAP has installed a Pump and Treatment Plant, which is in operation to remediate the groundwater contamination. Record of Decision (ROD) for Operable Unit One - Groundwater. Letters concurring with the FOST, the Army's decision to transfer and the Hall County Reuse Authority Plan proposing to transfer these parcels of property to DTE Rail Car Service, Inc. were received from EPA Region VII on 3 May 2001 and from NDEQ on 6 March 2000.
CLASSIFICATION YARD	RDX and other explosive compounds	Past ordnance production and disposal since 1942 (Released)	The RDX plume lies beneath a portion of the land in the classification yards. CHAAP has installed a Pump and Treatment Plant, which is in operation to remediate the groundwater contamination. Record of Decision (ROD) for Operable Unit One - Groundwater. Letters concurring with the FOST, the Army's decision to transfer and the Hall County Reuse Authority Plan proposing to transfer these parcels of property to DTE Rail Car Service, Inc. were received from EPA Region VII on 3 May 2001 and from NDEQ on 6 March 2000.
59 ACRES - Parcel #1 Approximately 59 acres of land between Airport Road and 13th Street and between the centerline of the north-south rail lines and a line 140 feet west of and parallel to said centerline.	RDX and other explosive compounds	Past ordnance production and disposal since 1942. (Released)	A portion of the RDX plume lies in the southeast corner under a part of this 59 parcel of land. CHAAP has installed a Pump and Treatment Plant, which is in operation to remediate the groundwater contamination. Record of Decision (ROD) for Operable Unit One - Groundwater. Letters concurring with the FOST, the Army's decision to transfer and the Hall County Reuse Authority Plan proposing to transfer these parcels of property to DTE Rail Car Service, Inc. were received from EPA Region VII on 3 May 2001 and from NDEQ on 6 March 2000.
Determined and Prepared by: Ms. Jo Short	Title: Realty Specialist	Site: Cornhusker AAP	Location: Grand Island, Nebraska 68803 EXHIBIT "B"

EXHIBIT "B" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED

**AGREEMENT AND DECLARATION OF
COVENANTS, RESTRICTIONS AND CONDITIONS**

This Agreement and Declaration (this "Agreement"), dated December 17, 2002, is between DTE Rail Services, Inc., a Michigan corporation ("DTERS") and the County of Hall, a political subdivision of the State of Nebraska (the "County").

RECITALS

A. Pursuant to Public Law 103-337, Section 2836 and Resolution Number 98-0030B (the "Resolution") of the Hall County Board of Supervisors (the "Board"), DTERS is the designated transferee from the Department of Defense of certain designated tracts, rail easements and railroad track (the "DTERS Designated Property") located in the Cornhusker Army Ammunition Plant ("CAAP") and more particularly described in the Resolution which includes the North-South Rail Line, as defined below and described in Exhibit A attached hereto. A Legal description of the CAAP is attached hereto as Exhibit B.

B. Pursuant to the Resolution, DTERS is required to enter into an agreement with the County of Hall incorporating certain conditions, restrictions and covenants contained in the Resolution.

C. Pursuant to Public Law 103-337, Section 2836 and Resolution Number 02-0030a of the Board, Nebraska Public Power District, a public corporation and political subdivision of the State of Nebraska ("NPPD") is the designated transferee from the DOD of certain other designated tracts described (subject to final deed) in Exhibit C attached hereto (the "NPPD Designated Property") located in the CAAP.

D. This Agreement sets forth the conditions, covenants and restrictions agreed to and declared by DTERS and accepted by the County in complete satisfaction of the requirements of Paragraph 2 of the Resolution, as the same may be amended.

AGREEMENT AND DECLARATIONS

DTERS hereby declares, and DTERS and the County hereby agree as follows:

1. Private Rail Crossings

DTERS agrees to grant easements and/or rights-of-way, without charge or compensation therefor, for necessary private crossings of roads over DTERS' railroad easements and track to owners of parcels located in the CAAP whose property is divided by such easements and track. The grantee of such private crossings shall bear all costs of construction and maintenance of such crossings and shall comply, at its sole expense, with all applicable federal, state, local and industry association, laws, rules, regulations, standards and guidelines; provided, however, any construction or maintenance of such crossings shall not interfere with the operation of the North-South Rail Line. In the event such crossings are requested, the requesting party shall provide DTERS with reasonable prior notice of any proposed crossing and the parties shall cooperate to minimize disruption to the use of the North-South Rail Line.

2. Public Rail Crossings

**EXHIBIT "C" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED**

DTERS shall be responsible for maintaining or causing to be maintained public rail crossings at all points where county roads cross DTERS' railroad easements.

3. North-South Rail Line

DTERS shall provide or otherwise make available rail service upon the north-south rail line linking the Burlington Northern Santa Fe mainline tracks and the Union Pacific Railroad mainline tracks (the "North-South Rail Line") to or for the benefit of owners of property located in the NPPD Designated Property and those owners of property within the CAAP with access to the North-South Rail Line. DTERS will satisfy its obligations to provide such rail service either by (a) establishing an affiliated entity which is a common carrier railroad as provided in 49 USC § 10102(5) (and applicable case law) with the duty to provide service upon reasonable request as provided in 49 USC § 11101 and the authority to enter into railroad transportation contracts pursuant to 49 USC § 10709 or (b) arranging for a third-party common carrier railroad to provide service on the North-South Rail Line. DTERS will provide or make available common carrier rail service at such time as service is required, upon reasonable prior notice from an owner of property located in the NPPD Designated property or the Southern Public Power District ("SPPD") Designated Property. The common carrier railroad shall be entitled to impose transportation rates and charges for such service that are agreed to with the rail shipper in a rail transportation contract, or are in accordance with the requirements applying to rates of common carrier railroads as provided in 49 USC § 10701-10705, including the requirement that rates for market dominant rail traffic must be reasonable. DTERS shall be entitled to impose reasonable rental fees and terms for the use of the North-South Rail Line by the common carrier railroad. In the event that NPPD constructs an electric generating station or other facility on such property and requires "unit train" rail service (entire trains of 100 or more railcars moving in shuttle service from origin to destination and back) to such facility, DTERS will if requested by such owner negotiate in good faith with respect to the granting of non-exclusive overhead trackage rights to the connecting carrier carriers that will deliver such trains to the North-South Rail Line, in order to permit the delivering carrier or carriers to operate such trains over the North-South Rail Line all the way to the destination facility. DTERS shall have the right to insist on reasonable terms and conditions, including compensation, for any such trackage rights operations, and DTERS (or the common carrier railroad designated under (a) or (b) above, as the case may be) shall retain control over access to and operations on the North-South Rail-Line. Except as specifically provided in this section, DTERS shall have no obligation to provide, or to permit others to provide rail service in, to, or for the benefit of, any party, or upon any trackage in the CAAP other than the North-South Rail Line. Neither DTERS nor the common carrier railroad shall have any obligation to construct or maintain any connections, spurs, sidetracks or other rail facilities connecting to the North-South Rail Line except as may be required under the Interstate Commerce Act, 49 USC § 10101, et seq. DTERS shall allow a switch connection to the North-South Rail Line with any private spur track connecting to the NPPD Designated Property and to those owners of property within the CAAP with access to the North-South Rail Line provided the cost of such switch connection is paid by the spur track owner.

4. Maintenance of Rail and Rail Right of Way

DTERS shall be responsible for the maintenance of all track and railroad easements included in the DTERS Designated Property in their current condition, or if upgraded or

replaced, consistent with applicable law and industry practice. DTERS may require third parties to satisfy this obligation pursuant to agreement but shall remain primarily liable so long as it retains title to the property in question.

5. Utility Crossings.

DTERS agrees to grant, without charge for such grant, to public utilities or their franchisees reasonable and necessary utility crossings, over or under its railroad easements for the benefit of owners of land located within the CAAP; provided however, any construction, installation or maintenance by such public utilities or franchisees over or under the railroad easements shall not interfere with the operation of the North-South Rail Line. In the event such a crossing is requested, the requesting party shall provide DTERS with reasonable prior notice of any proposed construction, installation or maintenance and the parties shall cooperate to minimize any disruption to the use of the North-South Rail Line.

6. Covenants Run With the Land

The covenants of DTERS contained in this Agreement shall run with the land at law and shall be binding on DTERS and all persons claiming by, through, or under DTERS unless and until released.

7. Deed Restrictions

DTERS agrees that it shall not sell or convey (other than non-exclusive track leases, trackage rights, or other non-exclusive track usage arrangements, utility and crossing easements and the like) any interest in the DTERS Designated Property without including in the granting instrument the covenants and restrictions contained in this Agreement.

8. Release

The restrictions and covenants contained in this Agreement may be released in whole or in part at any time by written instrument executed by the record owners of at least sixty percent (60%) of the property located in the NPPD Designated Property and the property being served by the North-South Rail Line.

9. Satisfaction of Resolution

The County hereby acknowledges that this Agreement satisfies all of the requirements of Paragraph 2 of the Resolution.

10. Recording.

This Agreement shall be recorded in the official real property records of Hall County in the County's Office of Register of Deeds as soon as practicable, and the covenants, condition and restrictions are to run with the DTERS Designated Property and bind future transferees of all or any portion of the DTERS Designated Property.

WITNESSES

WITNESSES

C. Wanda Christman
Cindy Sulzner

DTE RAIL SERVICES, INC.

By: [Signature]
Its: Vice President & General Manager

**COUNTY OF HALL, STATE OF
NEBRASKA**

James M. Ericksen
Robert Hunter

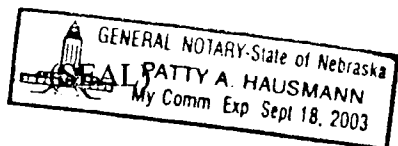
By: Arnold E. Laster
Its: Chairman of the Board

[illegible]

The foregoing Agreement and Declaration of Covenants, Restrictions and Conditions was acknowledged before me this 4th day of December 2002 by STEPHEN CHRISTIAN as VICE PRES. & GEN. MANAGER of DTE Rail Services, Inc., on behalf of the corporation.

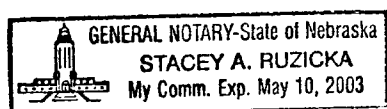
Patsy A. Hausman

Notary Public
Hall County, Nebraska
My Commission Expires: Oct. 18, 2003

[illegible]

The foregoing Agreement and Declaration of Covenants, Restrictions and Conditions was acknowledged before me this 31 day of December, 2002 by Pamela Lancaster as Chairman of the Board of the County of Hall, Nebraska on behalf of the County.

(SEAL)



Stacey A. Quilley
Notary Public
Hall County, Nebraska
My Commission Expires: 5-10-03

EXHIBIT ALEGAL DESCRIPTION OF PROPERTY OCCUPIED BY THENORTH-SOUTH MAIN RAILROAD TRACKCORNHUSKER ARMY AMMUNITION PLANTHALL COUNTY, NEBRASKA

A tract of land consisting of the property occupied by the North-South railroad line linking the Burlington Northern Santa Fe Railroad mainline tracks and the Union Pacific Railroad mainline tracks and comprising a part of the East Half (E1/2) of Section Five (5), a part of the East Half (E1/2) of Section Eight (8), a part of the East Half of Section Seventeen (17), a part of the East Half (E1/2) of Section Twenty (20), and a part of the East Half (E1/2) of Section Twenty Nine (29), all being in Township Eleven (11) North, Range Ten (10) West of the 6th P.M., Hall County, Nebraska.

EXHIBIT BLEGAL DESCRIPTION OF OVERALL CORNHUSKER ARMY AMMUNITION PLANT HALLCOUNTY, NEBRASKA(PER HALL COUNTY MAP)

A tract of land formerly known as the Cornhusker Army Ammunition Plant comprising all of Sections Five (5), Six (6), Seven (7), Eight (8), Seventeen (17), Eighteen (18), Nineteen (19), Twenty (20), Twenty Nine (29) and Thirty (30), all being in Township Eleven (11) North, Range Ten (10) West of the 6th P.M., Hall County, Nebraska, and all of Sections One (1), Two (2), Eleven (11), Twelve (12), Thirteen (13), Fourteen (14), Twenty Three (23), Twenty Four (24), Twenty Five (25), and Twenty Six (26), all being in Township Eleven (11) North, Range Eleven (11) West of the 6th P.M., Hall County, Nebraska.

EXHIBIT C
NPPD DESIGNATED PROPERTY

RESOLUTION #02-0030A

**A RESOLUTION DESIGNATING NEBRASKA PUBLIC POWER DISTRICT
AS TRANSFEREE OF PROPERTY LOCATED AT THE
CORNHUSKER ARMY AMMUNITION PLANT**

WHEREAS, Public Law 103-337, sec. 2836 authorizes the Secretary of the Army to convey to the Hall County, Nebraska, Board of Supervisors or its designee all right, title and interest of the United States in and to the real property that is the site of the Cornhusker Army Ammunition Plant, hereinafter referred to as "CAAP," for fair market value, said property to be used in a manner consistent with the CAAP Reuse Committee's Comprehensive Reuse Plan, hereinafter referred to as the "Reuse Plan"; and

WHEREAS, Nebraska Public Power District has proposed a plan to utilize the real estate described herein for development of a power plant; and

WHEREAS, the use of said property for industrial use is consistent with the CAAP Reuse Committee's Comprehensive Reuse Plan.

BE IT RESOLVED, the Hall County Board of Supervisors hereby designates Nebraska Public Power District, hereinafter referred to as "NPPD," as the transferee of the following lands located at the Cornhusker Army Ammunition Plant, to wit:

All of tracts 32, 33, 35, 36, and a portion of tract 37 as marked on attachment "A"

BE IT FURTHER RESOLVED, the above described transfers shall be subject to the following conditions, restrictions, and limitations:

1. Survey And Changes In Descriptions And Parcels. The above description of land is approximate and intended to describe only the general area to be conveyed to NPPD. NPPD shall furnish a perimeter survey of said parcel to the Hall County Board of Supervisors. The Hall County Board of Supervisors and the CAAP Reuse Committee may require changes to any parcel description, boundary, or dimensions or require designations of easements as necessary to accommodate the needs of the County of Hall or the CAAP Reuse Committee.
2. Abandonment Of Designation. The County of Hall may rescind and cancel this designation in whole or in part if the designation is abandoned by NPPD.
3. Transfer And Assignments. This designation of NPPD as transferee shall not be assigned or transferred by NPPD except with written prior consent of the Hall County Board of Supervisors

4. Obligations To Inform County. NPPD shall inform the Hall County Board in a timely manner of activities and communications between NPPD and the Department of the Army relative to the conveyance of the above properties.
5. Amendments. The terms of this resolution may be modified or amended upon written agreement of the County and NPPD.
6. Use Of Property. NPPD shall use the aforesaid property in a manner consistent with the CAAP Reuse Committee's Comprehensive Reuse Plan.
7. Previous Designations and Conveyances. The lands herein identified as all of tracts 32, 33, 35, 36, and a portion of tract 37 as marked on attachment "A" shall not include nor be interpreted as including any easement, tract, or parcel for which as transferee has been previously designated by the Hall County Board of Supervisors, nor shall it include any easement, tract or parcel previously conveyed by the Secretary of the Army.

RESOLUTION MOVED BY Jim Eriksen

SECONDED BY Scott Arnold

Vote:

Supervisor Arnold:

For X; Against ___; Abstained ___; Not Present ___.

Supervisor Eriksen:

For X; Against ___; Abstained ___; Not Present ___.

Supervisor Hartman:

For X; Against ___; Abstained ___; Not Present ___.

Supervisor Humiston:

For X; Against ___; Abstained ___; Not Present ___.

Supervisor Jeffries:

For X; Against ___; Abstained ___; Not Present ___.

Supervisor Lancaster:

For X; Against ___; Abstained ___; Not Present ___.

Supervisor Logan:

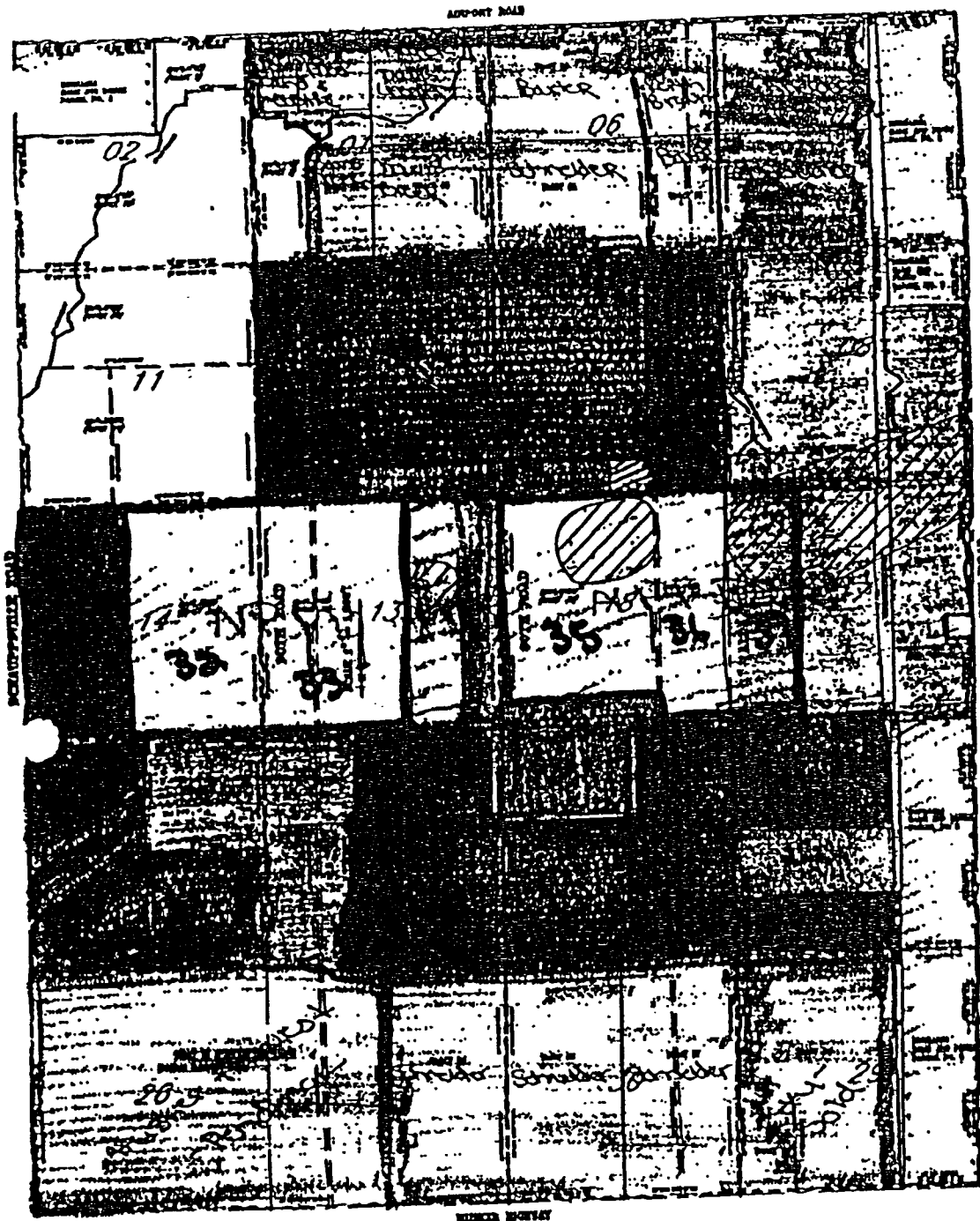
For X; Against ___; Abstained ___; Not Present ___.

PASSED AND ADOPTED THIS 9 DAY OF April, 2002.

HALL COUNTY BOARD OF SUPERVISORS

Marla J. Conley
Marla J. Conley, Hall County Clerk

Pamela B. Lancaster
Pamela B. Lancaster, Chairman of the Board
of Supervisors



COMMUNIST ARMY AMMUNITION PLANT RAIL EIGHT, MICHIGAN	
BONJAN AND ASSOCIATES INC. WASHINGTON, D.C.	

Designated to NPPD
 owned by other entities
 OTE Parcels - Pending

- Sold
- Sold - Nov. 16, 2001
- Sale - 2007:

all surveyed except tract 37

Entered As Instrument No
0200600526

STATE OF NEBRASKA)
COUNTY OF HALL) SS

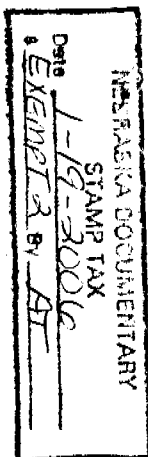
2006 JAN 19 PM 3 01

Natly Braach
REG OF DEEDS

CASH 110.50
CHECK _____

REFUNDS:

CASH _____
CHECK _____



G.I. ABSTRACT



2006000526

Cornhusker Army Ammunition Plant
Hall County, Nebraska
Parcels 3 and 8A
Portions of Acquisition Tracts 72, 73, 74, 75 and 76

11080

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 8th day of December, 2005, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as "Grantor," acting by and through the Deputy Assistant Secretary of the Army (Installations and Housing) (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and **DTE Rail Services, Inc., a Michigan corporation, with its principal office located at 425 South Main Street, Ann Arbor, Michigan 48104**, hereinafter referred to as "Grantee."

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be transferred to Grantee; and

WHEREAS, the Department of the Army has completed environmental restoration required, if any, with respect to the property conveyed herein; and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above mentioned laws, regulations and orders.

NOW THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of **SIX HUNDRED FORTY EIGHT THOUSAND TWO HUNDRED FIFTY AND NO/100 DOLLARS (\$648,250.00)**, the receipt of which is hereby acknowledged by Grantor; and (2) the specific agreements hereinafter made by Grantee, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all its right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

Two parcels of land comprising parts of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the Sixth Principal Meridian, all being located in Hall County, Nebraska, containing 146.299 acres, more or less (hereinafter referred to as the "Property") and more particularly shown and described as Parcel No. 3 and Parcel No. 8A on Exhibits "**A-1**" and "**A-2**," attached hereto and made a part hereof.

RESERVING, however, to the Grantor and its assigns, ownership and exclusive use of the existing monitoring wells located on the property together with access across the Property for the purpose of monitoring and/or closing the wells. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same. One monitoring well (G0050) is located within the Shop Area (Parcel 8A) and four monitoring wells (G0029/G0030/G0031/G0052) are located in the Nitrate Area (Parcel 3).

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of Grantor, its successors and assigns:

a. SAVE AND EXCEPT and there is hereby reserved unto Grantor, its successors and assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) covering the Property.

200600526

b. SAVE AND EXCEPT and there is hereby reserved unto Grantor, and its assigns, all rents and other beneficial interests in favor of Grantor in and to the following leases to the extent, and only to the extent that such rents and other beneficial interests cover the Property:

(1) Department of the Army License No. DACA45-3-03-6051, granted to MKM Engineers, Inc., for storage purposes (Building S-39) for the period 1 September 2003 through 31 August 2008.

(2) Department of the Army Lease No. DACA45-1-97-6022, granted to Mid-Plains Power, Inc., for storage purposes (Building S-33) for the period 1 November 2001 through 31 October 2005.

(3) Department of the Army No. Lease DACA45-1-96-6085, granted to Phillip B. Sextro, for storage purposes (Building S-37) for the period 1 May 2001 through 31 October 2005.

III. CERCLA COVENANT AND RESERVED ACCESS EASEMENT

a. Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), 42 U.S.C. Section 9620(h)(3), the Grantor has made a complete search of its records concerning the property subject to this deed. Those records indicate that the hazardous substances, as defined by Section 101 (14) of CERCLA, shown on Exhibits "**B-1**" and "**B-2**," attached hereto and made a part hereof, have been stored for one year or more (S), released (R), or disposed of (D) on the property during the time the property was owned by the Grantor. The Grantee should review the Final Environmental Baseline Survey No. 38-EH-8519-99 dated 9-20 November 1998, the Environmental Baseline Survey for the Property dated 3 May 1999, and the Finding of Suitability to Transfer (FOST), as amended, dated May 2005, for further details.

b. The Grantor covenants and warrants that all remedial action necessary to ensure protection of human health and the environment with respect to any such substances remaining on the property has been taken prior to the date hereof. Furthermore, excepting those situations where the Grantee hereunder (who was a lessee on a portion of the property), its successors or assigns, or any other lessee of the Property, are potentially responsible parties, as defined by CERCLA, any additional remedial action found to be necessary with respect to any such substance remaining on the property after the date hereof shall be conducted by the United States.

c. The Grantor shall not incur liability for additional response action or corrective action found to be necessary after the date of transfer in any case in which the person or entity to whom the property is transferred, or other non-Grantor entities, is identified as the party responsible for contamination of the property.

d. The Grantor reserves a right of access to any and all portions of the herein described parcels of land for purposes of environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of, to the extent permitted by law,

available utilities at reasonable cost to the Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance of the herein described parcels of land, or in which such access is necessary to carry out a remedial action, response action or corrective action on adjoining property. Pursuant to this reservation, the United States and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the Grantee or the then owner and any authorized occupant of the property) to enter upon the herein described parcels of land and conduct investigations and surveys, to include drilling, test-pitting, borings, data and/or record compilation, and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including, but not limited to, the installation, operation and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with the record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. Grantor will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions. This subparagraph shall not affect the Grantor's future responsibilities, if any, to conduct response actions or corrective actions that are required by applicable laws, rules, and regulations.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCLUSIONS, RESERVATIONS, COVENANTS AND RESTRICTIONS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exclusions, reservations, covenants and restrictions affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the property, or any part thereof, their heirs, successors and assigns.

a. Federal Facility Agreement

The Grantee acknowledges that Cornhusker Army Ammunition Plant has been identified as a National Priority List (NPL) site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska and the Department of the Army, effective September 1990, and a copy of any amendments thereto, have been provided the Grantee. The Grantee, its successors and assigns, agree that should any conflict arise between the terms of the FFA as they presently exist or as they may be later amended and the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee, its successors and assigns, further agree that notwithstanding any other provisions of this Deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof.

b. Environmental Baseline Survey (EBS) and Finding of Suitability to Transfer (FOST), As Amended

1. The Grantee has received the technical environmental reports, including the Environmental Baseline Survey for the Property dated 9-20 November 1998, the Environmental Baseline Survey for the Property dated 3 May 1999 and the FOST, as amended, for the property dated May 2005, prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use.

2.a. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the formerly leased Property (DACA45-1-79-6041, DACA45-1-96-6095 and DACA45-1-01-6010) on or after the beginning date of the leases, whether or not such substance was set forth in the technical environmental reports, including the EBSs, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the formerly leased Property (DACA45-1-79-6041, DACA45-1-96-6095 and DACA45-1-01-6010) prior to the beginning date of the leases. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the formerly leased Property occurring on or after the beginning date of the leases, where such substance or product was placed on the formerly leased Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, on or after the beginning date of the leases. This Subsection IV.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

2.b. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the remaining Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBSs, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the remaining Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the remaining Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Subsection IV.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

c. Notice of the Presence of Lead-Based Paint and Covenant Against the Use of the Property for Residential Purposes

1. The Grantee is hereby informed and does acknowledge that all building on the Property, which was constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips and dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in Residential Real Property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead-based paint hazards. "Residential Real Property" means any housing constructed prior to 1978, except housing for the elderly (households reserved for and composed of one or more persons 62 years of age or more at the time of initial occupancy) or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

2. Available information concerning known lead-based paint and/or lead-based paint hazards, the location of lead-based paint and/or lead-based paint hazards, and the condition of painted surfaces is contained in the Environmental Baseline Surveys and (for residential properties) the lead-based paint assessment, which have been provided to the Grantee. All purchasers must receive the federally-approved pamphlet on lead poisoning prevention. The Grantee hereby acknowledges receipt of all of the information described in this subparagraph.

3. The Grantee acknowledges that it has received the opportunity to conduct its own risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards prior to execution of this document.

4. The Grantee covenants and agrees that it shall not permit the occupancy or use of and buildings or structures on the Property as Residential Real Property without complying with this section and all applicable Federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the Grantee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992) (hereinafter Title X).

5. The Grantee shall, after consideration of the guidelines and regulations established pursuant to Title X: (1) Comply with the joint HUD and EPA Disclosure Rule (24 CFR 35, Subpart A, 40 CFR 745, Subpart F), when applicable, by disclosing to prospective purchasers the known presence of lead-based paint and/or lead-based paint hazards as determined by previous risk assessments; (2) Abate lead-based paint hazards in pre-1978 buildings and structures in paint, dust and bare soil in accordance with the HUD Guidelines; and (3) Comply with the EPA lead-based paint work standards when conducting lead-based paint activities (40 CFR 745, Subpart L).

6. In complying with these requirements, the Grantee covenants and agrees to be responsible for any abatement or remediation of lead-based paint or lead-based paint hazards on the Property found to be necessary as a result of the subsequent use of the Property for residential purposes. The Grantee covenants and agrees to comply with solid or hazardous waste laws that may apply to any waste that may be generated during the course of lead-based paint abatement activities.

7. The Grantee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorney's fees arising out of, or in a manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of lead-based paint hazards on the Property if used for residential purposes.

8. The covenants, restrictions, requirements and obligations of this Subsection IV.c. shall be binding upon the Grantee, its successors and assigns and all future owners and shall be deemed to run with the land. The Grantee on behalf of itself, its successors and assigns covenants that it will include and make legally binding, this Subsection IV.c. in all subsequent transfers, leases, or conveyance documents.

d. Notice of the Presence of Asbestos and Covenant

1. The Grantee is hereby informed and does acknowledge that friable and non-friable asbestos or asbestos-containing materials ("ACM") has been found on the Property, as described in the EBSs and FOST, as amended. The ACM on the Property does not currently pose a threat to human health or the environment. All friable asbestos that posed a risk to human health has been removed.

2. The Grantee covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos; and that the Grantor assumes no liability for future remediation of asbestos or damages for personal injury, illness, disability, or death, to the Grantee, its successors or assigns, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos on the Property, whether the Grantee, its successors or assigns have properly warned or failed to properly warn the individual(s) injured. The Grantee agrees to be responsible for any future remediation of asbestos found to be necessary on the Property.

3. Unprotected or unregulated exposures to asbestos in product manufacturing, shipyard, and building construction workplaces have been associated with asbestos-related diseases. Both the Occupational Safety and Health Administration (OSHA) and the EPA regulate asbestos because of the potential hazards associated with exposure to airborne asbestos fibers. Both OSHA and EPA have determined that such exposure increases the risk of asbestos-related diseases, which include certain cancers and which can result in disability or death.

4. The Grantee acknowledges that it has inspected the Property as to its asbestos content and condition and any hazardous or environmental conditions relating thereto. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos hazards or concerns.

5. The Grantor assumes no liability for any damages to person or property, and gives no warranties, either express or implied, with regard to the presence or absence of asbestos or ACM in buildings and structures, or whether the Property is or is not suitable for a particular purpose. The Grantee further agrees to indemnify and hold harmless the Grantor, its officers, agents and employees from and against all suits, claims, demands or actions, liabilities, judgments, penalties, costs and attorneys' fees arising out of or in any manner predicated upon, future asbestos abatement or remediation from within buildings and structures on the Property; disposal of ACM or asbestos after conveyance to the Grantee; personal injury, death or property damages resulting from, related to, caused by or arising out of exposure to asbestos within buildings and structures on the Property on or after conveyance of such portion of the Property to the Grantee. The Grantee's obligation hereunder shall apply whenever the United States incurs costs or liabilities for actions giving rise to liability under this Subsection. Except for those facilities that were previously leased by the Grantee (DACA45-1-79-6041, DACA45-1-96-6095, and DACA45-1-01-6010), the Grantee shall not be responsible for indemnifying or holding the Grantor harmless from any loss, claims, liabilities, judgments, penalties, costs, or damages arising out of exposure to asbestos that occurred prior to the date of this Deed.

e. Polychlorinated Biphenyls (PCBs) Containing Equipment Notification

The Grantee is hereby informed and does acknowledge that equipment containing polychlorinated biphenyls (PCBs) exists on the Property to be conveyed and that said equipment is owned by Southern Public Power District.

f. Notice of Aboveground/Underground (AST/UST) Storage Tanks

The Grantee is hereby informed and does acknowledge that two inactive Aboveground Storage Tanks (S-6 and a solvent tank) remain on Parcel 8A. There is also one active UST remaining on Parcel 8A (SPHA-3,T2). Underground Storage Tanks (S14, T1 and S40,T1) that contained solvent/gasoline were formerly located on Parcel 8A from 1942 to 1993. The tanks and the surrounding soil were removed in 1993, and subsequent investigation indicated that no additional cleanup was necessary.

g. Land Use Restrictions

The Grantor has undertaken careful environmental study of the Property and concluded, to which the Grantee agrees, that the highest and best use of the Property is limited by its environmental condition to commercial/industrial/agricultural uses. In order to protect human health and the environment, promote community objectives, and further the common environmental objectives and land use plans of the Grantor, State of Nebraska and Grantee, the

following covenants/restrictions/reservations are included in this Deed to assure the use of the Property is consistent with environmental conditions of the Property. The following covenants/restrictions/reservations benefit both the lands retained by the Grantor and the general public welfare and are consistent with the State of Nebraska and Federal environmental statutes.

1. Commercial/Industrial/Agricultural Use Restrictions

(a) The Grantee covenants for itself, its successors and assigns, that, with the exception of Building N-17, which is located on Parcel 3, the Property shall be used solely for commercial/industrial/agricultural purposes and not for residential purposes, the Property having been remediated only for commercial/industrial/agricultural uses. Commercial, Industrial and Agricultural uses include, but are not limited to, administrative/office space, manufacturing, warehousing, restaurants, hotels/motels, and retail activities. Residential use includes, but is not limited to, housing, day care facilities, and schools (excluding education and training programs for persons over 18 years of age), and assisted living facilities. The Grantee covenants for itself, its successors and assigns, that Building N-17 shall be used solely for industrial purposes and not for commercial, agricultural or residential purposes. Industrial uses include, but are not limited to, rail car maintenance and repair, manufacturing, and warehousing.

(b) Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations, such additional remediation necessary to allow for residential use of the Property, and, for Building N-17, to allow for commercial, agricultural or residential use. Any additional remediation will be at no additional cost to the Grantor and with the Grantor's prior written consent. Consent may be conditioned upon such terms and conditions as the Grantor deems reasonable and appropriate, including performance and payment bonds and insurance. Upon completion of such remediation required to allow residential use of the Property, and, for Building N-17, to allow for commercial, agricultural or residential use, and upon the Grantee's obtaining the approval of the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency (EPA) and the Nebraska Department of Environmental Quality (DEQ) and, if required, any other regulatory agency, the Grantor agrees to release or, if appropriate, modify this restriction by executing and recording, in the same land records of Nebraska, Hall County, as this Deed, a Partial Release of Covenant. Grantee shall bear the cost of recording and reasonable administrative fees.

2. Enforcement

(a) The above covenants/restrictions/reservations shall inure to the benefit of the public in general and adjacent lands, including lands retained by the United States, and, therefore, are enforceable by the United States Government and State of Nebraska. These covenants/restrictions/reservations are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable.

(b) The Grantee covenants for itself, its successors and assigns that it shall include and otherwise make legally binding the above land use covenants/restrictions/reservations in all subsequent leases and transfer or conveyance documents relating to the Property subject hereto.

Notwithstanding this provision, failure to include these land use restrictions in subsequent conveyances does not abrogate the status of these covenants/restrictions/reservations as binding upon the parties, their successors and assigns.

(c) The Grantee, for itself, its successors and assigns, covenants that it will not undertake or allow any activity on or use of the Property to include Building N-17, that would violate the land use restrictions contained herein.

(d) Notwithstanding any other provision of this Deed; any agreement between the Grantee and the Grantor; the provisions of CERCLA, including CERCLA Section 120(h)(3), as amended, the Grantee on behalf of itself, its successors and assigns, covenants and agrees that the Grantee or the then record owner of the Property will be fully responsible for any investigation and/or remediation of hazardous substances, pollutants or contaminants, or petroleum or petroleum derivatives, to the extent that such investigation and/or remediation becomes necessary in response to a violation of the land use restrictions in Section IV.g.

3. Submissions

Modification of Restrictions. The Grantee shall submit any requests to use the Property for residential purposes, to use Building N-17 for commercial, agricultural, and/or residential purposes, to install monitoring wells or other modification to the above restrictions to Grantor, with a copy to EPA and Nebraska DEQ, by first class mail, postage prepaid, addressed as follows:

- (a) to Grantor: Corps of Engineers, Omaha District
ATTN: CENWO-RE
106 South 15th Street
Omaha, NE 68102-1618
- (b) to EPA: U.S. Environmental Protection Agency, Region VII
901 North 5th Street
Kansas City, KS 66101
- (c) to State: Nebraska Department of Environmental Quality
P.O. Box 98922
Lincoln, NE 68509-8922"

V. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land described in Section IV of this Quitclaim Deed. In addition, Grantor and its successors and assigns, shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, Grantor and its successors

and assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by Grantee, for itself and its successors and assigns, that except for warranties, responsibilities and agreements of Grantor specifically set forth herein, the Property is conveyed "*as is*" and "*where is*" without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property, including, but not limited to, the possible limited presence of explosives residue and the possible minimal presence of secondary explosives on or within Building N-17, which is located on Parcel 3. Grantee, for itself and its successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property, including Building N-17, nor any agreement or promise to alter, improve, adapt or repair the Property including Building N-17.

b. The Grantee, its successors and assigns, shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grants of any interest, privilege, or license.

c. Grantee, for itself and its successors and assigns, agrees that any future major modifications or the demolition of Building N-17, which is located on Parcel 3, shall, at its or their sole expense, be accomplished with oversight by personnel qualified to oversee explosives removal.

VI. AGREEMENTS, NOTICES AND CONDITIONS

a. Anti-Deficiency Act

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of funds appropriated for this purpose to the Department of the Army, and nothing in this deed shall be interpreted to require obligations or payments by the Grantor in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

b. Notice of Wetlands

This Property contains wetlands protected under state and Federal laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetlands, including, without limitation, the placement of fill materials; the building of any structure; the placement of site-development fills for recreational, industrial, commercial, residential, and other uses; the placement of causeways or road fills; and the construction of dams and dikes.

VII. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to the following:

(1) Easement No. DACA45-2-99-6157, granted to Hall County for road rights-of-way.

(2) Easement No. DACA45-2-99-6023, granted to Hall County for road rights of way.

(3) Easement No. DACA45-2-97-6024, granted to Southern Nebraska Rural Public Power District for electric power-line and substation rights-of-way.

(4) Easement No. DACA45-2-99-6070, granted to Northwestern Public Service Company for gas-line rights-of-way.

(5) Department of the Army Lease Nos. DACA45-1-01-6010, DACA45-1-96-6095 and DACA45-1-79-6041, granted to DTE Rail Services, Inc., for lease of certain railroad and storage facilities located on the CHAAP. The Grantor upon conveyance of the property to the Grantee will terminate said leases.

b. Any zoning laws, ordinances, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements that may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

g. Installation Commander agreements, whether or not of record or otherwise approved in writing by Grantee.

VIII. NO WAIVER

The failure of the Government to insist in any one or more instances upon complete performance of any of the said notices, covenants, conditions, restrictions, or reservations shall not be construed as a waiver or a relinquishment of the future performance of any such covenants, conditions, restrictions, or reservations; but the obligations of the Grantee, its successors and assigns, with respect to such future performance shall continue in full force and effect.

200600526

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be hereunto affixed this 8th day of December, 2005.



UNITED STATES OF AMERICA

By:

Joseph W. Whitaker

Joseph W. Whitaker

Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

COMMONWEALTH OF VIRGINIA)

) ss

COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 30th day of September, 2008, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and who acknowledged the foregoing instrument to be his free act and deed, dated this 8th day of December, 2005, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.

Sherinah Z. Hill

Notary Public

My commission expires: 30 September 2008

Embossed Hereon is My
Commonwealth of Virginia Notary Public Seal
My Commission Expires September 30, 2008
SHERINAH Z. HILL

200600526

GRANTEE ACCEPTANCE

The undersigned Grantee, does hereby accept the herein-described property, subject to the notices, agreements, reservations, restrictions, conditions, covenants and exceptions hereinabove expressed.

Executed this 20th day of October, 2005, in Washtenaw County, State of Michigan.

DTE RAIL SERVICES, INC.

BY: *Ernest J. Mail*

TITLE: CEO

STATE OF MICHIGAN)
) ss
COUNTY OF WASHTENAW)

REVIEWED
BY: *JA*
LEGAL
10-20-05

The foregoing Quitclaim Deed was acknowledged before me this 20 day of October, 2005, by Ivan J. O'Neil.



David J. Bowbeer
Notary Public

My commission expires: 9-2-2007

Scale: 1" = 200'

* - Indicates 1/2" Iron Pipe Found Unless Otherwise Noted
 o - Indicates 1/2" Iron Pipe Placed Unless Otherwise Noted
 A - Indicates ACTUAL Distance
 R - Indicates RECORDED Distance

Actual Point Of Beginning
20' Wide Easement

2002

Parcel No. 3

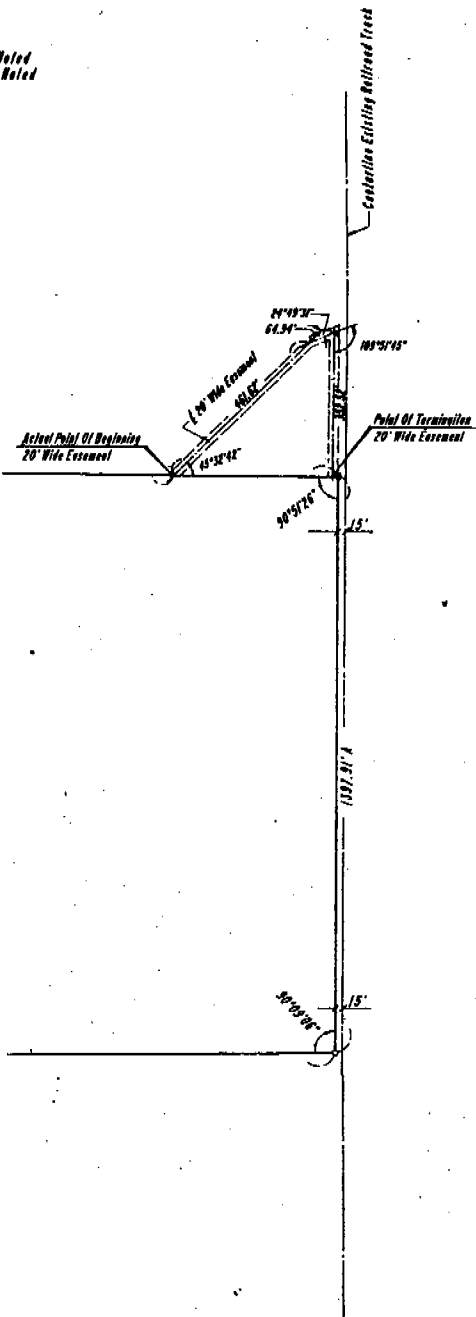
1339.65' A
— 70' B. 1
— 40' County Road Right of Way

3449.54'A

-S.W. Cor. Sec. 20,
T 11 N - R 10 W.
Found Aluminium Cap

2

200600526



LEGAL DESCRIPTION (Parcel No. 3)

A tract of land comprising a part of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the 6th. P.M., in Hall County, Nebraska, more particularly described as follows: Beginning at the West Quarter Corner of said Section Twenty (20); thence running northerly along the west line of said Section Twenty (20), a distance of One Hundred Eighteen and Ninety Four Hundredths (118.94) feet; thence deflecting right 90°40'43" and running easterly a distance of Three Thousand Four Hundred Forty Five and Thirty Nine Hundredths (3445.39) feet, to a point Fifteen (15.0) feet west of the centerline of an existing railroad tract; thence deflecting right 89°08'34" and running southerly parallel with and Fifteen (15.0) feet west of the centerline of an existing railroad tract, a distance of One Thousand Three Hundred Ninety Seven and Ninety One Hundredths (1397.91) feet; thence deflecting right 89°50'54" and running westerly a distance of Three Thousand Four Hundred Forty Nine and Fifty Four Hundredths (3449.54) feet, to a point on the west line of said Section Twenty (20); thence deflecting right 90°20'14" and running northerly along the west line of said Section Twenty (20), a distance of One Thousand Three Hundred Thirty Nine and Sixty Five Hundredths (1339.65) feet, to the point of beginning and containing 113.047 acres more or less, of which 1.339 acres more or less is presently occupied by public road right of way. Net 111.708 acres more or less.

ACCESS EASEMENT (Parcel No. 3)

A tract of land consisting of a Twenty (20.0) foot wide easement located in a part of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the 6th. P.M., in Hall County, Nebraska, the centerline of said Twenty (20.0) foot wide easement being more particularly described as follows: Beginning at the West Quarter Corner of said Section Twenty (20); thence running northerly along the west line of said Section Twenty (20), a distance of One Hundred Eighteen and Ninety Four Hundredths (118.94) feet; thence deflecting right 90°40'43" and running easterly a distance of Three Thousand Four Hundred Forty Five and Thirty Nine Hundredths (3445.39) feet, to the ACTUAL point of beginning; thence deflecting left 45°32'42" and running northeasterly a distance of Four Hundred Sixty One and Sixty Two Hundredths (461.62) feet; thence deflecting right 24°49'31" and running northeasterly a distance of Sixty Four and Ninety Four Hundredths (64.94) feet; thence deflecting right 109°51'45" and running southerly a distance of Three Hundred Fifty Two and Fifty Two Hundredths (352.52) feet, to the point of termination, said tract containing 0.404 acres more or less.

EXHIBIT "A-1" ATTACHED TO AND MADE

A PART OF OUTCLAIM DEED

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, that the accompanying plat is from an accurate survey of the described property made under my supervision.



Ronald R. Rockwell, Reg. Land Surveyor No. 349

2006 NORTH PLATTE ROAD DOWNEY HILLS, NEBRASKA 68342 PHONE (402) 982-1472	
F.B. BOX 5408	
LAND SURVEY Pl. Section 20, T11N-R10W Hall County, Nebraska	
SUBMITTED BY:	DRAWN BY: Derris
CHECKED BY: R.R.R.	SHEET NO. 1011
APPROVED BY:	REVISIONS
DATE: Feb 15, 2000	January 14, 2001
PROJECT NO.	

N.W. Cor. N1/2, Sec.
30, T11N - R10W,
Found Aluminum Cap

200600526

LEGAL DESCRIPTION (Parcel No. 8A)

A tract of land comprising a part of the North Half (N1/2) of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., in Hall County, Nebraska, more particularly described as follows:

Beginning at the northwest corner of said North Half (N1/2); thence running easterly along the north line of said North Half (N1/2), a distance of One Thousand Three Hundred Sixty Four and Sixty Two Hundredths (1364.62) feet, to the ACTUAL point of beginning; thence continuing easterly along the north line of said North Half (N1/2), a distance of Seven Hundred Fifty and Seventy Nine Hundredths (750.79) feet; thence deflecting right $87^{\circ}33'43''$ and running southerly a distance of Two Hundred Twenty Three and Eighty Seven Hundredths (223.87) feet; thence deflecting left $23^{\circ}04'13''$ and running southeasterly a distance of Two Hundred Twenty Nine and Fifty Four Hundredths (229.54) feet; thence deflecting left $64^{\circ}09'24''$ and running easterly a distance of One Hundred Nine and Twenty One Hundredths (109.21) feet; thence deflecting right $90^{\circ}00'00''$ and running southerly Four Hundred Fifteen and Eighty Eight Hundredths (415.88) feet; thence deflecting right $50^{\circ}12'39''$ and running southwesterly a distance of Two Hundred Forty Three and Seventy Four Hundredths (243.74) feet; thence deflecting left $48^{\circ}35'43''$ and running southerly a distance of Three Hundred Seventy and Nineteen Hundredths (370.19) feet; thence deflecting right $89^{\circ}42'41''$ and running westerly a distance of Seven Hundred Seventy One and Fifty Nine Hundredths (771.59) feet; thence deflecting right $88^{\circ}42'57''$ and running northerly a distance of Three Hundred Thirty Four and Fifteen Hundredths (334.15) feet; thence deflecting left $90^{\circ}00'07''$ and running westerly a distance of Four Hundred Fifty Seven and Eighty Seven Hundredths (457.87) feet; thence deflecting right $89^{\circ}45'07''$ and running northerly a distance of Two Hundred Eighty Five and Thirty Eight Hundredths (285.38) feet; thence deflecting left $89^{\circ}45'30''$ and running westerly a distance of One Hundred Ninety Three and Seventy Hundredths (193.70) feet; thence deflecting right $90^{\circ}47'40''$ and running northerly a distance of One Hundred Seventy Nine and Five Hundredths (179.05) feet; thence deflecting right $89^{\circ}19'48''$ and running easterly a distance of Three Hundred Seventy Five and Seventy Eight Hundredths (375.78) feet; thence deflecting left $51^{\circ}15'32''$ and running northeasterly a distance of Four Hundred Thirty One and Fifty Five Hundredths (431.55) feet; thence deflecting left $38^{\circ}34'36''$ and running northerly a distance of Two Hundred Sixteen and Three Hundredths (216.03) feet, to the ACTUAL point of beginning and containing 33.252 acres more or less, of which, 0.863 acres more or less is presently occupied by public road right of way. Net 32.389 acres more or less.

ACCESS EASEMENT (50' Wide)

A tract of land consisting of a Fifty (50.0) foot wide easement located in the North Half (N1/2) of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., in Hall County, Nebraska, the centerline of said Fifty (50.0) foot wide easement being more particularly described as follows:

Beginning at the northwest corner of said North Half (N1/2); thence running easterly along the north line of said North Half (N1/2), a distance of One Thousand Three Hundred Ninety Two and Sixty Eight Hundredths (1392.68) feet; thence deflecting right $89^{\circ}30'47''$ and running southerly along the centerline of an existing road, a distance of Nine Hundred Eighty One and Sixty Nine Hundredths (981.69) feet; thence deflecting right $01^{\circ}31'48''$ and continuing southerly along the centerline of an existing road, a distance of Three Hundred Sixty Nine and Three Tenths (369.30) feet, to the ACTUAL point of beginning; thence continuing along the last described course, a distance of One Thousand One Hundred Ninety Eight and Nine Hundredths (1198.09) feet, to the point of TERMINATION, said point being on the north line of and One Thousand Three Hundred Ninety One and Forty Three Hundredths (1391.43) feet east of the northwest corner of a tract of land referred to as Parcel No. 3, and located in a part of said Section Twenty (20), said tract containing 1.375 acres more or less.

70th. Road

N.W. Cor. Parcel No. 3 -
Nail In Asphalt

Parcel No. 3

Northerly Line Parcel No. 3

Point Of Termination Access
Easement (50' Wide)

Actual Point Of Beginning
Access Easement (50' Wide)

Centerline 50' Wide Access Easement

Approximate Centerline Of Existing Road

Parcel No. 8A
(33.252 Ac.)

P1. N1/2, S

Section Line Old Potash

Found P.R. Nail
In Asphalt

Actual Point Of Beginning
Parcel No. 8A

750.79' A & R

50' County Road Right Of Way

753.49'

1392.68' A & R

1364.62' A & R

375.78' A & R

193.70' A & R

285.38' A & R

431.55' A & R

471.87' A & R

1391.43' A

1392.68' A & R

1198.09' A & R

981.69' A & R

369.30' A & R

229.54' A & R

223.87' A & R

109.21' A & R

415.88' A & R

243.74' A & R

370.19' A & R

771.59' A & R

457.87' A & R

334.15' A & R

750.79' A & R

753.49'

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457.87' A & R

334.15' A & R

750.79' A & R

753.49'

50' County Road Right Of Way

1392.68' A & R

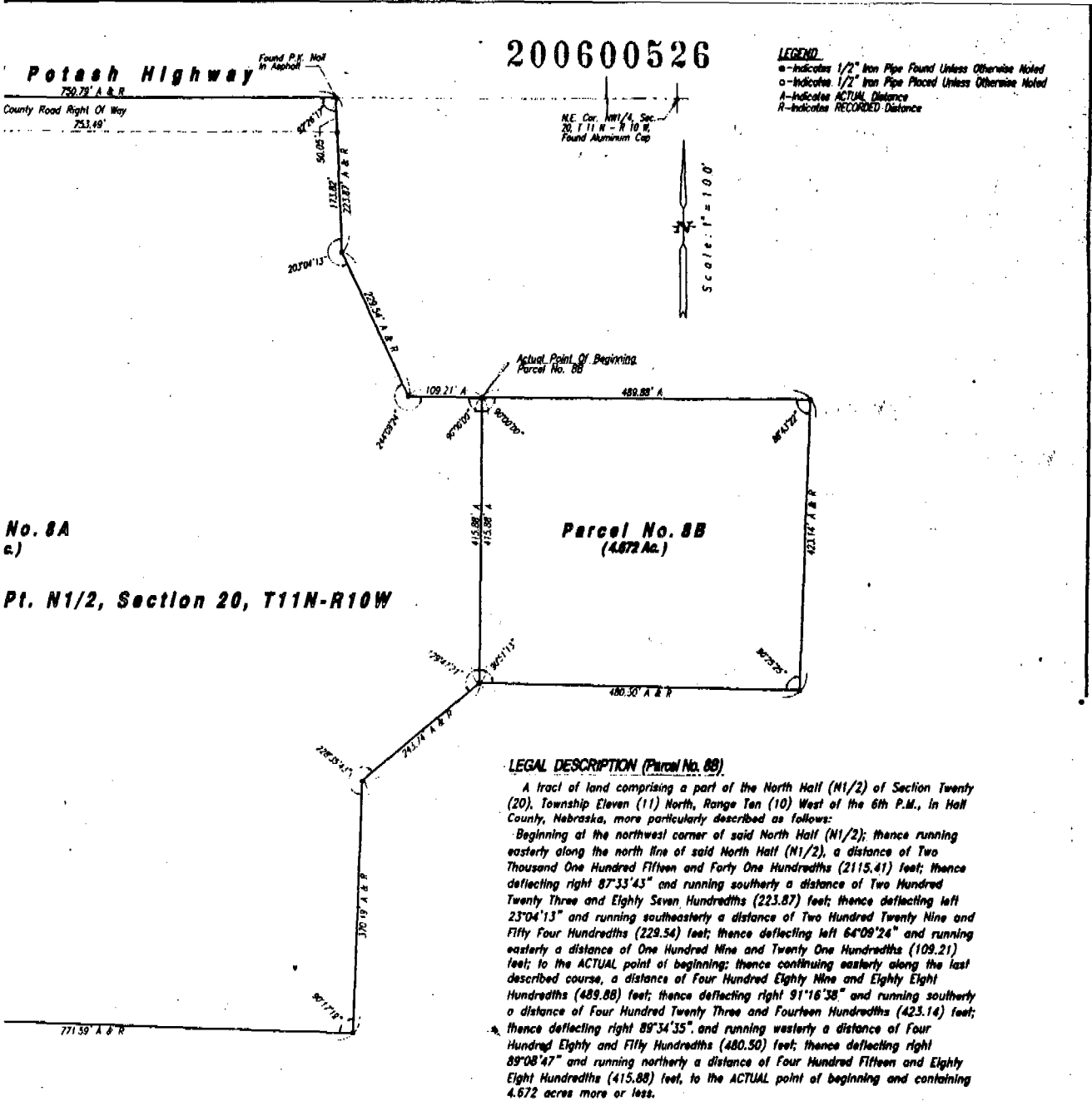
1364.62' A & R

375.78' A & R

193.70' A & R

285.38' A & R

431.55' A & R



SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Daryl D. Sorgenfrei, Reg. Land Surveyor No. 538

**EXHIBIT "A-2" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED**

2014 NORTH WIND ROAD, GRAND ISLAND, NEBRASKA 68801	
LAND SURVEY	
Pl. N1/2, Sec. 20, T11N - R10W	
Hall County, Nebraska	
SUBMITTED BY:	DRAWN BY: Daryl S.
CHECKED BY: B.S.	SHEET No. 1 OF 1
APPROVED BY:	DATE: February 16, 2005
PROJECT No.	REVISIONS

200600526

EXHIBIT B-1

Table 2 - Notification of Hazardous Substance Storage, Release or Disposal

Property Description	Name of Hazardous Substance(s) Stored (S), Released (R) or Disposed (D)	Date of Storage, Release or Disposal	Remedial Actions
Parcel 3 Nitrate Area Approximately 113.047 acres of land	Nitrate liquor, aluminum powder and crystalline nitrate (Buildings N-1, N-2, N-3, N-5, N-7, N-9, N-11, N-13, N-15, and N-17) (S)	1942-1945, possibly 1950-1957	Based on the 1996 RI and the 1998 Feasibility Study, this area was found to have lead contamination in soil occurring possibly from stored automotive batteries. The 1999 Record of Decision (ROD) for Operable Unit Three identified the selected remedy as excavation of lead-contaminated soil at the General Storage Area/Salvage Yard to levels below the RAO for lead (400 µg/g), transportation of contaminated soil to an off-site disposal facility, and implementation of institutional controls to prevent residential use.
	Ammonium nitrate fertilizer (S)	1946-1948	
	Laboratory chemicals and explosive waste (Buildings X-1, X-3, and X-4) (S)	Production periods, possibly 1942-1945 and 1950-1957	Preparations to excavate the lead-contaminated soils within the Nitrate Area were initiated in May 2000. Prior to excavation activities, composite delineation samples were collected at a depth of 6 inches to 1 foot. The analytical results of all composite samples were below RAOs for lead (400 µg/g). As prior analytical detections of lead-contaminated soils could not be confirmed or replicated, no excavation activities at the Nitrate Area were completed. Details of sampling locations and analytical results of the composite sampling are presented in the Closeout Report for the Soil Investigation and Excavation of OU3, 2001.
	Explosive compounds and waste from mine test facility (Building N-2) (S)	1968-1973	
	PCB Transformers and automotive batteries containing lead (Buildings N-1 and N-3 in Salvage Yard) (S)	1965-1990	Based on the results of the composite sampling in 2001, concentrations of lead in soil at the Nitrate Area were not confirmed above NDEQ guidance concentrations. As a result, the selected remedy for lead in soil at the Nitrate Area has been achieved.
	Solvents, paint, and silica sand for sandblasting (Building N-17 and Drum Areas to the North and South of Building N-17) (S)	1979 to present (associated with railcar refurbishing operations)	Beginning in December 2003, decontamination by thermal decomposition and demolition of several buildings in the Nitrate Area was performed for residual explosive contaminants, including Buildings N-1, N-2, N-3, N-5, N-7, N-9, N-11, N-13, N-15, X-1, X-3, and X-4. On October 20, 2004, the contractor performing this work certified that the identified buildings had been decontaminated to a 5X level and therefore the affected parcels of land could be transferred for sale.
			For the work that is performed in accordance with IOCP 385-1, the 5X designation indicates that no significant amounts (not enough to present an explosive safety hazard) of contamination remain. Several criteria must be met to achieve the 5X certification. Among these criteria are thermal decomposition of buildings at a sufficiently high temperature and a determination that explosive soil is not present. For the Nitrate Area sites, the criteria used to determine whether soil was considered explosive was a determination that the soil did not contain greater than 10% by weight of any secondary explosive or mixture of secondary explosives in soil samples.

EXHIBIT "B-1" ATTACHED TO AND MADE

A PART OF QUITCLAIM DEED

200600526

EXHIBIT B-1

Table 2 - Notification of Hazardous Substance Storage, Release or Disposal

Property Description	Name of Hazardous Substance(s) Stored (S), Released (R) or Disposed (D)	Date of Storage, Release or Disposal	Remedial Actions
			<p>The >10% by weight explosives level is not a measure of toxicity hazard. Toxicity hazards due to explosive chemicals were evaluated in the 1996 RI, 1998 FS for OU3, and 1999 ROD for OU3. In the OU3 ROD, explosives were not determined to be contaminants of potential concern (COPCs) for the Nitrate Area; therefore no cleanup levels were established for explosives at this Area of Concern (AOC). Soil cleanup levels for explosives that were established for other OU3 AOCs include:</p> <p>Shop Area 102 micrograms per gram ($\mu\text{g/g}$) of 1,3,5-trinitrobenzene 191 $\mu\text{g/g}$ of 2,4,6- trinitrotoluene</p> <p>Pistol Range 52 $\mu\text{g/g}$ of RDX</p> <p>Sanitary Landfill 123 $\mu\text{g/g}$ of 2-amino-4,6-dinitrotoluene 123 $\mu\text{g/g}$ of 4-amino-2,6-dinitrotoluene 8.42 $\mu\text{g/g}$ of 2,4-dinitrotoluene 8.42 $\mu\text{g/g}$ of 2,6-dinitrotoluene 1,022 $\mu\text{g/g}$ of nitrobenzene 52 $\mu\text{g/g}$ of RDX 191 $\mu\text{g/g}$ of 2,4,6- trinitrotoluene</p> <p>The chemical analyses of soil performed to determine whether explosive soil was present as part of the 5X certification effort can be compared to soil cleanup levels for explosive chemicals that have been established for the various OU3 AOCs. This comparison shows that for soil analyses performed as part of the 5X certification effort for building sites in the Nitrate Area, all of the analytical results for chemicals that have an established cleanup level for an OU3 AOC were less than the respective cleanup level.</p> <p>Groundwater results from perimeter wells indicate that operations at the Nitrate Area have not impacted groundwater.</p>

200600526

EXHIBIT B-2

Table 2 - Notification of Hazardous Substance Storage, Release or Disposal

Property Description	Name of Hazardous Substance(s) Stored (S), Released (R) or Disposed (D)	Date of Storage, Release or Disposal	Remedial Actions
Parcel 8A Shop Area Approximately 32.387 acres of land	Explosive compounds and waste including 2,4,6-TNT and RDX in laundry wastewater (Building S-4, sumps, open ditches, and leachfields) (S) (R)	Periods of ammunition production between 1942 and 1973	A number of containers of pesticides, herbicides, and other chemicals from Building S-37 were disposed of by DRMO in 1993 through 1994. Investigation of the Shop Area determined that there were unacceptable concentrations of lead in soil. Soils contaminated with lead were identified in the 1996 RI in the Shop Area, directly east/northeast of Building S-22. The 1999 ROD identified the selected remedy as excavation and off-site disposal of lead-contaminated soil to or below the RAO of 400 µg/g, and deed restrictions to prevent residential use.
	Solvents and paints, including lead-based paint were used and stored in the paint shop (Building S-22) (S)	1942-1990	Soil excavation activities were performed at the Shop Area (Parcel 8A) in June 2000. All confirmation sample lead concentrations were below the RAO for lead. All excavations were backfilled with clean fill. The contaminated soil was disposed of at the Grand Island Municipal Landfill. The selected remedy for lead in soil of excavation and disposal has been achieved. The 2004 Final First Five-Year Review Report determined that the selected remedy for OU3 remains protective of human health and the environment.
	Paints, pesticides, solvents, oils, and other chemicals in Paint Spray Shop and pesticide mixing (Building S-37) (S)	1942-1990	Beginning in December 2003, decontamination by thermal decomposition and demolition of Buildings S-4 and S-5 in Parcel 8A in the Shop Area was performed for residual explosive contaminants. On October 20, 2004, the contractor performing this work certified that the identified buildings had been decontaminated to a 5X level and therefore the affected parcels of land could be transferred for sale. For the work that is performed in accordance with IOCP 385-1, the 5X designation indicates that no significant amounts (not enough to present an explosive safety hazard) of contamination remain. Several criteria must be met to achieve the 5X certification. Among these criteria are thermal decomposition of buildings at a sufficiently high temperature and a determination that explosive soil is not present. For the Shop Area sites, the criteria used to determine whether soil was considered explosive was a determination that the soil did not contain greater than 10% by weight of any secondary explosive or mixture of secondary explosives in soil samples. The >10% by weight explosives level is not a measure of toxicity hazard. Toxicity hazards due to explosive chemicals were evaluated in the 1996 RI, 1998 FS for OU3, and 1999 ROD for OU3. In the OU3 ROD, explosive contaminant soil cleanup levels established for the Shop Area include the following: 102 µg/g of 1,3,5-trinitrobenzene 191 µg/g of 2,4,6- trinitrotoluene The OU3 ROD determined that no explosive contaminants exceeded the cleanup levels established for the Shop Area.

EXHIBIT "B-2" ATTACHED TO AND MADE

A PART OF QUITCLAIM DEED

EXHIBIT B-2

Table 2 - Notification of Hazardous Substance Storage, Release or Disposal

Property Description	Name of Hazardous Substance(s) Stored (S), Released (R) or Disposed (D)	Date of Storage, Release or Disposal	Remedial Actions
			<p>A review of soil analyses performed as part of the 5X certification effort in the Shop Area building sites (Buildings S-4 and S-5) indicates that all of the analyses for explosive chemicals were below quantitation limits (non-detect). The quantitation limits for these analyses were far below the cleanup levels/Remedial Action Objectives (RAOs) established in the ROD for OU3, therefore these analytical results are also below established RAOs.</p> <p>No groundwater contamination was found on Parcel 8A, therefore no remediation of contaminated groundwater on Parcel 8A was specified in the 1999 OU3 ROD. The OU3 ROD does specify groundwater monitoring for VOCs and natural attenuation indicators for the VOC plume located in Parcel 8B and deed restrictions to prevent residential use and domestic groundwater use.</p>

Entered As Instrument No
0200600527

STATE OF NEBRASKA)
COUNTY OF HALL) SS

2006 JUN 19 PM 3 01

Kathy Beach
REG OF DEEDS

Cornhusker Army Ammunition Plant
Hall County, Nebraska
Parcel 8B
Portions of Acquisition Tracts 72 and 76

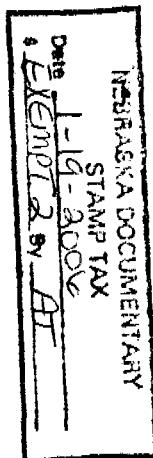
REFUNDS:

CASH _____

CHECK _____

CASH 80.50

CHECK _____



G.I. ABSTRACT



200600527

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 8th day of December, 2005, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as "Grantor," acting by and through the Deputy Assistant Secretary of the Army (Installations and Housing) (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) ("said Act"), and **DTE Rail Services, Inc.**, a Michigan corporation, with its principal office located at 425 South Main Street, Ann Arbor, Michigan 48104, hereinafter referred to as "Grantee."

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be transferred to Grantee; and

WHEREAS, the Department of the Army has completed environmental restoration required, if any, with respect to the property conveyed herein; and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above mentioned laws, regulations and orders.

NOW THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of **EIGHT THOUSAND FOUR HUNDRED AND NO/100 DOLLARS (\$8,400.00)**, the receipt of which is hereby acknowledged by Grantor; and, (2) the specific agreements hereinafter made by Grantee, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all its right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

One parcel of land comprising part of North One Half (N1/2) of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the Sixth Principal Meridian, all being located in Hall County, Nebraska, containing 4.672 acres, more or less (hereinafter referred to as the "Property") and more particularly shown and described as Parcel No. 8B on Exhibit "A", attached hereto and made a part hereof.

RESERVING, however, to the Grantor and its assigns, ownership and exclusive use of the existing monitoring wells located on the property together with access across the Property for the purpose of monitoring and/or closing the wells. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same. Five monitoring wells are located in various areas on the Property being conveyed (G0053/G0069/SHGW02/SHGW03/SHGW04).

RESERVING, however, to the Grantor and its assigns a perpetual and assignable right, power, and easement in, upon, over and across the above described real property as follows: no new water wells shall be constructed and maintained on the land for domestic purposes; no existing water wells shall be utilized on the land for domestic purposes; and no ground water shall be used for domestic purposes. Domestic purposes include human consumption, sanitation, bathing, cooking, laundering, and swimming. Domestic purposes do not include crop irrigation, watering of livestock, and fire control. Ground water means that water which occurs in or moves, seeps, filters, or percolates through ground under the surface of the land. Grantor and its assigns also reserve a perpetual right of access to any and all portions of the above described real property for the purposes of monitoring compliance with and enforcing said easement, including the right, at Grantee's, its successors', and assigns' sole expense, to close and decommission any water wells being constructed, maintained, or utilized on the land for domestic purposes and to disconnect and remove any related pumping equipment, piping and utilities. Grantor and its assigns shall have the right to enforce said easement in any court of competent jurisdiction. In the event that volatile organic compounds (VOCs) in the groundwater, as identified in the

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Record of Decision, are attenuated to less than the cleanup levels established in Table 5-5 of the final Operable Unit 3 Record of Decision dated October 1999, or any later amendments to this Record of Decision, the underlying fee owner(s) may file a written application with the U.S. Army Corps of Engineers, Omaha District, Real Estate Division, Omaha, Nebraska, for a written release of said easement. A copy of this application shall be furnished to the U.S. Environmental Protection Agency and the Nebraska Department of Environmental Quality. Said release will be issued to the underlying fee owner(s) only in the event that the Army Corps of Engineers, in its sole discretion, gives its approval. In the event such a release is issued, the underlying fee owner(s) will bear all costs of recording the release in the local county records.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of Grantor, its successors and assigns:

a. SAVE AND EXCEPT and there is hereby reserved unto Grantor, its successors and assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) covering the Property.

III. CERCLA COVENANT AND RESERVED ACCESS EASEMENT

a. Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), 42 U.S.C. Section 9620(h)(3), the Grantor has made a complete search of its records concerning the property subject to this deed. Those records indicate that the hazardous substances, as defined by Section 101 (14) of CERCLA, shown on Exhibit "B", attached hereto and made a part hereof, have been stored for one year or more (S), released (R), or disposed of (D) on the property during the time the property was owned by the Grantor. The Grantee should review the Final Environmental Baseline Survey No. 38-EH-8519-99 dated 9-20 November 1998, the Environmental Baseline Survey for the Property dated 3 May 1999, and the Finding of Suitability to Transfer (FOST), dated May 2005, for further details.

b. The Grantor covenants and warrants that all remedial action necessary to ensure protection of human health and the environment with respect to any such substances remaining on the property has been taken prior to the date hereof. Furthermore, excepting those situations where the Grantee, hereunder, its successors or assigns, hereunder are potentially responsible parties, as defined by CERCLA, any additional remedial action found to be necessary with respect to any such substance remaining on the property after the date hereof shall be conducted by the United States.

c. The Grantor shall not incur liability for additional response action or corrective action found to be necessary after the date of transfer in any case in which the person or entity to whom the property is transferred, or other non-Grantor entities, is identified as the party responsible for contamination of the property.

d. The Grantor reserves a right of access to any and all portions of the herein described parcels of land for purposes of environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of, to the extent permitted by law, available utilities at reasonable cost to the Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance of the herein described parcels of land, or in which such access is necessary to carry out a remedial action, response action or corrective action on adjoining property. Pursuant to this reservation, the United States and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the Grantee or the then owner and any authorized occupant of the property) to enter upon the herein described parcels of land and conduct investigations and surveys, to include drilling, test-pitting, borings, data and/or record compilation, and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary under applicable authorities, including but not limited to the installation, operation and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. Grantor will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions. This subparagraph shall not affect the Grantor's future responsibilities, if any, to conduct response actions or corrective actions that are required by applicable laws, rules, and regulations.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCLUSIONS, RESERVATIONS, COVENANTS AND RESTRICTIONS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exclusions, reservations, covenants and restrictions affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the property, or any part thereof, their heirs, successors and assigns.

a. Federal Facility Agreement

The Grantee acknowledges that Cornhusker Army Ammunition Plant has been identified as a National Priority List (NPL) site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska and the Department of the Army, effective September 1990, and a copy of any amendments thereto, have been provided the Grantee. The Grantee, its successors and assigns, agree that should any conflict arise between the terms of the FFA as they presently exist or as they may later be amended and

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the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee, its successors and assigns, further agree that notwithstanding any other provisions of this Deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof.

b. Environmental Baseline Survey (EBS) and Finding of Suitability to Transfer (FOST)

1. The Grantee has received the technical environmental reports, including the Environmental Baseline Survey for the Property dated 9-20 November 1998, the Environmental Baseline Survey for the Property dated 3 May 1999 and the FOST for the property dated May 2005, prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use.

2. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBSs, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the remaining Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Subsection IV.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

c. Notice of the Presence of Lead-Based Paint and Covenant Against the Use of the Property for Residential Purposes

1. The Grantee is hereby informed and does acknowledge that all buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in Residential Real Property is required to provide the buyer with any information on lead-based

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paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead-based paint hazards. "Residential Real Property" means any housing constructed prior to 1978, except housing for the elderly (households reserved for and composed of one or more persons 62 years of age or more at the time of initial occupancy) or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

2. Available information concerning known lead-based paint and/or lead-based paint hazards, the location of lead-based paint and/or lead-based paint hazards, and the condition of painted surfaces is contained in the Environmental Baseline Surveys and (for residential properties) the lead-based paint assessment, which have been provided to the Grantee. All purchasers must receive the federally-approved pamphlet on lead poisoning prevention. The Grantee hereby acknowledges receipt of all of the information described in this subparagraph.

3. The Grantee acknowledges that it has received the opportunity to conduct its own risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards prior to execution of this document.

4. The Grantee covenants and agrees that it shall not permit the occupancy or use of and buildings or structures on the Property as Residential Real Property without complying with this section and all applicable Federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the Grantee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992) (hereinafter Title X).

5. The Grantee shall, after consideration of the guidelines and regulations established pursuant to Title X: (1) Comply with the joint HUD and EPA Disclosure Rule (24 CFR 35, Subpart A, 40 CFR 745, Subpart F), when applicable, by disclosing to prospective purchasers the known presence of lead-based paint and/or lead-based paint hazards as determined by previous risk assessments; (2) Abate lead-based paint hazards in pre-1978 buildings and structures in paint, dust and bare soil in accordance with the HUD Guidelines, and (3) Comply with the EPA lead-based paint work standards when conducting lead-based paint activities (40 CFR 745, Subpart L).

6. In complying with these requirements, the Grantee covenants and agrees to be responsible for any abatement or remediation of lead-based paint or lead-based paint hazards on the Property found to be necessary as a result of the subsequent use of the Property for residential purposes. The Grantee covenants and agrees to comply with solid or hazardous waste laws that may apply to any waste that may be generated during the course of lead-based paint abatement activities.

7. The Grantee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands, or actions, liabilities,

judgments, costs and attorney's fees arising out of, or in a manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of lead-based paint hazards on the Property if used for residential purposes.

8. The covenants, restrictions, requirements and obligations of this Subsection IV.c. shall be binding upon the Grantee, its successors and assigns and all future owners and shall be deemed to run with the land. The Grantee on behalf of itself, its successors and assigns covenants that it will include and make legally binding, this Subsection IV.c. in all subsequent transfers, leases, or conveyance documents.

d. Notice of the Presence of Asbestos and Covenant

1. The Grantee is hereby informed and does acknowledge that friable and non-friable asbestos or asbestos-containing materials ("ACM") has been found on the Property, as described in the EBSs/FOST. The ACM on the Property does not currently pose a threat to human health or the environment. All friable asbestos that posed a risk to human health has been removed.

2. The Grantee covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos; and that the Grantor assumes no liability for future remediation of asbestos or damages for personal injury, illness, disability, or death, to the Grantee, its successors or assigns, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos on the Property, whether the Grantee, its successors or assigns have properly warned or failed to properly warn the individual(s) injured. The Grantee agrees to be responsible for any future remediation of asbestos found to be necessary on the Property.

3. Unprotected or unregulated exposures to asbestos in product manufacturing, shipyard, and building construction workplaces have been associated with asbestos-related diseases. Both the Occupational Safety and Health Administration (OSHA) and the EPA regulate asbestos because of the potential hazards associated with exposure to airborne asbestos fibers. Both OSHA and EPA have determined that such exposure increases the risk of asbestos-related diseases, which include certain cancers and which can result in disability or death.

4. The Grantee acknowledges that it has inspected the Property as to its asbestos content and condition and any hazardous or environmental conditions relating thereto. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos hazards or concerns.

5. The Grantor assumes no liability for any damages to person or property, and gives no warranties, either express or implied, with regard to the presence or absence of asbestos or ACM in buildings and structures, or whether the Property is or is not suitable for a particular purpose. The Grantee further agrees to indemnify and hold harmless the Grantor, its officers,

agents and employees from and against all suits, claims, demands or actions, liabilities, judgments, penalties, costs and attorneys' fees arising out of or in any manner predicated upon, future asbestos abatement or remediation from within buildings and structures on the Property; disposal of ACM or asbestos after conveyance to the Grantee; personal injury, death or property damages resulting from, related to, caused by or arising out of exposure to asbestos within buildings and structures on the Property on or after conveyance of such portions of the Property to the Grantee. The Grantee's obligation hereunder shall apply whenever the United States incurs costs or liabilities for actions giving rise to liability under this Subsection. The Grantee shall not be responsible for indemnifying or holding the Grantor harmless from any loss, claims, liabilities, judgments, penalties, costs, or damages arising out of exposure to asbestos that occurred prior to the date of this Deed.

e. Polychlorinated Biphenyls (PCBs) Containing Equipment Notification

The Grantee is hereby informed and does acknowledge that equipment containing polychlorinated biphenyls (PCBs) exists on the Property to be conveyed and that said equipment is owned by Southern Public Power District.

f. Notice of Aboveground Storage Tanks - Parcel 8B

The Grantee is hereby informed and does acknowledge there were several Aboveground Storage Tanks (ASTs) that contained diesel fuel which were formerly located on the premises from 1942 to 1998 (S-3, S-7, S-8, S-9, S-12, S-32, S-34 and S-35); the tanks and surrounding soil were removed in 1989 (S-7, S-8, S-9) and 1998 (S-3, S-12, S-32, S-34 and S-35); and subsequent investigation indicated that no additional cleanup was necessary.

g. Land Use Restrictions

The Grantor has undertaken careful environmental study of the Property and concluded, to which the Grantee agrees, that the highest and best use of the Property is limited by its environmental condition to commercial/industrial/agricultural uses. In order to protect human health and the environment, promote community objectives, and further the common environmental objectives and land use plans of the Grantor, State of Nebraska and Grantee, the following covenants/restrictions/reservations are included in this deed to assure the use of the Property is consistent with environmental conditions of the Property. The following covenants/restrictions/reservations benefit both the lands retained by the Grantor and the general public welfare and are consistent with the State of Nebraska and Federal environmental statutes.

1. Commercial/Industrial/Agricultural Use Restrictions

(a) The Grantee covenants for itself, its successors and assigns, that the Property shall be used solely for commercial/industrial/agricultural purposes and not for residential purposes, the Property having been remediated only for commercial/industrial/agricultural uses. Commercial, Industrial and Agricultural uses include, but are not limited to, administrative/office

space, manufacturing, warehousing, restaurants, hotels/motels and retail activities. Residential use includes, but is not limited to, housing, day care facilities, and schools (excluding education and training programs for persons over 18 years of age), and assisted living facilities.

(b) Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations, such additional remediation necessary to allow for residential use of the Property. Any additional remediation will be at no additional cost to the Grantor and with the Grantor's prior written consent. Consent may be conditioned upon such terms and conditions as the Grantor deems reasonable and appropriate, including performance and payment bonds and insurance. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's obtaining the approval of the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency (EPA) and the Nebraska Department of Environmental Quality (DEQ) and, if required, any other regulatory agency, the Grantor agrees to release or, if appropriate, modify this restriction by executing and recording, in the same land records of Nebraska, Hall County, as this deed, a Partial Release of Covenant. Grantee shall bear the cost of recording and reasonable administrative fees.

2. Enforcement

(a) The above covenants/restrictions/reservations shall inure to the benefit of the public in general and adjacent lands, including lands retained by the United States, and, therefore, are enforceable by the United States Government and State of Nebraska. These covenants/restrictions/reservations are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable.

(b) The Grantee covenants for itself, its successors and assigns that it shall include and otherwise make legally binding the above land use covenants/restrictions/ reservations in all subsequent leases and transfer or conveyance documents relating to the Property subject hereto. Notwithstanding this provision, failure to include these land use restrictions in subsequent conveyances does not abrogate the status of these covenants/restrictions/reservations as binding upon the parties, their successors and assigns.

(c) The Grantee, for itself, its successors and assigns, covenants that it will not undertake or allow any activity on or use of the Property that would violate the land use restrictions contained herein.

(d) Notwithstanding any other provision of this Deed; any agreement between the Grantee and the Grantor; the provisions of CERCLA, including CERCLA Section 120(h)(3), as amended, the Grantee on behalf of itself, its successors and assigns, covenants and agrees that the Grantee or the then record owner of the Property will be fully responsible for any investigation and/or remediation of hazardous substances, pollutants or contaminants, or petroleum or petroleum derivatives, to the extent that such investigation and/or remediation becomes necessary in response to a violation of the land use restrictions in Section IV.g., or the reserved negative easement in Section I.

3. Submissions

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Modification of Restrictions. The Grantee shall submit any requests to use the Property for residential purposes, install monitoring wells or other modification to the above restrictions to Grantor, with a copy to EPA and Nebraska DEQ, by first class mail, postage prepaid, addressed as follows:

- (a) to Grantor: Corps of Engineers, Omaha District
ATTN: CENWO-RE
106 South 15th Street
Omaha, NE 68102-1618
- (b) to EPA: U.S. Environmental Protection Agency, Region VII
901 North 5th Street
Kansas City, KS 66101
- (c) to State: Nebraska Department of Environmental Quality
P.O. Box 98922
Lincoln, NE 68509-8922

V. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land described in Section IV of this Quitclaim Deed. In addition, Grantor and its successors and assigns, shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, Grantor and its successors and assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by Grantee, for itself and its successors and assigns, that except for warranties, responsibilities and agreements of Grantor specifically set forth herein, the Property is conveyed "*as is*" and "*where is*" without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property. Grantee, for itself and its successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property nor any agreement or promise to alter, improve, adapt or repair the Property.

b. The Grantee, its successors and assigns, shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grants of any interest, privilege, or license.

VI. AGREEMENTS, NOTICES AND CONDITIONS

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a. Anti-Deficiency Act

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of funds appropriated for this purpose to the Department of the Army, and nothing in this deed shall be interpreted to require obligations or payments by the Grantor in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

b. Notice of Wetlands

This Property contains wetlands protected under state and Federal laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetlands, including, without limitation, the placement of fill materials; the building of any structure; the placement of site-development fills for recreational, industrial, commercial, residential, and other uses; the placement of causeways or road fills; and the construction of dams and dikes.

VII. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the Property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record.

b. Any zoning laws, ordinances, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements that may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

g. Installation Commander agreements, whether or not of record or otherwise approved in writing by Grantee.

200600527

VIII. NO WAIVER

The failure of the Government to insist in any one or more instances upon complete performance of any of the said notices, covenants, conditions, restrictions, or reservations shall not be construed as a waiver or a relinquishment of the future performance of any such covenants, conditions, restrictions, or reservations; but the obligations of the Grantee, its successors and assigns, with respect to such future performance shall continue in full force and effect.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 1991) in which property is transferred by the United States.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. 2662.

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be hereunto affixed this 8th day of December, 2005.



UNITED STATES OF AMERICA

By:

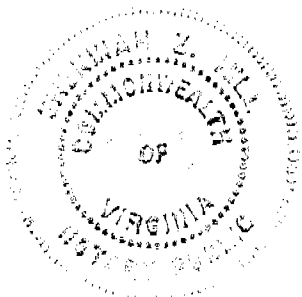
Joseph W. Whitaker

Joseph W. Whitaker

Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

COMMONWEALTH OF VIRGINIA)
) ss
COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 30th day of September, 2008, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and who acknowledged the foregoing instrument to be his free act and deed, dated this 8th day of December, 2005, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.



Shekinah Z. Hill
Notary Public

My commission expires: 30 September 2008

GRANTEE ACCEPTANCE

200600527

The undersigned Grantee, does hereby accept the herein-described property, subject to the notices, agreements, reservations, restrictions, conditions, covenants and exceptions hereinabove expressed.

Executed this 5 day of August, 2005, in Washtenaw County, State of Michigan.

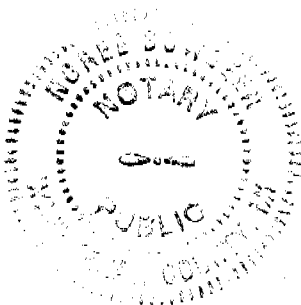
DTE RAIL SERVICES, INC.

BY: Evan J O'Neil

TITLE: President CEO
BY: [Signature]
LEGAL
8-4-05

STATE OF MICHIGAN)
) ss
COUNTY OF WASHTENAW)

The foregoing Quitclaim Deed was acknowledged before me this 5 day of August, 2005, by Evan James O'Neil.



Noe Bowbeer
Notary Public

My commission expires: 9/2/2007

NOE BOWBEER
Notary Public, Washtenaw County, MI
My Commission Expires 09/02/2007

200600527

N.W. Cor. N1/2, Sec.
20, T11N - R10W
Found Aluminum Cap

1392.68' A & R
1364.62' A & R

Found P.H. Nail
in Asphalt

Section Line Old Potash

750.79' A & R

50' County Road Right Of Way

751.69'

Actual Point Of Beginning
Parcel No. 8A

LEGAL DESCRIPTION (Parcel No. 8A)

A tract of land comprising a part of the North Half (N1/2) of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., in Hall County, Nebraska, more particularly described as follows:

Beginning at the northwest corner of said North Half (N1/2); thence running easterly along the north line of said North Half (N1/2), a distance of One Thousand Three Hundred Sixty Four and Sixty Two Hundredths (1364.62) feet, to the ACTUAL point of beginning; thence continuing easterly along the north line of said North Half (N1/2), a distance of Seven Hundred Fifty and Seventy Nine Hundredths (750.79) feet; thence deflecting right 87°33'43" and running southerly a distance of Two Hundred Twenty Three and Eighty Seven Hundredths (223.87) feet; thence deflecting left 23°04'13" and running southeasterly a distance of Two Hundred Twenty Nine and Fifty Four Hundredths (229.54) feet; thence deflecting left 64°09'24" and running easterly a distance of One Hundred Nine and Twenty One Hundredths (109.21) feet; thence deflecting right 90°00'00" and running southerly Four Hundred Fifteen and Eighty Eight Hundredths (415.88) feet; thence deflecting right 50°12'39" and running southwesterly a distance of Two Hundred Forty Three and Seventy Four Hundredths (243.74) feet; thence deflecting left 48°35'43" and running southerly a distance of Three Hundred Seventy and Nineteen Hundredths (370.19) feet; thence deflecting right 89°42'41" and running westerly a distance of Seven Hundred Seventy One and Fifty Nine Hundredths (771.59) feet; thence deflecting right 88°42'57" and running northerly a distance of Three Hundred Thirty Four and Fifteen Hundredths (334.15) feet; thence deflecting left 90°00'07" and running westerly a distance of Four Hundred Fifty Seven and Eighty Seven Hundredths (457.87) feet; thence deflecting right 89°45'07" and running northerly a distance of Two Hundred Eighty Five and Thirty Eight Hundredths (285.38) feet; thence deflecting left 89°45'30" and running westerly a distance of One Hundred Ninety Three and Seventy Hundredths (193.70) feet; thence deflecting right 90°47'40" and running northerly a distance of One Hundred Seventy Nine and Five Hundredths (179.05) feet; thence deflecting right 89°19'48" and running easterly a distance of Three Hundred Seventy Five and Seventy Eight Hundredths (375.78) feet; thence deflecting left 51°15'32" and running northeasterly a distance of Four Hundred Thirty One and Fifty Five Hundredths (431.55) feet; thence deflecting left 38°34'36" and running northerly a distance of Two Hundred Sixteen and Three Hundredths (216.03) feet, to the ACTUAL point of beginning and containing 33.252 acres more or less, of which 0.863 acres more or less is presently occupied by public road right of way. Net 32.389 acres more or less.

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Parcel No. 8A
(32.389 Ac.)

Pt. N1/2, S

ACCESS EASEMENT (50' Wide)

A tract of land consisting of a Fifty (50.0) foot wide easement located in the North Half (N1/2) of Section Twenty (20), Township Eleven (11) North, Range Ten (10) West of the 6th P.M., in Hall County, Nebraska, the centerline of said Fifty (50.0) foot wide easement being more particularly described as follows:

Beginning at the northwest corner of said North Half (N1/2); thence running easterly along the north line of said North Half (N1/2), a distance of One Thousand Three Hundred Ninety Two and Sixty Eight Hundredths (1392.68) feet; thence deflecting right 89°30'47" and running southerly along the centerline of an existing road, a distance of Nine Hundred Eighty One and Sixty Nine Hundredths (981.69) feet; thence deflecting right 01°31'48" and continuing southerly along the centerline of an existing road, a distance of Three Hundred Sixty Nine and Three Tenths (369.30) feet, to the ACTUAL point of beginning; thence continuing along the last described course, a distance of One Thousand One Hundred Ninety Eight and Nine Hundredths (1198.09) feet, to the point of TERMINATION, said point being on the north line of and One Thousand Three Hundred Ninety One and Forty Three Hundredths (1391.43) feet east of the northwest corner of a tract of land referred to as Parcel No. 3, and located in a part of said Section Twenty (20), said tract containing 1.375 acres more or less.

70th. ROAD

N.W. Cor. Parcel No. 3
Nail in Asphalt

Northerly Line Parcel No. 3

1391.43' A

Parcel No. 3

Point Of Termination Access
Easement (50' Wide)

Actual Point Of Beginning
Access Easement (50' Wide)

Centerline 50' Wide Access Easement

771.59' A & R

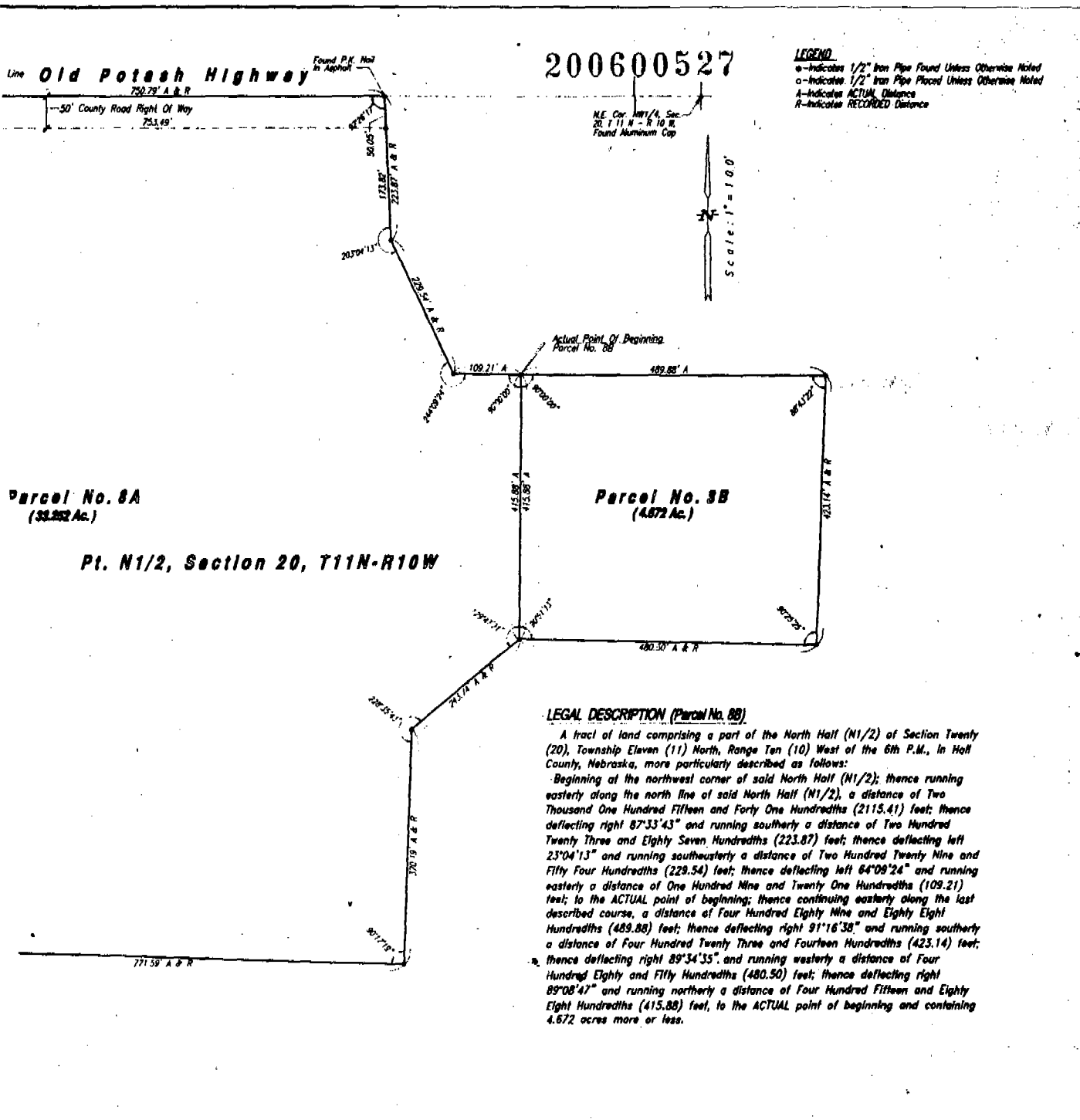


EXHIBIT "A" ATTACHED TO AND MADE

A PART OF QUITCLAIM DEED

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Daryl D. Sorgenfrei, Reg. Land Surveyor No. 548 s.s.
(Seal)

SUBMITTED BY:		DRAWN BY: Daryl S.	
CHECKED BY: B.S.		SHEET No. 1 OF 1	
APPROVED BY:		REVISIONS	
DATE: February 18, 2005		February 28, 2005	
PROJECT No.			

200600527

EXHIBIT B**Table 2 - Notification of Hazardous Substance Storage, Release, or Disposal**

Property Description	Name of Hazardous Substance(s) Stored (S), Released (R) or Disposed (D)	Date of Storage, Release or Disposal	Remedial Actions
Parcel 8B Shop Area Approximately 4.672 acres of land	Volatile organic compounds (VOCs) (R)	1942-1998	<p>No soil remediation was required on Parcel 8B.</p> <p>Groundwater sampling results collected in the AST area indicated that chlorinated solvents had impacted groundwater on Parcel 8B. Concentrations of 1,1,2-trichloroethane (1,1,2-TCA) and 1,2-dichloroethane (1,2-DCA) were detected in samples collected during the 1995 and 1996 sampling efforts.</p> <p>Annual monitoring for VOCs continues at six sampling locations on Parcel 8B. The March 2004 sampling event indicates that three of the six sampling locations were non-detect for VOCs. Low levels of various VOCs were detected in the other three sampling locations (all located within Parcel 8B); however, only a single detection of 1,1,2-TCA (7.2 µg/L at SHGW02) exceeded its respective MCL (5.0 µg/L). The evaluation of sampling data indicates there is evidence that natural attenuation is occurring and that the VOC plume is not migrating off OU3. Site groundwater is not in use.</p> <p>The 1999 ROD identified the selected remedy for VOCs in groundwater (Parcel 8B) as monitored natural attenuation. Groundwater monitoring for VOCs and natural attenuation indicators will continue until regulatory approval to discontinue monitoring is obtained. See Record of Decision (ROD) Operable Unit Three, 1999.</p>

EXHIBIT "B" ATTACHED TO AND MADE**A PART OF QUITCLAIM DEED**

Entered As Instrument No
0200607051

STATE OF NEBRASKA)
COUNTY OF HALL) ss

2006 AUG 7 PM 4 53

Kathy Braach
REG. OF DEEDS

CASH _____

CHECK 70.50

REFUNDS: _____

CASH _____

CHECK _____

NEBRASKA DOCUMENTARY

STAMP TAX

Date 8-7-2006

EXEMPT 2 BY AT

Cathleen Allen
PO Box 790
GI NE 68802

Cornhusker Army Ammunition Plant (CHAAP)
Hall County, Nebraska
Part of Acquisition Tract No. 3a
Land Tract No. 1

QUITCLAIM DEED

70.50

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 12th day of July, 2006, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as "Grantor," acting by and through the Deputy Assistant Secretary of the Army (Installations and Housing) (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) (hereinafter "said Act"), and **CENTRAL PLATTE NATURAL RESOURCES DISTRICT (CPNRD)**, a political subdivision of the State of Nebraska, with its principal office located at 215 Kaufman Avenue, Grand Island, Nebraska 68803, hereinafter referred to as "Grantee."

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be transferred to Grantee; and

WHEREAS, the property to be conveyed herein has been identified by Grantor pursuant to 42 U.S.C. Section 9620(h)(4)(A) as real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of and appropriate concurrence in such identification has been obtained pursuant to 42 U.S.C. Section 9620(h)(4)(B); and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above mentioned laws, regulations and orders.



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NOW THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of Seventy Eight Thousand Two Hundred Ten and No/100 Dollars (\$78,210.00), the receipt of which is hereby acknowledged by Grantor; and (2) the specific agreements hereinafter made by Grantee, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all its right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

A tract of land comprising a part of the Northeast Quarter (NE1/4) of Section Two (2), Township Eleven (11) North, Range Eleven (11) West of the 6th Principal Meridian, Hall County, Nebraska, containing 104.280 acres, more or less (hereinafter referred to as the "Property"), and being more particularly shown and described on **Exhibit "A,"** which is attached hereto and made a part hereof.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of Grantor, and its assigns:

SAVE AND EXCEPT and there is hereby reserved unto Grantor, and its assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) covering the Property.

Department of the Army Lease No. DACA45-1-02-6020 (Tract 1) granted to Tom Fagan for the period March 1, 2005 through February 28, 2006.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120(h)(4) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended, (CERCLA), 42 U.S.C. Section 9601 et seq., the Grantor has identified the Property as real property on which no hazardous substances and no

petroleum products or their derivatives were known to have been released or disposed of. The Grantor covenants and warrants to the Grantee that in the event that any response action or corrective action is found to be necessary after the date of this conveyance as a result of hazardous substances or petroleum products or their derivatives existing on the Property prior to the date of this conveyance, such response action or corrective action shall be conducted by the Grantor.

b. The Grantor shall not incur liability for additional response action or corrective action found to be necessary after the date of transfer in any case in which the person or entity to whom the property is transferred, or other non-Grantor entities, is identified as the party responsible for contamination of the property.

c. Grantor reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, the United States, and its respective officers, agents, employees, contractors and subcontractors, shall have the right (upon reasonable notice to the then owner and any authorized occupant) to enter upon the herein described Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including, but not limited to, the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants. Grantor will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions. This subparagraph shall not affect the Grantor's future responsibilities, if any, to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCLUSIONS, RESERVATIONS, COVENANTS AND RESTRICTIONS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exclusions, reservations, covenants and restrictions affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the property, or any part thereof, their heirs, successors and assigns.

a. Federal Facility Agreement

The Grantee acknowledges that Cornhusker Army Ammunition Plant has been identified as a National Priority List (NPL) site under the Comprehensive Environmental Response,

Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army, effective September 1990, and a copy of any amendments thereto, have been provided the Grantee. The Grantee, its successors and assigns, agree that should any conflict arise between the terms of the FFA as they presently exist or as they may be later amended and the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee, its successors and assigns, further agree that notwithstanding any other provisions of this deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof.

b. Environmental Baseline Survey (EBS) and Finding of Suitability to Transfer (FOST)

1. The Grantee has received the technical environmental reports, including the Environmental Baseline Survey for the Property dated 9-20 November 1998 and the FOST for the property dated October 2005, prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use.

2. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Subsection IV.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

c. Preservation of Archeological Site

Archeological Site 25HL47 (hereinafter referred to as "the site") is located on Tract 1 of the subject property and is hereby conveyed subject to the following conditions, restrictions and limitations hereinafter set forth:

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1. The Site shall be maintained and preserved in accordance with the Secretary of Interior's Standards and Guidelines for Archeological Documentation (48 FR 44734-44737) Preservation and the Advisory Council on Historic Preservation's publication entitled "Treatment of Archeological Properties," in order to preserve and enhance those qualities that make the property eligible for inclusion in the National Register of Historic Places.

2. The Site can be used for agricultural, conservation, or recreation related activities **provided that no disturbance of the ground surface or any other similar activity shall be permitted**, which would alter the historic integrity or the archeological value of the Site, without prior written permission of the Nebraska State Historic Preservation Officer (SHPO) signed by a fully authorized representative thereof. Should the SHPO require, as a condition of granting permission, that the Grantee conduct archeological data recovery operations or other activities designed to mitigate the adverse effect of the proposed activity on 25HL47, the Grantee shall conduct such activities at his own expense. Also, the Grantee shall conduct such activities in accordance with the Secretary of the Interior's Standards and Guidelines for Archeological Documentation (48 FR 44734-44737), and the Nebraska State Archeologist's guidelines and permit processes (as applicable), and such other standards and guidelines as the SHPO may specify, including but not limited to standards and guidelines for research design, field work, analysis, preparation and dissemination of reports, disposition of artifacts and other materials, consultation with Native American or other organizations as required, and reinterment of human remains, if recovered.

3. The above restrictions are binding on the Grantee, his heirs, successors and assigns in perpetuity; however, the SHPO may, for good cause, modify or cancel any of the foregoing restrictions upon written application of the Grantee, his successors or assigns.

4. The SHPO shall be permitted access, at all reasonable times, to inspect the Site in order to ascertain if the above conditions are being observed.

5. In the event of a violation of this covenant by the Grantee, and in addition to any remedy now or hereafter provided by law, the SHPO may, following reasonable notice to the State of Nebraska, notify the Advisory Council on Historic Preservation of said violations.

6. If the Grantee, his successors or assigns, conducts and completes a study of the Site 25HL47 and retrieves archeological resources and delivers them to the SHPO, all under the supervision of, and to the satisfaction of, the Nebraska State Archeologist, the Nebraska Historical Society shall execute a valid certificate of release of this Preservation Restriction and deliver said certificate of release in recordable form to the Grantee, or his successors or assigns.

7. This covenant is enforceable in specific performance by a court of competent jurisdiction.

d. Endangered Species Act

Prior to any construction activities on the Property associated with the flood control project, the Grantee, at no expense to the Grantor, agrees to perform all of the following in order to satisfy the requirements of the Endangered Species Act.

1. The portions of the flood control project on or within the former CHAAP, to include the detention basins, will be designed to limit the amount of wetland habitat in order to either avoid or minimize the occurrence of any resultant net flow depletion to the lower Platte River.

2. The design for portions of the flood control project on or within the former CHAAP, to include the flood detention basins, will be submitted by the Grantee after development to the U.S. Fish and Wildlife Service, hereinafter "Service," for review.

3. The water use calculator developed by the Natural Resources Conservation Service (NRCS, 2001), along with other methods approved by the Service, will be utilized to determine whether the project will result in a net flow depletion to the lower Platte River (i.e., in terms of acre-feet of water depleted on an average annual basis during the months of February through July).

4. If it is determined that the portions of the flood control project on or within the former CHAAP project will result in a minor net annual flow depletion (25 acre-feet or less), consultation must occur with the Service.

5. The effects of the portions of the flood control project on or within the former CHAAP, to include the detention basins, on federally listed endangered species and designated critical habitat will be offset by one of the conservation measures described in the Service's biological opinion on federal agency actions that result in minor water depletions to the Platte River system (USFWS, 2002 and 2003).

6. If the calculated amount of the net annual flow depletion is 25 acre-feet or less, the conservation measure which allows for debiting a calculated depletion fee (at no cost to the CPNRD) from a special account that has been established with the National Fish and Wildlife Foundation, must be considered and may be utilized.

7. If the amount of the net annual flow depletion is calculated to be greater than 25 acre-feet per year, on an average annual basis during the months of February through July, further prompt consultation with the Service must occur in order to comply with other reasonable means to either avoid or offset the adverse impacts of the portions of the flood control project on or within the former CHAAP on listed endangered species and critical habitat.

8. Consultation must occur with the Service and the state fish and wildlife agency to ensure that the future use of the property is in compliance with all applicable environmental laws and regulations, including the substantive environmental and natural resource provisions of Executive Orders 11988 and 11990.

The U.S. Fish and Wildlife Service shall have the right to enforce each of the above requirements against the Grantee, its successors and assigns, in any court of competent jurisdiction, in the event the Grantee, its successors and assigns, fail to perform any one or more of them.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to the following:

Perpetual Easement No. DACA45-2-00-6023, granted to Hall County for road rights-of-way.

b. Any zoning laws, ordinances, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land described in Section IV. of this Quitclaim Deed. In addition, Grantor and its successors and assigns, shall

be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, Grantor and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by Grantee, for itself and its successors and assigns, that except for warranties, responsibilities and agreements of Grantor specifically set forth herein, the Property is conveyed "*as is*" and "*where is*," without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property. Grantee, for itself and its successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property nor any agreement or promise to alter, improve, adapt or repair the Property.

b. The Grantee, its successors and assigns, shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grants of any interest, privilege, or license.

VII. AGREEMENTS, NOTICES AND CONDTIONS

a. Anti-Deficiency Act Clause

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of funds appropriated for this purpose to the Department of the Army, and nothing in this Deed shall be interpreted to require obligations or payments by the Grantor in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

b. Notice of Wetlands

This Property contains wetlands protected under state and Federal laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetlands, including, without limitation, the placement of fill materials; the building of any structure; the placement of site-development fills for recreational, industrial, commercial, residential, and other uses; the placement of causeways or road fills; and the construction of dams and dikes.

VIII. NO WAIVER

The failure of the Government to insist in any one or more instances upon complete performance of any of the said notices, covenants, conditions, restrictions, or reservations shall

200607051

GRANTEE ACCEPTANCE

CENTRAL PLATTE NATURAL RESOURCES DISTRICT, GRANTEE, hereby accepts this Quitclaim Deed and the property described therein for itself, its successors and assigns, subject to all of the notices, agreements, reservations, restrictions, conditions, covenants, exceptions, and terms contained therein, this 31st day of January 2006.

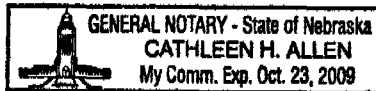
CENTRAL PLATTE NATURAL
RESOURCES DISTRICT

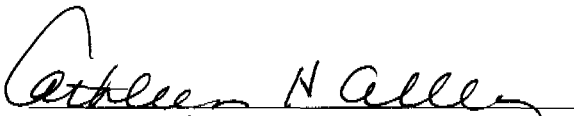
BY: 

TITLE: General Manager

STATE OF NEBRASKA)
) ss
COUNTY OF HALL)

The foregoing Quitclaim Deed was acknowledged before me this 31st day of January 2006, by Ronald Bishop, General Manager




Notary Public

My commission expires: Oct. 23 2009

200607051

N.W. CORNER NE1/4
SECTION 2-T11N-R11W
FOUND "D J HOSTLER"
ALUMINUM CAP IN
ASPH. PAVEMENT

3,200.0' R.

AIRPORT ROAD

2,636.82' A.

SECTION LINE

177°59'57" A.

SCALE 1"=200'

SCHAUPPSVILLE ROAD

2,180.0' R.
2,180.83' A.

2,649.86' A.

SECTION LINE

89°49'50" A.

FOUND STATE GAME AND
PARKS BRASS CAP IN CONC.

3,200.0' R.
3,198.43' A.

S.W. CORNER NW1/4
SECTION 2-T11N-R11W
FOUND U. S. B. L. M.
BRASS CAP

(NEBRASKA GAME AND PARKS)
TRACT PER QUITCLAIM DEED-
RECORDED IN BOOK 166, PAGE 443
REGISTER OF DEEDS OFFICE

LEGAL DESCRIPTION

A tract of land comprising a part of the North
Hall County, Nebraska, and more particularly d

Beginning at the northeast corner of said
(NE1/4), a distance of Two Thousand Sev-
Game and Parks Commission property) 2
running southerly, along and upon the es
and One Tenth (2,180.10) feet to the south
easterly, along and upon the easterly pro
Ninety One and Seventy Eight Hundredths
and running northerly, along and upon t
Fifty Four Hundredths (2,179.54) feet to the
occupied by public road right of way.

CORNER TIES

N.W. CORNER NW1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
49.26' N.W. TO NAIL IN POWER POLE
37.20' S.E.W. TO CHISELED MARK ON TOP END OF C.M.P.
43.43' S.E. TO CHISELED MARK ON TOP END OF C.M.P.

N.W. CORNER NE1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
36.35' N.W. TO CHISELED MARK IN TOP END OF C.M.P.
33.60' N. TO NAIL IN POWER POLE
60.09' S. TO PIN IN CONCRETE MONUMENT

N.E. CORNER NE1/4 - FOUND "D J HOSTLER" ALUMINUM CAP IN ASPH. PAVEMENT
46.84' N.E. TO NAIL IN POWER POLE
64.30' S.E. TO NAIL IN FENCE CORNER POST
54.77' S.W. TO NAIL IN FENCE CORNER POST

S.W. CORNER NW1/4 - FOUND U.S.B.L.M. BRASS CAP
26.90' W. TO 1/2" IRON PIPE
52.10' N.E. TO NAIL IN FENCE BRACE POST
52.44' S.E. TO NAIL IN FENCE BRACE POST

S.E. CORNER NE1/4 - FOUND 1 1/4" IRON PIN
63.69' N.N.E. TO NAIL IN 42" TREE
42.39' N.E. TO NAIL IN 42" TREE
53.55' E.N.E. TO NAIL IN 42" TREE

2-T11N-R11W

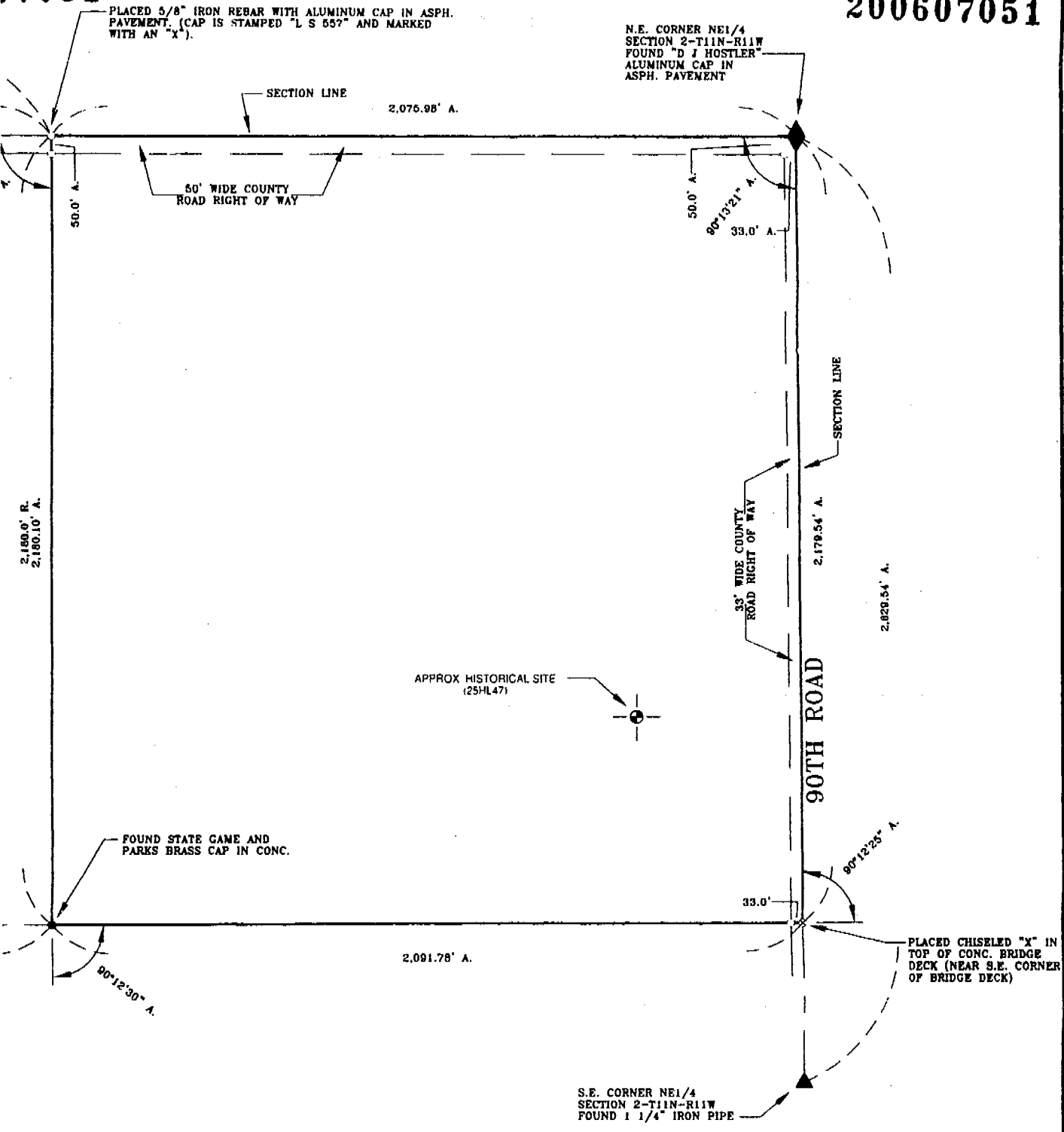
SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowle
supervision.

Lee D. Wagner, R

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Section Two (2), Township Eleven (11) North, Range Eleven (11) West of the 6th P.M.

thence running westerly, along and upon the north line of said Northeast Quarter (2,075.98) feet to the northeast corner of a tract (State of Nebraska vs 443, Hall County Register of Deeds Office; thence deflecting left 89°48'26" and same Game and Parks Commission tract, a distance of Two Thousand One Hundred Eighty same Game and Parks Commission tract; thence deflecting left 90°12'30" and running e of said Nebraska Game and Parks Commission tract, a distance of Two Thousand e on the east line of said Northeast Quarter (NE1/4); thence deflecting left 90°12'25" east Quarter (NE1/4), a distance of Two Thousand One Hundred Seventy Nine and containing 104.280 acres, more or less, of which, 3.996 acres, more or less, is presently

R. - RECORDED DISTANCE ON QUITCLAIM DEED RECORDED IN BOOK 168, PAGE 443, HALL COUNTY REGISTER OF DEEDS OFFICE
A. - ACTUAL DISTANCES AND/OR ANGLES

= INDICATES 5/8" IRON REBAR WITH ALUMINUM CAP PLACED. (CAP IS STAMPED "L S 557" AND MARKED WITH AN "X").

panying plat is from an accurate survey of the described property made under my



TRACT NO. 1

PART OF THE NE1/4 OF SECTION 2-T11N-R11W, HALL COUNTY, NEBRASKA	CAAP 1.dwg
	18-29-2004
LAND SURVEY	D.S.
	L.W.
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 339 - PHONE 382-8465 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68802-0339	

EXHIBIT "A" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED (TRACT 1)


200607051

CERTIFICATE OF AUTHORITY

I hereby certify that I am the Chairman of
(Secretary or Attesting Officer)
the organization named in the foregoing agreement with the United States of
America; that said organization is organized under the laws of the State of
Nebraska;
(State)
that the seal, if applicable, affixed to said instrument
is the seal of said organization; that Ronald Bishop,
(Name of Officer)
who signed said agreement was then General Manager of said
(Title of Officer)
organization and has been duly authorized to sign the foregoing agreement on
behalf of said organization, binding said organization to the terms therein.

I, as the Secretary/Attesting Officer, hereby attest to the validity of the
Signature of said Officer; and that said signature affixed to such agreement is
genuine.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal,
if applicable, of said organization, this 1st day of February, 2006.


Secretary or Attesting Officer
Loren Schuett, Chairman

Central Platte Natural Resources District
Corporation or Organization

*This form certifies that the person signing the attached instrument has the authority to do so. The signature of the
Secretary/Attesting Officer and the individual signing the attached instrument cannot be the same.*

Entered As Instrument No
0200607052

80 50

STATE OF NEBRASKA)
COUNTY OF HALL) SS

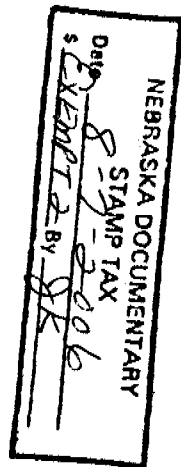
2006 AUG 7 PM 4 54

Kathy Isaac
REG OF DEEDS

CASH _____
CHECK 80.50

REFUNDS:

CASH _____
CHECK _____



Cathleen Allen



200607052

Cornhusker Army Ammunition Plant (CHAAP)
Hall County, Nebraska
Parts of Acquisition Tracts Nos. 4 and 5
Land Tract No. 2

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 12th day of July 2006, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as "Grantor," acting by and through the Deputy Assistant Secretary of the Army (Installations and Housing) (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) (hereinafter "said Act"), and **CENTRAL PLATTE NATURAL RESOURCES DISTRICT (CPNRD)**, a political subdivision of the State of Nebraska, with its principal office located at 215 Kaufman Avenue, Grand Island, Nebraska 68803, hereinafter referred to as "Grantee."

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be transferred to Grantee; and

WHEREAS, the Department of the Army has completed environmental restoration required, if any, with respect to the property conveyed herein; and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above mentioned laws, regulations and orders.

NOW THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of Sixty Four Thousand One Hundred Ninety and No/100 Dollars (\$64,190.00), the receipt of which is hereby acknowledged by Grantor; and (2) the specific agreements hereinafter made by Grantee, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all its right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

A tract of land comprising a part of the Southwest Quarter (SW1/4) and a part of the Northwest Quarter (NW1/4), all being in Section One (1), Township Eleven (11) North, Range Eleven (11) West of the 6th Principal Meridian, Hall County, Nebraska, containing 91.700 acres, more or less (hereinafter referred to as the "Property"), and being more particularly shown and described on **Exhibit "A,"** which is attached hereto and made a part hereof.

RESERVING, however, to the Grantor, ownership and exclusive use of the three existing monitoring wells (well identifiers G0057, G0058 and G0059) located in the southwest corner of the Property together with access across the property for the purpose of monitoring and/or removing the wells. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same.

RESERVING, however, to the Grantor, ownership and exclusive use of the existing weir situated in the northwest corner of the Property together with a perpetual and assignable easement (85 feet x 160 feet), as shown on Exhibit "A," for the operation, maintenance, alteration and replacement of the weir; together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of Grantor, and its assigns:

SAVE AND EXCEPT and there is hereby reserved unto Grantor, and its assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) covering the Property.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), 42 U.S.C. Section 9620 (h)(3), the Grantor has made a complete search of its records concerning the property subject to this Deed. Those records indicate that the hazardous substances, as defined by Section 101 (14) of CERCLA, shown on **Exhibit "B,"** attached hereto and made a part hereof, have been stored for one year or more (S), released (R), or disposed of (D), on the property during the time the property was owned by the Grantor. The Grantee should review the Final Environmental Baseline Survey No. 38-EH-8519-99 dated 9-20 November 1998, and the Finding of Suitability to Transfer (FOST) dated October 2005 for further details.

b. The Grantor covenants and warrants that all remedial action necessary to ensure protection of human health and the environment with respect to any such substance remaining on the property has been taken prior to the date hereof. Furthermore, excepting those situations where the Grantee, its successors or assigns, hereunder are potentially responsible parties, as defined by CERCLA, any additional remedial action found to be necessary with respect to any such substance remaining on the property after the date hereof shall be conducted by the United States.

c. The Grantor shall not incur liability for additional response action or corrective action found to be necessary after the date of transfer in any case in which the person or entity to whom the property is transferred, or other non-Grantor entities, is identified as the party responsible for contamination of the property.

d. Grantor reserves a right of access to all portions of the Property for environmental investigation, remediation, or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to the Grantor. These rights shall be exercisable in any case in which a remedial action, response action, or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, the United States, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the then owner and any authorized occupant of the Property) to enter upon the herein described Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including, but not limited to the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities or authorized occupants.

Grantor will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions. This subparagraph shall not affect the Grantor's future responsibilities, if any, to conduct response actions or corrective actions that are required by applicable laws, rules, and regulations.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCLUSIONS, RESERVATIONS, COVENANTS AND RESTRICTIONS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exclusions, reservations, covenants and restrictions affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the property, or any part thereof, their heirs, successors and assigns.

a. Federal Facility Agreement

The Grantee acknowledges that Cornhusker Army Ammunition Plant has been identified as a National Priority List (NPL) site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army, effective September 1990, and a copy of any amendments thereto, have been provided the Grantee. The Grantee, its successors and assigns, agree that should any conflict arise between the terms of the FFA as they presently exist or as they may be later amended and the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee, its successors and assigns, further agree that notwithstanding any other provisions of this deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof.

b. Environmental Baseline Survey (EBS) and Finding of Suitability to Transfer (FOST)

1. The Grantee has received the technical environmental reports, including the Environmental Baseline Survey for the Property dated 9-20 November 1998 and the FOST for the property dated October 2005 prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use.

2. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or

assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Subsection IV.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

c. Land Use Restrictions

The Grantor has undertaken careful environmental study of the Property and concluded, to which the Grantee agrees, that the highest and best use of the Property is limited by its environmental condition to agricultural, conservation, or recreational land uses. In order to protect human health and the environment, promote community objectives, and further the common environmental objectives and land use plans of the Grantor, State of Nebraska, and Grantee, the following covenants/restrictions/reservations are included in this deed to assure the use of the Property is consistent with environmental conditions of the Property. The following covenants/restrictions/reservations benefit both the lands retained by the Grantor and the general public welfare and are consistent with the State of Nebraska and Federal environmental statutes.

1. Agricultural/Conservation/Recreation Use Restrictions

(a) The Grantee covenants for itself, its successors and assigns, that the Property shall be used solely for agricultural, conservation, or recreation purposes and not for residential purposes, the Property having been remediated only for agricultural, conservation or recreation uses.

(b) Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations, such additional remediation necessary to allow for residential use of the Property. Any additional remediation will be at no additional cost to the Grantor and with the Grantor's prior written consent. Consent may be conditioned upon such terms and conditions, as the Grantor deems reasonable and appropriate, including performance and payment bonds and insurance. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's obtaining the approval of the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency (EPA) and the Nebraska Department of Environmental Quality (DEQ) and, if required, any other regulatory agency, the Grantor agrees to release or, if appropriate, modify this restriction by executing and recording, in the same land records of Nebraska, Hall County, as this deed, a Partial Release of Covenant. Grantee shall bear the cost of recording and reasonable administrative fees.

2. Enforcement

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(a) The above covenants/restrictions/reservations shall inure to the benefit of the public in general and adjacent lands, including lands retained by the United States, and, therefore, are enforceable by the United States Government and State of Nebraska. These covenants/restrictions/reservations are binding on the Grantee, its successors and assigns; shall run with the land; shall run with the land; and are forever enforceable.

(b) The Grantee covenants for itself, its successors and assigns that it shall include and otherwise make legally binding the above land use covenants/restrictions/ reservations in all subsequent leases and transfer or conveyance documents relating to the Property subject hereto. Notwithstanding this provision, failure to include these land use restrictions in subsequent conveyances does not abrogate the status of these covenants/restrictions/reservations as binding upon the parties, their successors and assigns.

(c) The Grantee, for itself, its successors and assigns, covenants that it will not undertake or allow any activity on or use of the Property that would violate the land use restrictions contained herein.

(d) Notwithstanding any other provision of this Deed; any agreement between the Grantee and the Grantor; the provisions of CERCLA, including CERCLA Section 120(h)(3), as amended, the Grantee on behalf of itself, its successors and assigns, covenants and agrees that the Grantee or the then record owner of the Property will be fully responsible for any investigation and/or remediation of hazardous substances, pollutants or contaminants, or petroleum or petroleum derivatives, to the extent that such investigation and/or remediation becomes necessary in response to a violation of the land use restrictions in **Section IV.c.** herein.

3. Submissions

Modification of Restrictions. The Grantee shall submit any requests to install monitoring wells, to construct subsurface structures for human occupation, or for other modification to the above restrictions to Grantor, with a copy to EPA and Nebraska DEQ, by first class mail, postage prepaid, addressed as follows:

- (a) to Grantor: Corps of Engineers, Omaha District
ATTN: CENWO-RE
106 South 15th Street
Omaha, NE 68102-1618
- (b) to EPA: U.S. Environmental Protection Agency, Region VII
901 North 5th Street
Kansas City, KS 66101
- (c) to State: Nebraska Department of Environmental Quality
P.O. Box 98922
Lincoln, NE 68509-8922

d. Endangered Species Act

Prior to any construction activities on the Property associated with the flood control project, the Grantee, at no expense to the Grantor, agrees to perform all of the following in order to satisfy the requirements of the Endangered Species Act.

1. The portions of the flood control project on or within the former CHAAP, to include the detention basins, will be designed to limit the amount of wetland habitat in order to either avoid or minimize the occurrence of any resultant net flow depletion to the lower Platte River.

2. The design for portions of the flood control project on or within the former CHAAP, to include the flood detention basins, will be submitted by the Grantee after development to the U.S. fish and Wildlife Service, hereinafter "Service" for review.

3. The water use calculator developed by the Natural Resources Conservation Service (NRCS, 2001), along with other methods approved by the Service, will be utilized to determine whether the project will result in a net flow depletion to the lower Platte River (i.e., in terms of acre-feet of water depleted on an average annual basis during the months of February through July).

4. If it is determined that the portions of the flood control project on or within the former CHAAP project will result in a minor net annual flow depletion (25 acre-feet or less), consultation must occur with the Service.

5. The effects of the portions of the flood control project on or within the former CHAAP, to include the detention basins, on federally listed endangered species and designated critical habitat will be offset by one of the conservation measures described in the Service's biological opinion on federal agency actions that result in minor water depletions to the Platte River system (USFWS, 2002 and 2003).

6. If the calculated amount of the net annual flow depletion is 25 acre-feet or less, the conservation measure which allows for debiting a calculated depletion fee (at no cost to the CPNRD) from a special account that has been established with the National Fish and Wildlife Foundation, must be considered and may be utilized.

7. If the amount of the net annual flow depletion is calculated to be greater than 25 acre-feet per year, on an average annual basis during the months of February through July, further prompt consultation with the Service must occur in order to comply with other reasonable means to either avoid or offset the adverse impacts of the portions of the flood control project on or within the former CHAAP on listed endangered species and critical habitat.

8. Consultation must occur with the Service and the state fish and wildlife agency to ensure that the future use of the property is in compliance with all applicable environmental laws and regulations, including the substantive environmental and natural resource provisions of Executive Orders 11988 and 11990.

The U.S. Fish and Wildlife Service shall have the right to enforce each of the above requirements against the Grantee, its successors and assigns, in any court of competent jurisdiction, in the event the Grantee, its successors and assigns, fail to perform any one or more of them.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to the following:

1. Perpetual Easement No. DACA45-2-00-6023, granted to Hall County for road rights-of-way.

2. Perpetual Easement No. DACA45-2-01-6078, granted to City of Grand Island for recreation trail rights-of-way. Grantee is not permitted to disturb the area lying within the recreation trail easement.

3. Perpetual Easement No. DACA45-2-00-6022, granted to Hall County and Central Platte Natural Resources District for drainage ditch.

b. Any zoning laws, ordinances, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

g. Installation Commander agreements, whether or not of record or otherwise approved in writing by Grantee.

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land described in Section IV. of this Quitclaim Deed. In addition, Grantor and its successors and assigns, shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, Grantor and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by Grantee, for itself and its successors and assigns, that except for warranties, responsibilities and agreements of Grantor specifically set forth herein, the Property is conveyed "*as is*" and "*where is*," without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property. Grantee, for itself and its successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property nor any agreement or promise to alter, improve, adapt or repair the Property.

b. The Grantee, its successors and assigns, shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grants of any interest, privilege, or license.

VII. AGREEMENTS, NOTICES AND CONDITIONS

a. Anti-Deficiency Act Clause

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of funds appropriated for this purpose to the Department of the Army, and nothing in this Deed shall be interpreted to require obligations or payments by the Grantor in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

b. Notice of Wetlands

This Property contains wetlands protected under state and Federal laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetlands, including, without limitation, the placement of fill materials; the building of any structure; the placement of site-development fills for recreational, industrial, commercial, residential, and other uses; the placement of causeways or road fills; and the construction of dams and dikes.

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VIII. NO WAIVER

The failure of the Government to insist in any one or more instances upon complete performance of any of the said notices, covenants, conditions, restrictions, or reservations shall not be construed as a waiver or a relinquishment of the future performance of any such covenants, conditions, restrictions, or reservations; but the obligations of the Grantee, its successors and assigns, with respect to such future performance shall continue in full force and effect.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 2003) under which property transferred by the United States is exempted from such taxation.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. Section 2662.

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (I&H) and the Seal of the Department of the Army to be hereunto affixed this 12th day of JULY 2006.

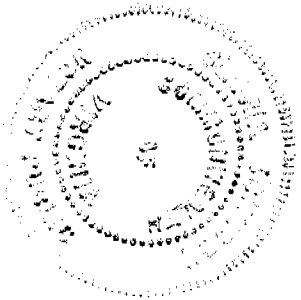


UNITED STATES OF AMERICA

By: Joseph W. Whitaker
Joseph W. Whitaker
Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA (I&E)

COMMONWEALTH OF VIRGINIA)
) ss
COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 31st day of OCTOBER 2008, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and who acknowledged the foregoing instrument to be his free act and deed, dated this 12th day of JULY 2006, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.



[Signature]
Notary Public

My commission expires: OCTOBER 31st, 2008

GRANTEE ACCEPTANCE

200607052

CENTRAL PLATTE NATURAL RESOURCES DISTRICT, GRANTEE, hereby accepts this Quitclaim Deed and the property described therein for itself, its successors and assigns, subject to all of the notices, agreements, reservations, restrictions, conditions, covenants, exceptions, and terms contained therein, this 31st day of January 2006.

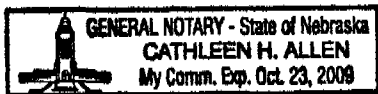
CENTRAL PLATTE NATURAL
RESOURCES DISTRICT

BY: Ronald Bishop

TITLE: General Manager

STATE OF NEBRASKA)
) ss
COUNTY OF HALL)

The foregoing Quitclaim Deed was acknowledged before me this 31st day of January 2006, by Ronald Bishop, General Manager



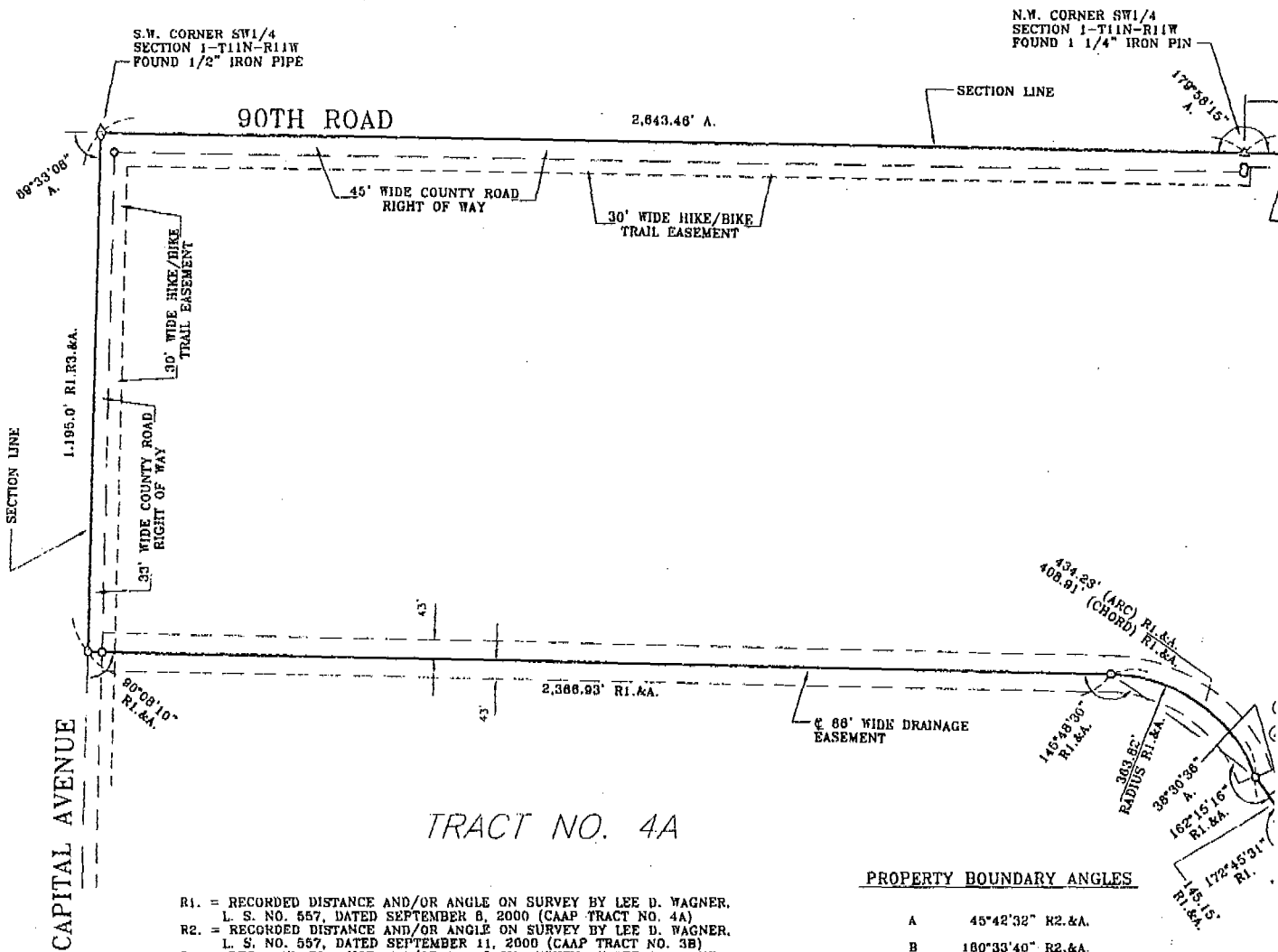
Cathleen H. Allen
Notary Public

My commission expires: Oct. 23, 2009

200607052

20

TRACT NO. 22



- R1. = RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY LEE D. WAGNER,
L. S. NO. 557, DATED SEPTEMBER 8, 2000 (CAAP TRACT NO. 4A)
R2. = RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY LEE D. WAGNER,
L. S. NO. 557, DATED SEPTEMBER 11, 2000 (CAAP TRACT NO. 3B)
R3. = RECORDED DISTANCE AND/OR ANGLE ON SURVEY BY LEE D. WAGNER,
L. S. NO. 557, DATED AUGUST 28, 2001 (CAAP TRACT NO. 22)

O - INDICATES 1/2" IRON PIPE FOUND

LEGAL DESCRIPTION

A tract of land comprising a part of the Southwest Quarter (SW1/4) and a part of the Northwest Quarter (NW1/4), all being in Range Eleven (11) West of the 6th P.M., Hall County, Nebraska, and more particularly described as follows:

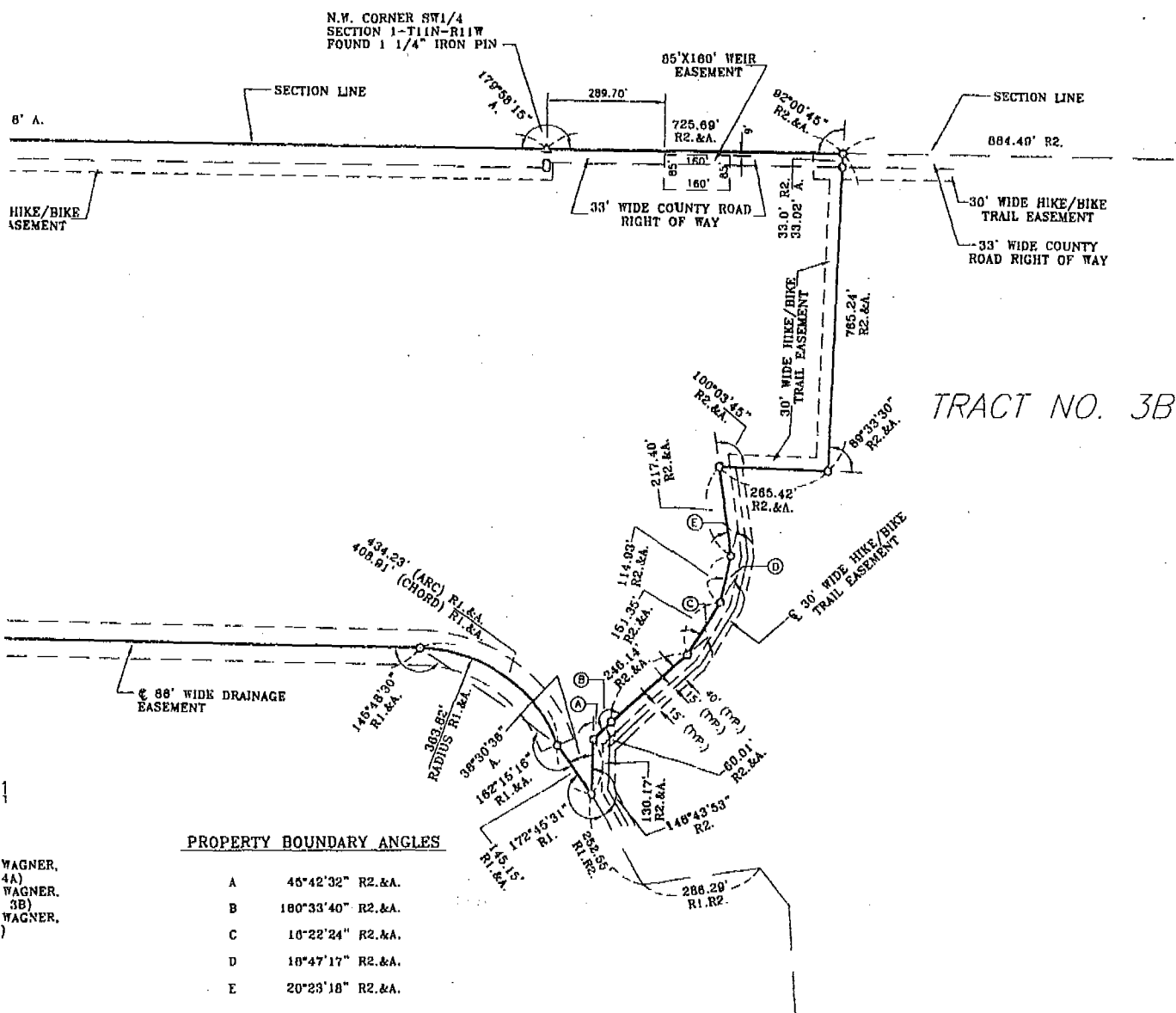
Beginning at the northwest corner of said Southwest Quarter (SW1/4); thence running southerly, along and upon the a distance of Two Thousand Six Hundred Forty Three and Forty Six Hundredths (2,643.46) feet to the southwest corner of said Southwest Quarter (SW1/4), a distance of Five (1,195.0) feet; thence deflecting left 90°08'10" and running northerly, a distance of Two Thousand Three Hundred (2,366.93) feet to a point of curvature; thence running northeasterly, along and upon the arc of a curve to the tangent of said curve coinciding with the previously described course, a distance of Four Hundred Thirty Four and chord distance = 408.91; -- long chord deflecting right 34°11'30" from the previously described course) to a point of curvature; thence running northeasterly, a distance of One Hundred Forty Five and Fifte (145.15) feet; thence running westerly, a distance of One Hundred Thirty and Seventeen Hundredths (130.17) feet; thence running westerly, a distance of Sixty and One Hundredth (60.01) feet; thence deflecting right 00°33'40" and running northwesterly, a distance of One Hundred Thirty and Seventeen Hundredths (130.17) feet; thence deflecting left 10°22'24" and running northwesterly, a distance of One Hundred and Fourteen Hundredths (114.93) feet; thence deflecting left 20°23'18" and running westerly, a distance of Two Hundred Seventeen and (172.45) feet; thence deflecting left 100°03'45" and running northerly, a distance of Two Hundred Sixty Five and Forty Two Hundredths (265.42) feet; thence running westerly, a distance of Seven Hundred Sixty Five and Twenty Four Hundredths (765.24) feet to a point of beginning and containing 91.700 acres, more or less.

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the d

Lee D. Wagner, Registered Land Surveyor No. 557

SCALE 1"=200'



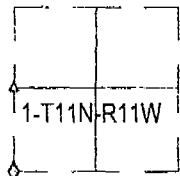
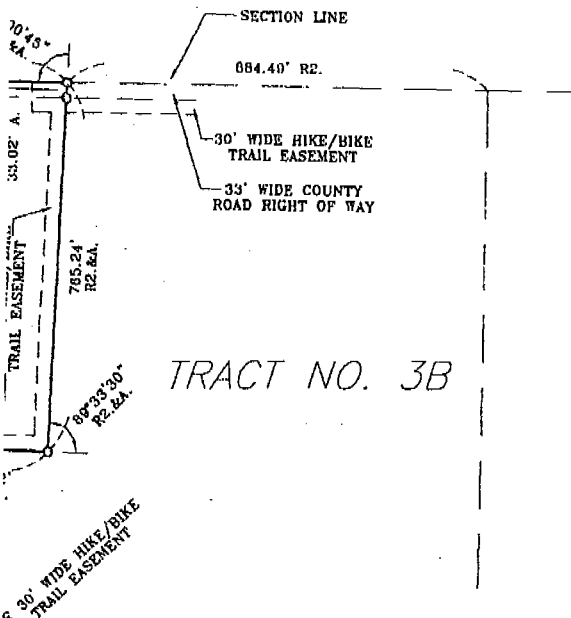
aid Southwest Quarter (SW1/4); thence running southerly, along and upon the west line of said Southwest Quarter (SW1/4), d Forty Three and Forty Six Hundredths (2,043.48) feet to the southwest corner of said Southwest Quarter (SW1/4); thence southerly, along and upon the south line of said Southwest Quarter (SW1/4), a distance of One Thousand One Hundred Ninety ft 90°08'10" and running northerly, a distance of Two Thousand Three Hundred Sixty Six and Ninety Three Hundredths; thence running northeasterly, along and upon the arc of a curve to the right whose radius is 303.82 feet, the initial he previously described course, a distance of Four Hundred Thirty Four and Twenty Three Hundredths (434.23) feet (long rd deflecting right 34°11'30" from the previously described course) to a point; thence deflecting right 17°44'44" from irve and running northeasterly, a distance of One Hundred Forty Five and Fifteen Hundredths (145.15) feet; thence deflecting a distance of One Hundred Thirty and Seventeen Hundredths (130.17) feet; thence deflecting right 45°42'32" and running One Hundredth (00.01) feet; thence deflecting right 00°33'40" and running northeasterly, a distance of Two Hundred 8.14) feet; thence deflecting left 10°22'24" and running northeasterly, a distance One Hundred Fifty One and Thirty Five left 10°47'17" and running running northeasterly, a distance of One Hundred Fourteen and Ninety Three Hundredths 7°23'18" and running westerly, a distance of Two Hundred Seventeen and Four Tenths (217.40) feet; thence deflecting right, a distance of Two Hundred Sixty Five and Forty Two Hundredths (265.42) feet; thence deflecting left 80°33'30" ven Hundred Sixty Five and Twenty Four Hundredths (765.24) feet to a point on the west line of said Northwest Quarter 1" and running southerly, along and upon the west line of said Northwest Quarter (NW1/4), a distance of Seven Hundred 1 (725.89) feet to the point of beginning and containing 91.700 acres, more or less.

I believe, the accompanying plat is from an accurate survey of the described property made under my supervision.

Lee D. Wagner, Registered Land Surveyor No. 557

200607052

SCALE 1"=200'



CORNER TIES

N.W. CORNER SW1/4 - FOUND 1 1/4" IRON PIN
65.00' N.N.E. TO NAIL IN 42"+ TREE
42.39' N.E. TO NAIL IN 42"+ TREE
53.55' E.N.E. TO NAIL IN 42"+ TREE
33.00' E. 1/2" IRON PIPE
46.00' E. 1/2" IRON PIPE

S.W. CORNER SW1/4 - FOUND 1/2" IRON PIPE
73.15' N.W. TO NAIL IN SIDE OF S.E. CORNER OF BUILDING DA/1
74.45' N.N.E. TO 1/2" IRON PIPE
55.60' N.E. TO 1/2" IRON PIPE
65.10' S.E. TO 1/2" IRON PIPE

Seven (11) North,
Quarter (SW1/4),
(SW1/4); thence
Hundred Ninety
three Hundredths
feet, the initial
34.23) feet (long
17°44'44" from
thence deflecting
32" and running
of Two Hundred
and Thirty Five
Three Hundredths
hence deflecting
left 89°33'30"
Northwest Quarter
of Seven Hundred

r my supervision.

PART OF THE SW1/4 AND PART OF THE NW1/4 SECTION 1-T11N-R11W HALL COUNTY, NEBRASKA		ccap2 08-20-2003 L.W.
LAND SURVEY		
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 339 - PHONE 582-8465 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68802-0339		

TRACT 2

EXHIBIT "A" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED (TRACT 2)

Notification of Hazardous Substance Storage, Release or Disposal

Property Description	Name of Hazardous Substance(s)	Date of Storage, Release, or Disposal	Remedial Actions
Land Tract 2 Approximately 91.7 acres of land including a portion of OU2.	Explosive waste and residues and associated chemicals. (Released)	Overland runoff and migration of groundwater contaminants from contamination associated with past ordnance production and disposal during Load Line Operations, 1942-1973.	<p>This tract contains a portion of the west drainage ditch. The west drainage ditch is part of OU2 and receives runoff from Load Line 5 (OU4), a portion of Load Line 4 (OU4), the Sanitary Landfill (OU3), and the eastern half of the Burning Grounds (OU5). It also currently receives treated effluent from the groundwater treatment plant for OU1.</p> <p>In addition, low levels of freon contamination in groundwater under Tract 2 were determined to be present. Groundwater contamination may have migrated from various sources on CHAAP, including the Burning Grounds (OU5) to the west of Tract 2 and the Sanitary Landfill and Pistol Range to the southwest of Tract 2.</p> <p>Investigation conducted in 1993 and evaluation performed in 1996 determined that chemicals of potential concern (COPCs) in the west drainage ditch surface soil included aluminum, cadmium, chromium, copper, iron, lead, silver, and vanadium. All of these COPCs were detected at levels below U.S. EPA Region 3 residential soil risk-based concentrations (RBCs), with the exception of iron in a single sample. The concentration of iron was well below the industrial RBC.</p> <p>Investigation and evaluation conducted in 1996 determined that freon was present at low levels in groundwater underneath Tract 2. Freon was not selected as a COPC in the Human Health Risk Assessment and the concentrations of freon in groundwater were far below the U.S. EPA Region 3 tap water RBC.</p> <p>Based on human health risk assessment, the 1996 RI determined that contaminants present in the soil in the west drainage ditch and in groundwater under Tract 2 were not at concentrations that would harm human health and no further action was recommended.</p> <p>A ROD for no further action at OU2 was signed in September 1998. All sites within OU2 are considered to be either uncontaminated or no threat to human health or the environment.</p> <p>The <i>Final First Five-Year Review Report for Cornhusker Army Ammunition Plant</i> (March 2004) indicates that the selected alternative for OU2 (no further action) remains protective of human health and the environment.</p>

*The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act 9 CERCLA or 'Superfund') 42 U.S.C. §9620(h). This table provides information on the storage of hazardous substances for one year or more in quantities greater than or equal to 1,000 kilograms or the hazardous substance's CERCLA reportable quantity (which ever is greater). In addition it provides information on the known release of hazardous substances in quantities greater than or equal to the substance's CERCLA reportable quantity. See 40 CFR Part 373.

200607052

CERTIFICATE OF AUTHORITY

I hereby certify that I am the Chairman of
(Secretary or Attesting Officer)
the organization named in the foregoing agreement with the United States of
America; that said organization is organized under the laws of the State of
Nebraska;
(State)
that the seal, if applicable, affixed to said instrument
is the seal of said organization; that Ronald Bishop,
(Name of Officer)
who signed said agreement was then General Manager of said
(Title of Officer)
organization and has been duly authorized to sign the foregoing agreement on
behalf of said organization, binding said organization to the terms therein.

I, as the Secretary/Attesting Officer, hereby attest to the validity of the
Signature of said Officer; and that said signature affixed to such agreement is
genuine.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal,
if applicable, of said organization, this 1st day of February, 2006.

Loren Schuett
Secretary or Attesting Officer
Loren Schuett, Chairman

Central Platte Natural Resources District
Corporation or Organization

*This form certifies that the person signing the attached instrument has the authority to do so. The signature of the
Secretary/Attesting Officer and the individual signing the attached instrument cannot be the same.*

Entered As Instrument No
0200608646

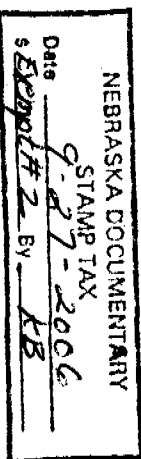
STATE OF NEBRASKA) SS
COUNTY OF HALL)

2006 SEP 27 PM 4 21

Kathy Beach
REG OF DEEDS

CASH _____
CHECK 101.00

REFUNDS:
CASH _____
CHECK _____



Leininger Firm
Cathleen Allen
PO Box 790
G I NE 68802



Cornhusker Army Ammunition Plant (CHAAP)
Hall County, Nebraska
Parts of Acquisition Tract Nos. 1, 2, 3a, 3b, 38, 39 and 40
Parts of Land Tract Nos. 19 (19A-323.851 Acres) and 20 (20A-208.755 Acres)

101.00

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS:

THIS QUITCLAIM DEED is made this 14th day of September 2006, by and between the **UNITED STATES OF AMERICA**, hereinafter referred to as "Grantor," acting by and through the Deputy Assistant Secretary of the Army (Installations and Housing) (I&H) pursuant to a delegation of authority from the **SECRETARY OF THE ARMY**, under and pursuant to the powers and authority contained in Section 2836(a) of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337, 108 Stat 2663, 3063) (hereinafter "said Act"), and **CENTRAL PLATTE NATURAL RESOURCES DISTRICT (CPNRD)**, a political subdivision of the State of Nebraska, with its principal office located at 215 Kaufman Avenue, Grand Island, Nebraska 68803, hereinafter referred to as "Grantee."

WITNESSETH:

WHEREAS, said Act authorizes the Secretary of the Army to convey the property herein to the Hall County, Nebraska, Board of Supervisors, or its designee; and

WHEREAS, said Board designated that the property to be conveyed herein be transferred to Grantee; and

WHEREAS, the Department of the Army has completed environmental restoration required, if any, with respect to the property conveyed herein; and

WHEREAS, the Grantee's use of the property will be in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan; and

WHEREAS, all the property to be conveyed herein has heretofore been declared surplus to the needs of the United States of America, is presently under the jurisdiction of the Secretary of the Army, is available for disposal and its disposal has been heretofore authorized by the Secretary of the Army, acting pursuant to the above mentioned laws, regulations and orders.

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NOW THEREFORE, Grantor and Grantee make the following respective conveyances, grants, assignments, reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements hereinafter set forth.

I. CONVEYANCE

Grantor, for and in consideration of: (1) good and valuable consideration in the sum of THREE HUNDRED SEVENTY-TWO THOUSAND EIGHT HUNDRED TWENTY-FOUR AND NO/100 DOLLARS (\$372,824.00 – Tract 19A: \$226,695.70; Tract 20A: \$146,128.30), the receipt of which is hereby acknowledged by Grantor; and (2) the specific agreements hereinafter made by Grantee, for itself and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby convey, remise, release and forever quitclaim to the Grantee, its successors and assigns, under and subject to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, all its right, title and interest, in and to the following described property situate, lying, and being in Hall County, State of Nebraska, including any and all buildings, appurtenances and improvements thereon:

Two tracts of land comprising parts of Sections Two (2) and Eleven (11), Township Eleven (11) North, Range Eleven (11) West of the Sixth Principal Meridian, all being located in Hall County, Nebraska, containing 532.606 acres, more or less (hereinafter referred to as the “Property”), and being more particularly shown and described on **Exhibits “A1” and “A2,”** which are attached hereto and made a part hereof.

RESERVING, however, to the Grantor, ownership and exclusive use of the seven existing monitoring wells (designated as G0035, G0054, G0055, G0056, G0065 and BGGW03, located throughout Tract 19A; and G0008, located on Tract 20A), together with access across the property for the purpose of monitoring and/or removing the wells. The Grantee, its successors and assigns shall allow ingress and egress of all equipment necessary to accomplish the same.

TO HAVE AND TO HOLD the same, together with all improvements, hereditaments, appurtenances therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, either in law or in equity, for the use, benefit and behalf of the Grantee, its successors and assigns forever.

II. GENERAL GOVERNMENT RESERVATIONS TO CONVEYANCE

This conveyance is expressly made subject to the following reservations in favor of Grantor, and its assigns:

a. **SAVE AND EXCEPT** and there is hereby reserved unto Grantor, and its assigns, all rights and interests that have been previously reserved to Grantor in any Patent(s) covering the Property.

200608646

b. **SAVE AND EXCEPT** and there is hereby reserved unto Grantor, and its assigns, all rents and other beneficial interests in favor of Grantor in and to the following leases to the extent, and only to the extent that such rents and other beneficial interests cover the Property:

Department of the Army Lease No. DACA45-1-02-6021 (Tract 19A) granted to Tom Fagan for the period 1 March 2006 through 28 February 2007.

Department of the Army Lease No. DACA45-1-01-6034 (Tract 20A) granted to Robert Nunnenkamp for the period 1 March 2006 through 28 February 2007.

III. CERCLA COVENANT AND RESERVED ACCESS

a. Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), 42 U.S.C. Section 9620(h)(3), the Grantor has made a complete search of its records concerning the property subject to this Deed. Those records indicate that the hazardous substances, as defined by Section 101 (14) of CERCLA, shown on Exhibit "B," attached hereto and made a part hereof, have been stored for one year or more (S), released (R), or disposed of (D) on the property during the time the property was owned by the Grantor. The Grantee should review the Final Environmental Baseline Survey (EBS) No. 38-EH-8519-99 dated 9-20 November 1998, and the Finding of Suitability to Transfer (FOST) dated May 2006, for further details.

b. The Grantor covenants and warrants that all remedial action necessary to ensure protection of human health and the environment with respect to any such substance remaining on the property has been taken prior to the date hereof. Furthermore, excepting those situations where the Grantee, its successors or assigns, hereunder are potentially responsible parties, as defined by CERCLA, any additional remedial action found to be necessary with respect to any such substance remaining on the property after the date hereof shall be conducted by the United States.

c. The Grantor shall not incur liability for additional response action or corrective action found to be necessary after the date of transfer in any case in which the person or entity to whom the property is transferred, or other non-Grantor entities, is identified as the party responsible for contamination of the property.

d. Grantor reserves a right of access to all portions of the Property for environmental investigation, remediation, or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to the Grantor. These rights shall be exercisable in any case in which a remedial action, response action, or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, the United States, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the then owner and any authorized occupant of the Property) to enter upon the herein described Property and conduct investigations

and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including, but not limited to the installation, operation, and removal of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities or authorized occupants. Grantor will provide the record title owner reasonable advance notice of such activities, responses, or remedial actions. This subparagraph shall not affect the Grantor's future responsibilities, if any, to conduct response actions or corrective actions that are required by applicable laws, rules, and regulations.

IV. SPECIFIC ENVIRONMENTAL NOTICES, EXCLUSIONS, RESERVATIONS, COVENANTS AND RESTRICTIONS AFFECTING THE PROPERTY

This conveyance is expressly made subject to the following environmental notices, exclusions, reservations, covenants and restrictions affecting the property hereby conveyed to the extent and only to the extent the same are valid and affect the property, and shall be considered as covenants running with the land and binding on all parties having any right, title or interest in the property, or any part thereof, their heirs, successors and assigns.

a. Federal Facility Agreement

The Grantee acknowledges that Cornhusker Army Ammunition Plant has been identified as a National Priority List (NPL) site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the Cornhusker Army Ammunition Plant Federal Facility Agreement (FFA), entered into by the United States Environmental Protection Agency (EPA) Region VII, the State of Nebraska, and the Department of the Army, effective September 1990, and a copy of any amendments thereto, have been provided the Grantee. The Grantee, its successors and assigns, agree that should any conflict arise between the terms of the FFA as they presently exist or as they may be later amended and the provisions of this property transfer, the terms of the FFA will take precedence. The Grantee, its successors and assigns, further agree that notwithstanding any other provisions of this Deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof.

b. Environmental Baseline Survey (EBS) and Finding of Suitability to Transfer (FOST)

1. The Grantee has received the technical environmental reports, including the Environmental Baseline Survey for the Property dated 9-20 November 1998 and the FOST for the property dated May 2006 prepared by the Grantor, and agrees, to the best of the Grantee's

knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use.

2. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Subsection IV.b. shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations.

c. Land Use Restrictions

The Grantor has undertaken careful environmental study of the Property and concluded, to which the Grantee agrees, that the highest and best use of the Property is limited by its environmental condition to agricultural, conservation, or recreational land uses. In order to protect human health and the environment, promote community objectives, and further the common environmental objectives and land use plans of the Grantor, State of Nebraska, and Grantee, the following covenant/restrictions/reservations are included in this Deed to assure the use of the Property is consistent with environmental conditions of the Property. The following covenant/restrictions/reservations benefit both the lands retained by the Grantor and the general public welfare and are consistent with the State of Nebraska and Federal environmental statutes.

1. Agricultural/Conservation/Recreation Use Restrictions

(a) The Grantee covenants for itself, its successors and assigns, that the Property shall be used solely for agricultural, conservation, or recreation purposes and not for residential or other purposes, the Property having been remediated only for agricultural, conservation or recreation uses.

(b) Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations, such additional remediation necessary to allow for residential or other use of the Property. Any additional remediation will be at no additional cost to the Grantor and with the Grantor's prior written consent. Consent may be conditioned upon such terms and conditions, as the Grantor deems reasonable and appropriate, including performance and payment bonds and insurance. Upon completion of such remediation required

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to allow residential or other use of the Property and upon the Grantee's obtaining the approval of the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency (EPA) and the Nebraska Department of Environmental Quality (NDEQ) and, if required, any other regulatory agency, the Grantor agrees to release or, if appropriate, modify this restriction by executing and recording, in the same land records of Nebraska, Hall County, as this Deed, a Partial Release of Covenant. Grantee shall bear the cost of recording and reasonable administrative fees.

2. Enforcement

(a) The above covenant/restrictions/reservations shall inure to the benefit of the public in general and adjacent lands, including lands retained by the United States, and, therefore, are enforceable by the United States Government and State of Nebraska. These covenant/restrictions/reservations are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable.

(b) The Grantee covenants for itself, its successors and assigns that it shall include and otherwise make legally binding the above land use covenant/restrictions/reservations in all subsequent leases and transfer or conveyance documents relating to the Property subject hereto. Notwithstanding this provision, failure to include these land use restrictions in subsequent conveyances does not abrogate the status of these covenant/restrictions/reservations as binding upon the parties, their successors and assigns.

(c) The Grantee, for itself, its successors and assigns, covenants that it will not undertake or allow any activity on or use of the Property that would violate the land use restrictions contained herein.

(d) Notwithstanding any other provision of this Deed; any agreement between the Grantee and the Grantor; the provisions of CERCLA, including CERCLA Section 120(h)(3), as amended, the Grantee on behalf of itself, its successors and assigns, covenants and agrees that the Grantee or the then record owner of the Property will be fully responsible for any investigation and/or remediation of hazardous substances, pollutants or contaminants, or petroleum or petroleum derivatives, to the extent that such investigation and/or remediation becomes necessary in response to a violation of the land use restrictions in **Section IV** herein.

3. Submissions

Modification of Restrictions. The Grantee shall submit any requests to install monitoring wells, to construct subsurface structures for human occupation, or for other modification to the above restrictions to Grantor, with a copy to EPA and Nebraska Department of Environmental Quality (NDEQ), by first class mail, postage prepaid, addressed as follows:

(a) to Grantor: Corps of Engineers, Omaha District
ATTN: CENWO-RE-M
106 South 15th Street
Omaha, NE 68102-1618

(b) to EPA: U.S. Environmental Protection Agency, Region VII
901 North 5th Street
Kansas City, KS 66101

(c) to State: Nebraska Department of Environmental Quality
P.O. Box 98922
Lincoln, NE 68509-8922

d. Endangered Species Act

Prior to any construction activities on the Property associated with the flood control project, the Grantee, at no expense to the Grantor, agrees to perform all of the following in order to satisfy the requirements of the Endangered Species Act.

1. The portions of the flood control project on or within the former CHAAP, to include the detention basins, will be designed to limit the amount of wetland habitat in order to either avoid or minimize the occurrence of any resultant net flow depletion to the lower Platte River.

2. The design for portions of the flood control project on or within the former CHAAP, to include the flood detention basins, will be submitted by the Grantee after development to the U.S. Fish and Wildlife Service, hereinafter "Service," for review.

3. The water use calculator developed by the Natural Resources Conservation Service (NRCS, 2001), along with other methods approved by the Service, will be utilized to determine whether the project will result in a net flow depletion to the lower Platte River (i.e., in terms of acre-feet of water depleted on an average annual basis during the months of February through July).

4. If it is determined that the portions of the flood control project on or within the former CHAAP project will result in a minor net annual flow depletion (25 acre-feet or less), consultation must occur with the Service.

5. The effects of the portions of the flood control project on or within the former CHAAP, to include the detention basins, on federally listed endangered species and designated critical habitat will be offset by one of the conservation measures described in the Service's biological opinion on federal agency actions that result in minor water depletions to the Platte River system (USFWS, 2002 and 2003).

6. If the calculated amount of the net annual flow depletion is 25 acre-feet or less, the conservation measure which allows for debiting a calculated depletion fee (at no cost to the Grantee) from a special account that has been established with the National Fish and Wildlife Foundation, must be considered and may be utilized.

7. If the amount of the net annual flow depletion is calculated to be greater than 25 acre-feet per year, on an average annual basis during the months of February through July, further prompt consultation with the Service must occur in order to comply with other reasonable means to either avoid or offset the adverse impacts of the portions of the flood control project on or within the former CHAAP on listed endangered species and critical habitat.

8. Consultation must occur with the Service and the state fish and wildlife agency to ensure that the future use of the property is in compliance with all applicable environmental laws and regulations, including the substantive environmental and natural resource provisions of Executive Orders 11988 and 11990.

The U.S. Fish and Wildlife Service shall have the right to enforce each of the above requirements against the Grantee, its successors and assigns, in any court of competent jurisdiction, in the event the Grantee, its successors and assigns, fail to perform any one or more of them.

V. GENERAL EXCEPTIONS TO CONVEYANCE

This conveyance is expressly made subject to the following matters to the extent and only to the extent the same are valid and affect the property:

a. All existing permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, recreational trails, railroads, pipelines, ditches and canals on, over and across said land, whether or not of record, including but not limited to the following:

Perpetual Easement No. DACA45-2-00-6023 granted to Hall County, for road rights-of-way.

b. Any zoning laws, ordinances, or regulations governing the subject property or regulations of other regulatory authorities having jurisdiction.

c. Matters which would be disclosed by a careful physical inspection of the property or the property records and by a properly conducted survey of the property.

d. Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the property.

e. All existing interest(s) reserved to or outstanding in third parties in and to coal, oil, gas, and/or minerals.

f. All other existing interests reserved by any original Grantor(s) in chain of title unto said Grantor(s), their respective successors and assigns, which affects any portion of the property interest(s) hereinabove described.

g. Installation Commander agreements, whether or not of record or otherwise approved in writing by Grantee.

VI. MISCELLANEOUS GRANTEE COVENANTS

Grantee covenants for itself, and its successors or assigns, and every successor in interest in the Property, to abide with each of the agreements and covenants running with the land described in Section IV. of this Quitclaim Deed. In addition, Grantor and its successors and assigns, shall be deemed a beneficiary of each of the following agreements and covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the following agreements and covenants in any court of competent jurisdiction. Notwithstanding the foregoing, Grantor and its assigns shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following agreements and covenants.

a. It is understood and agreed by Grantee, for itself and its successors and assigns, that except for warranties, responsibilities and agreements of Grantor specifically set forth herein, the Property is conveyed "*as is*" and "*where is*" without any representation or warranty on the part of Grantor to make any alterations, repairs or additions. Grantor shall not be liable for any latent or patent defects in the Property. Grantee, for itself and its successors and assigns, acknowledges that Grantor has made no representations or warranty concerning the condition and state of repair of the Property nor any agreement or promise to alter, improve, adapt or repair the Property.

b. The Grantee, its successors and assigns, shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grants of any interest, privilege, or license.

VII. AGREEMENTS, NOTICES, AND CONDITIONS

a. Anti-Deficiency Act Clause

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of funds appropriated for this purpose to the Department of the Army, and nothing in this Deed shall be interpreted to require obligations or payments by the Grantor in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

b. Notice of Wetlands

This Property contains wetlands protected under state and Federal laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetlands, including, without limitation, the placement of fill materials; the

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building of any structure; the placement of site-development fills for recreational, industrial, commercial, residential, and other uses; the placement of causeways or road fills; and the construction of dams and dikes.

c. Cornhusker Environmental Restoration Program (IRP) and Military Munitions Response Program (MMRP)

Grantee acknowledges that the land (Tract 19C) lying adjacent to the Property herein conveyed contains Disposed Military Munitions (DMM) and that the Grantor will be undertaking environmental cleanup ("Cornhusker Installation Restoration Program or IRP") of said Tract 19C including a munitions response ("Military Munitions Response Program or MMRP"). During those times periods when the Grantor is executing its IRP and/or MMRP on Tract 19C, the Grantee is prohibited from human occupancy of the Property herein conveyed (Tracts 19A and 20A). The Grantor will provide written notice to the Grantee of its schedule for performing IRP/MMRP activities on Tract 19C. Neither the Grantee nor its successors and assigns, as the case may be, shall have any claim at law or equity against the United States or any officer, employee, agent, contractor of any tier, or servant of the agents, contractors of any tier, or servants pursuant to the execution of the IRP and/or MMRP or based on said prohibition.

VIII. NO WAIVER

The failure of the Government to insist in any one or more instances upon complete performance of any of the said notices, covenants, conditions, restrictions, or reservations shall not be construed as a waiver or a relinquishment of the future performance of any such covenants, conditions, restrictions, or reservations; but the obligations of the Grantee, its successors and assigns, with respect to such future performance shall continue in full force and effect.

THIS QUITCLAIM DEED is exempt from the documentary tax under the provision of Neb. Rev. Stat. 76-902(2) (R.S. Supp., 2003) under which property transferred by the United States is exempted from such taxation.

THIS QUITCLAIM DEED is not subject to the provisions of 10 U.S.C. Section 2662.

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army for Installations and Housing (I&H) and the Seal of the Department of the Army to be hereunto affixed this 14th day of September 2006.

By:

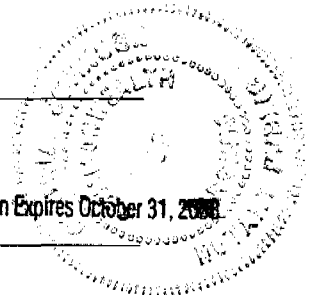
Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

COMMONWEALTH OF VIRGINIA)
) ss
COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on this 31st day of October 2009, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (I&H), whose name is signed to the foregoing instrument and who acknowledged the foregoing instrument to be his free act and deed, dated this 14th day of September 2006, and acknowledged the same for and on behalf of the UNITED STATES OF AMERICA.

Notary Public

My commission expires: **My Commission Expires October 31, 2008**



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GRANTEE ACCEPTANCE

CENTRAL PLATTE NATURAL RESOURCES DISTRICT, GRANTEE, hereby accepts this Quitclaim Deed and the property described therein for itself, its successors and assigns, subject to all of the notices, agreements, reservations, restrictions, conditions, covenants, exceptions, and terms contained therein, this 22nd day of June 2006.

CENTRAL PLATTE NATURAL
RESOURCES DISTRICT

BY: [Signature]

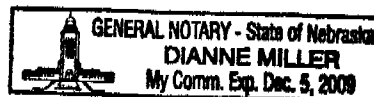
TITLE: Regional Manager

STATE OF NEBRASKA)
) ss
COUNTY OF HALL)

The foregoing Quitclaim Deed was acknowledged before me this 22nd day of June 2006, by Ronald G Bishop.

[Signature]
Notary Public

My commission expires: 12/5/09



200608646

N.W. CORNER NW1/4
SECTION 2-T11N-R11W
FOUND "D J HOSTLER" ALUMINUM
CAP IN ASPH. PAVEMENT

(NEBRASKA GAME AND PARKS)
TRACT PER QUITCLAIM DEED
RECORDED IN BOOK 166, PAGE 443
REGISTER OF DEEDS OFFICE

5,290.21' R2 & A.

3,200.0' R1
3,198.43' R2

SCALE 1"=300'

S.W. CORNER NW1/4
SECTION 2-T11N-R11W
FOUND U.S.B.L.M. BRASS CAP

468.93' R2 (BY
DEDUCTION)
468.80' A.

50.0' A.

179°54'38" A
50.0' A

50' WIDE COUNTY ROAD
RIGHT OF WAY

SCHAUPPSVILLE ROAD

2,646.23' A.

50.0' A.

13TH STREET

S.W. CORNER SW1/4
SECTION 2-T11N-R11W
FOUND U.S.B.L.M. BRASS CAP

33.0' A.
88°42'08" A.

33' WIDE COUNTY ROAD
RIGHT OF WAY
1,474.62' A.
(TO TEMP. POINT)

54°55'50" R3
54°55'45" A
(TO TEMP. POINT)

S89°45'45" W R3.

1,177.33' R3 & A.
(TO TEMP. POINT)

PARCEL NO. 19B

S.E. CORNER SW1/4
SECTION 2-T11N-R11W
FOUND 1/2" IRON PIPE

NOTE: FOUND 1/2" IRON PIPE, 0.20' SOUTH OF SECTION
LINE. PLACED TEMPORARY POINT AT CORRECT LOCATION
FOR BOUNDARY DIMENSIONS AND ANGLES, AND TO SET
RIGHT OF WAY CORNER.

TRACT NO. 19A

CORNER TIES

S.W. CORNER SW1/4 - FOUND U.S.B.L.M. BRASS CAP
48.46' N.W. TO 1/2" IRON PIPE
54.89' N.E. TO NAIL IN FENCE GATE POST
63.25' S.E. TO NAIL IN FENCE GATE POST

S.W. CORNER NW1/4 - FOUND U.S.B.L.M. BRASS CAP
26.90' W. TO 1/2" IRON PIPE
52.10' N.E. TO NAIL IN FENCE BRACE POST
52.44' S.E. TO NAIL IN FENCE BRACE POST

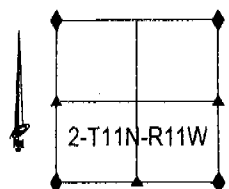
N.W. CORNER NW1/4 - FOUND "D J HOSTLER" ALUMINUM
CAP IN ASPH. PAVEMENT
48.26' N.W. TO NAIL IN POWER POLE
43.43' S.E. TO CHISELED MARK ON TOP END OF CMP
37.20' S.S.W. TO CHISELED MARK ON TOP END OF CMP

N.E. CORNER NE1/4 - FOUND "D J HOSTLER" ALUMINUM
CAP IN ASPH. PAVEMENT
48.84' N.E. TO NAIL IN POWER POLE
54.30' S.E. TO NAIL IN FENCE CORNER POST
54.77' S.W. TO NAIL CORNER POST

N.E. CORNER SE1/4 - FOUND 1 1/4" IRON PIN
63.89' N.N.E. TO NAIL IN 42" TREE
42.39' N.E. TO NAIL IN 42" TREE
63.55' E.N.E. TO NAIL IN 42" TREE

S.E. CORNER SE1/4 - FOUND 1/2" IRON PIPE IN ASPH. PAVEMENT
73.18' N.W. TO NAIL IN S.E. CORNER OF BUILDING DA/1
74.49' N.E. TO 1/2" IRON PIPE
66.13' S.E. TO 1/2" IRON PIPE

S.E. CORNER SW1/4 - FOUND 1/2" IRON PIPE
53.30' N.W. TO NAIL IN FENCE GATE POST
27.85' N.E. TO NAIL IN FENCE GATE POST
35.60' S.W. TO 1/2" IRON PIPE

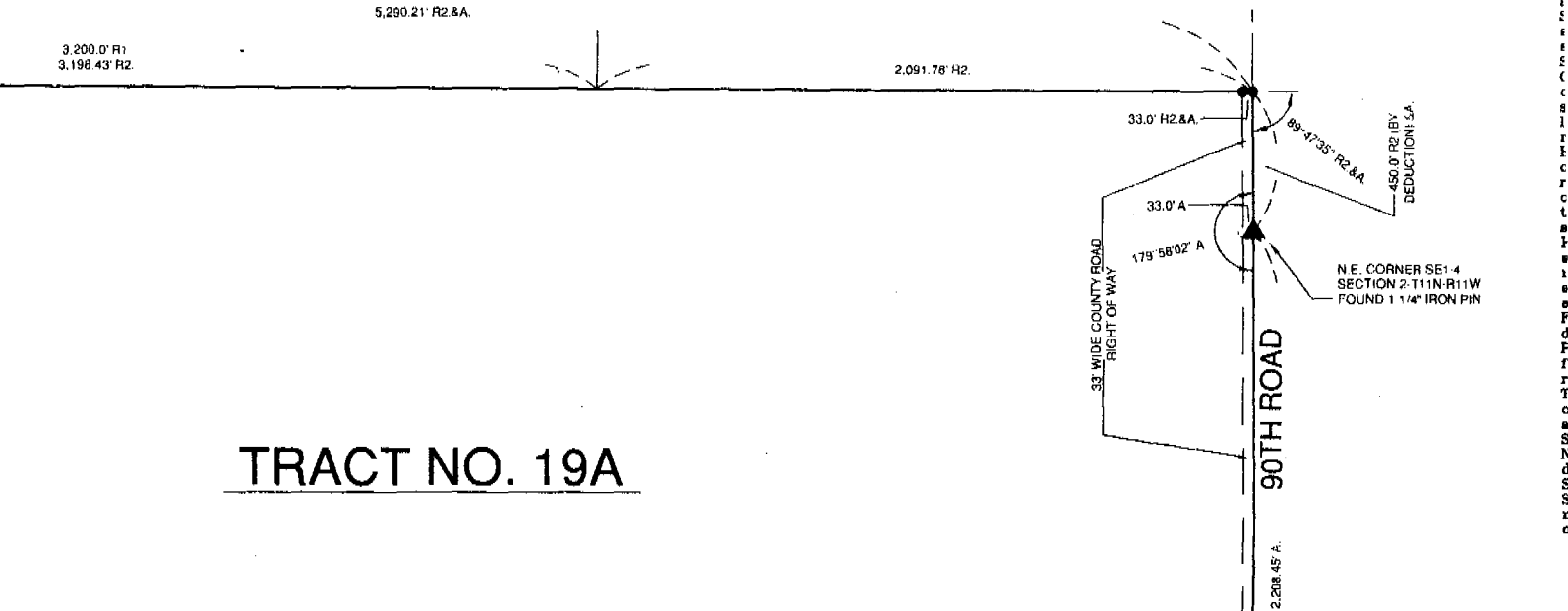


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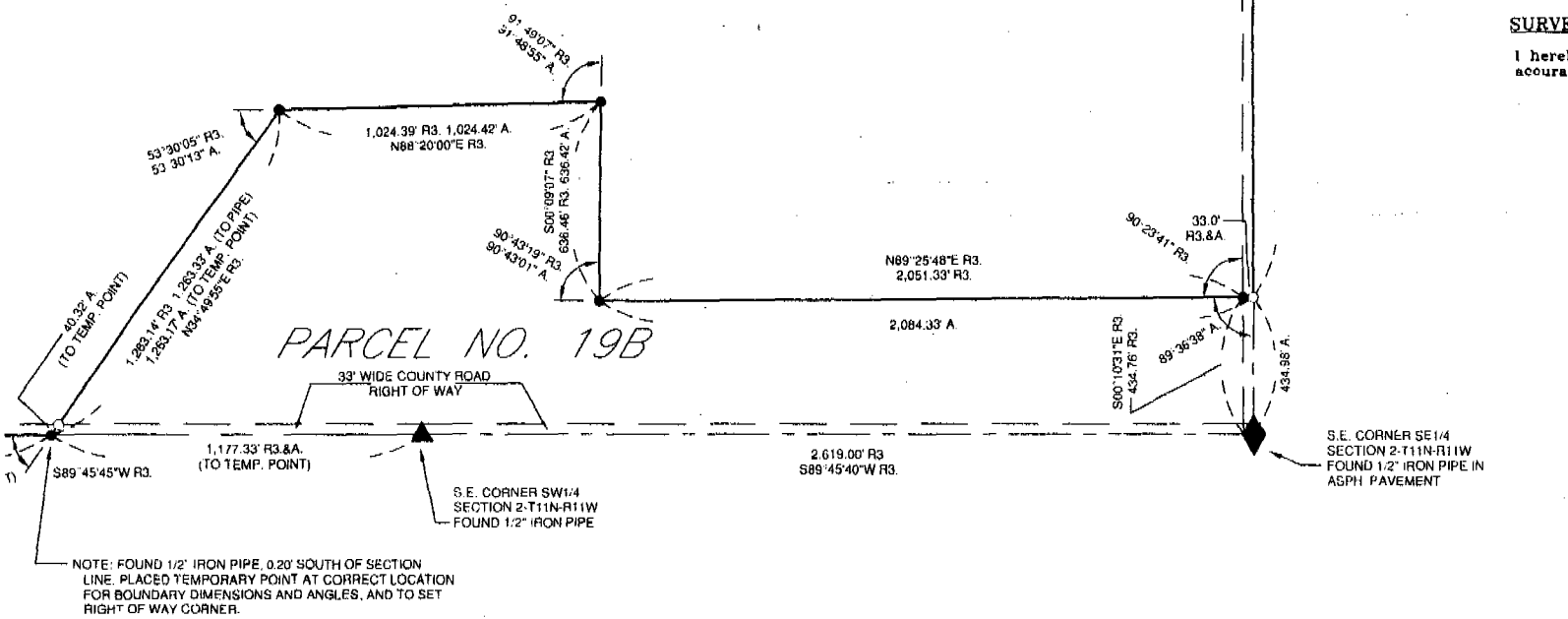
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GAME AND PARKS)
R QUITCLAIN DEED
BOOK 166, PAGE 443
OF DEEDS OFFICE

TRACT NO. 1



TRACT NO. 19A



- | | |
|---|---|
| U.L.M. BRASS CAP
E
GATE POST
GATE POST | N.E. CORNER SE1/4 - FOUND 1 1/4" IRON PIN
63.89' N.N.E. TO NAIL IN 42" TREE
48.39' N.E. TO NAIL IN 42" TREE
53.65' E.N.E. TO NAIL IN 42" TREE |
| U.L.M. BRASS CAP
BRACE POST
BRACE POST | S.E. CORNER SE1/4 - FOUND 1/2" IRON PIPE IN ASPH. PAVEMENT
78.18' N.W. TO NAIL IN S.E. CORNER OF BUILDING DA/1
74.49' N.E. TO 1/2" IRON PIPE
65.13' S.E. TO 1/2" IRON PIPE |
| HOSTLER" ALUMINUM
POLE
ON TOP END OF CMP
ON TOP END OF CMP | S.E. CORNER SW1/4 - FOUND 1/2" IRON PIPE
53.30' N.W. TO NAIL IN FENCE GATE POST
27.85' N.E. TO NAIL IN FENCE GATE POST
35.60' S.W. TO 1/2" IRON PIPE |
| HOSTLER" ALUMINUM
POLE
CORNER POST
OST | |

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N.E. CORNER NE 1/4
SECTION 2 T11N-R11W
FOUND "DJ HOSTLER" ALUMINUM
CAP IN ASPH. PAVEMENT

R1 = RECORDED DISTANCE ON QUITCLAIM DEED RECORDED IN BOOK 186, PAGE 443, HALL COUNTY REGISTER
OF DEEDS OFFICE (STATE GAME AND PARKS TRACT)
R2 = RECORDED DISTANCE AND/OR ANGLE ON SURVEY (REFERRED TO AS "TRACT NO. 1") BY LEE D. WAGNER,
S. NO. 557, DATED OCTOBER 29, 2004
F.A. = RECORDED DISTANCE AND/OR BEARING (AND/OR ANGLE) BY DERYL D. SORGENFREL, L. S. NO. 578, DATED
JANUARY 25, 2005 (NOTE: RECORDED ANGLES ARE BASED ON RECORDED BEARINGS)
A. = ACTUAL DISTANCE AND/OR ANGLE

● INDICATES 1/2" IRON PIPE FOUND
○ INDICATES 1/2" IRON PIPE WITH PLASTIC CAP PLACED. CAP IS STAMPED "L.S. 557"

LEGAL DESCRIPTION

A tract of land comprising a part of the Southwest Quarter (SW1/4), a part of the Northwest Quarter (NW1/4), a part of the Northeast Quarter (NE1/4), and a part of the Southeast Quarter (SE1/4), all being in Section Two (2), Township Eleven (11) North, Range Eleven (11) West of the 6th P.M., Hall County, Nebraska, and more particularly described as follows:

Beginning at the southwest corner of said Southwest Quarter (SW1/4); thence running northerly, along and upon the west line of said Southwest Quarter (SW1/4), a distance of Two Thousand Six Hundred Forty Six and Twenty Three Hundredths (2,646.23) feet to the southwest corner of said Northwest Quarter (NW1/4); thence deflecting right 00°06'22" and running northerly, along and upon the west line of said Northwest Quarter (NW1/4), a distance of Four Hundred Sixty Eight and Nine Tenths (468.90) feet to the southwest corner of a tract (State of Nebraska Game and Parks Commission property) recorded in Book 186, Page 443, Hall County of Register of Deeds Office; thence deflecting right 89°50'57" and running easterly, along and upon the south line of said Nebraska Game and Parks Commission tract, and along and upon the south line of a survey by Lee D. Wagner, L. S. No. 557, dated October 29, 2004, said survey being referred to as Tract No. 1, a distance of Five Thousand Two Hundred Ninety and Twenty One Hundredths (5,290.21) feet to the southeast corner of said Tract No. 1, said point also being on the east line of said Northeast Quarter (NE1/4); thence deflecting right 89°47'35" and running southerly, along and upon the east line of said Northeast Quarter (NE1/4), a distance of Four Hundred Fifty (450.0) feet to the northeast corner of said Southeast Quarter (SE1/4); thence deflecting right 00°01'58" and running southerly, along and upon the east line of said Southeast Quarter (SE1/4), a distance of Two Thousand Two Hundred Eight and Forty Five Hundredths (2,208.45) feet to a point on the easterly prolongation of a north line of a survey by Deryl D. Sorgenfrel, L. S. No. 578, dated January 25, 2005, said survey being referred to as Parcel No. 19B; thence deflecting right 89°36'38" and running westerly, along and upon the easterly prolongation of a north line of said Parcel No. 19B and along and upon a north line of said Parcel No. 19B, a distance of Two Thousand Eighty Four and Thirty Three Hundredths (2,084.33) feet to a corner of said Parcel No. 19B; thence deflecting right 90°43'01" and running northerly, along and upon an east line of said Parcel No. 19B, a distance of Six Hundred Thirty Six and Forty Two Hundredths (636.42) feet to a northeast corner of said Parcel No. 19B; thence deflecting left 91°48'55" and running westerly, along and upon the north line of said Parcel No. 19B, a distance of One Thousand Twenty Four and Forty Two Hundredths (1,024.42) feet to the northwest corner of said Parcel No. 19B; thence deflecting left 53°30'13" and running southwesterly, along and upon the northwest line of said Parcel No. 19B, a distance of One Thousand Two Hundred Sixty Three and Seventeen Hundredths (1,263.17) feet to the southwest corner of said Parcel No. 19B, said point also being on the south line of said Southwest Quarter (SW1/4); thence deflecting right 54°55'45" and running westerly, along and upon the south line of said Southwest Quarter (SW1/4), a distance of One Thousand Four Hundred Seventy Four and Sixty Two Hundredths (1,474.62) feet to the point of beginning and containing 323.851 acres, more or less, of which, 6.878 acres, more or less, is presently occupied by public road right of way.

SURVEYOR'S CERTIFICATE

I hereby certify that to the best of my knowledge and belief, the accompanying plat is from an accurate survey of the described property made under my supervision.

Lee D. Wagner, Registered Land Surveyor No. 557

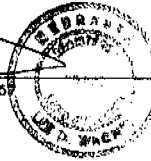


EXHIBIT "A-1" ATTACHED TO AND MADE
A PART OF QUITCLAIM DEED

PART OF THE SW1/4, NW1/4, NE1/4 & SE1/4 OF SECTION 2-T11N-R11W, HALL COUNTY, NEBRASKA		CAAP 19A.dwg 04-04-05 L.W.
LAND SURVEY		
BENJAMIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS P. O. BOX 339 - PHONE 382-8465 - AREA CODE 308 GRAND ISLAND, NEBRASKA 68802-0339		

TRACT NO. 19A

200608646

N.W. CORNER NW1/4
SECTION 11-T11N-R11W
FOUND U.S.B.L.M. BRASS CAP

50.0' A
90°14'47" A
33.0' A

N89°45'45"E R.
2,380.15' A

33' WIDE COUNTY ROAD
RIGHT OF WAY

SCALE 1"=200'

SECTION LINE

2,548.47' A

SCHAUPPSVILLE ROAD

50' WIDE COUNTY
ROAD RIGHT OF WAY

S.W. CORNER NW1/4
SECTION 11-T11N-R11W
FOUND U.S.B.L.M. BRASS CAP

273.48' A
103°45'27" A
51.48' A
180°08'51" A
50.0' A
280.25' A
27°50'32" A
389.24' A
67°39'38" A
413.56' A
6°49'27" A
260.82' A
32°51'30" A

S.W. CORNER SW1/4
SECTION 11-T11N-R11W
FOUND U.S.B.L.M. BRASS CAP

SECTION LINE

30' WIDE HIKE/BIKE
TRAIL EASEMENT

TRACT M

LEGAL DESC

A tract of land
all being in Sec
described as fo

Beginning
(NW1/4),
Eight Ten
Deryl D.
running
feet to t
Parcel No
on the e
Northeast
being Th
deflectin
67°39'38"
27°50'32"
running
Quarter
distance
deflectin
Six Hund
6.185 acr

R. = RECORDED DISTANCE AND/OR BEARING (AND/OR ANGLE) ON SURVEY (REFERRED
TO AS "PARCEL NO. 208") BY DERYL D. SORGENFREI, L. S. NO. 578, DATED JANUARY
25, 2005 (NOTE: RECORDED ANGLES ARE BASED ON RECORDED BEARINGS)
A. = ACTUAL DISTANCE AND/OR ANGLE

● - INDICATES 1/2" IRON PIPE FOUND
○ - INDICATES 1/2" IRON PIPE WITH PLASTIC CAP PLACED. CAP IS STAMPED "L S 557"

CORNER TIES

N.W. CORNER NW1/4 - FOUND U.S.B.L.M. BRASS CAP
48.48' N.W. TO 1/2" IRON PIPE
54.39' N.E. TO NAIL IN FENCE GATE POST
53.25' S.E. TO NAIL IN FENCE GATE POST

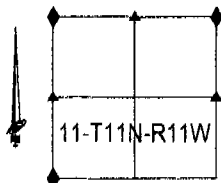
N.E. CORNER NW1/4 - FOUND 1/2" IRON PIPE
53.30' N.W. TO NAIL IN FENCE GATE POST
27.85' N.E. TO NAIL IN FENCE GATE POST
35.00' S.W. TO 1/2" IRON PIPE

N.E. CORNER NE1/4 - FOUND 1/2" IRON PIPE IN ASPH. PAVEMENT
73.18' N.W. TO NAIL IN S.E. CORNER OF BUILDING DA/1
74.49' N.E. TO 1/2" IRON PIPE
65.13' S.E. TO 1/2" IRON PIPE

S.E. CORNER NE1/4 - FOUND 3/4" IRON PIN
53.92' N.E. TO 1/2" IRON PIPE
39.98' E. TO 1/2" IRON PIPE
47.88' S.E. TO 1/2" IRON PIPE

S.W. CORNER SW1/4 - FOUND U.S.B.L.M. BRASS CAP
45.68' N.W. TO FACE OF CONC. W.C.
59.87' N.E. TO 1/2" IRON PIPE
66.18' S.E. TO "X" NAILS IN TOP OF FENCE BRACE POST

S.W. CORNER NW1/4 - FOUND U.S.B.L.M. BRASS CAP
51.70' N.E. TO NAIL IN FENCE BRACE POST
50.18' E. TO FACE OF CONCRETE WITNESS CORNER
31.25' W. TO 1/2" IRON PIPE



SURVEYOR'S

I hereby certifi
supervision.

TRACT NO. 20A

200608646

Exhibit "B" Table 2 Notification of Hazardous Substance Storage, Release, or Disposal			
Property Description	Name of Hazardous Substance(s) Stored (S), Released (R), or Disposed (D)	Date of Storage, Release, or Disposal	Remedial Actions
Land Tract 19A Approximately 323.851 acres of land	1,1,-dichloroethene, acetone (R) Dichlorodifluoromethane and explosive waste and residues. (R)	Source unknown Approximately 1942-1968 (intermittent)	There is evidence that hazardous substances were potentially released to the groundwater under Tract 19A. Hazardous substances were not stored or disposed of on the property. The potential release involves groundwater contamination migrating from other locations on CHAAP. Hazardous substances that have been detected in Tract 19A groundwater are acetone, 1,1-dichloroethene, and dichlorodifluoromethane. The origins of the acetone and 1,1-dichloroethene contamination are not known. Dichlorodifluoromethane is also known as Freon 12 and may have been associated with the migrating Freon 113 contamination. Freon 113, which is not a hazardous substance, was not stored or disposed of on the property, but was potentially released through groundwater contamination migrating from various sources on CHAAP, including the Burning Grounds (OU5), and the Sanitary Landfill and the Pistol Range, which are all part of OU3. All of these potential source areas are located south of Tract 19A.
Land Tract 20A Approximately 208.755 acres of land	Explosive waste and residues. (R)	Approximately 1942-1968 (intermittent)	There is no evidence that hazardous substances were stored, released, or disposed of on the property in excess of the 40 CFR Part 373 reportable quantities. Freon 113, which is not a hazardous substance, was not stored or disposed of on the property, but was potentially released through groundwater contamination migrating from other sources on CHAAP, including the Pistol Range (OU3) to the south of Tract 20A.


EXHIBIT "B" ATTACHED TO AND MADE A PART OF QUITCLAIM DEED

CERTIFICATE OF AUTHORITY

I hereby certify that I am the Chairman of
(Secretary or Attesting Officer)
 the organization named in the foregoing agreement with the United States of
 America; that said organization is organized under the laws of the State of
Nebraska;
(State)
 that the seal, if applicable, affixed to said instrument
 is the seal of said organization; that Ronald Bishop,
(Name of Officer)
 who signed said agreement was then General Manager of said
(Title of Officer)
 organization and has been duly authorized to sign the foregoing agreement on
 behalf of said organization, binding said organization to the terms therein.

I, as the Secretary/Attesting Officer, hereby attest to the validity of the
 Signature of said Officer; and that said signature affixed to such agreement is
 genuine.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal,
 if applicable, of said organization, this 22nd day of June, 2006.


Secretary or Attesting Officer
 Loren Schuett, Chairman

Central Platte Natural Resources District
Corporation or Organization

*This form certifies that the person signing the attached instrument has the authority to do so. The signature of the
 Secretary/Attesting Officer and the individual signing the attached instrument cannot be the same.*

the conveyance under subsection (a)(1) as the Secretary considers appropriate to protect the interests of the United States.

SEC. 2836. LAND CONVEYANCE, CORNHUSKER ARMY AMMUNITION PLANT, HALL COUNTY, NEBRASKA.

(a) CONVEYANCE AUTHORIZED.—Subject to subsection (b), the Secretary of the Army may convey to the Hall County, Nebraska, Board of Supervisors (in this section referred to as the “Board”), or the designee of the Board, all right, title and interest of the United States in and to the real property, together with any improvements thereon, located in Hall County, Nebraska, that is the site of the Cornhusker Army Ammunition Plant.

(b) REQUIREMENT RELATING TO CONVEYANCE.—The Secretary may not carry out the conveyance authorized under subsection (a) until the Secretary completes any environmental restoration required with respect to the property to be conveyed.

(c) UTILIZATION OF PROPERTY.—The Board or its designee, as the case may be, shall utilize the real property conveyed under subsection (a) in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan.

(d) CONSIDERATION.—In consideration for the conveyance under subsection (a), the Board or its designee, as the case may be, shall pay to the United States an amount equal to the fair market value of the real property to be conveyed, as determined by the Secretary.

(e) USE OF PROCEEDS.—(1) The Secretary shall deposit in the special account established under section 204(h)(2) of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 485(h)(2)) the amount received from the Board or its designee under subsection (d).

(2) Notwithstanding subparagraph (A) of such section 204(h)(2), the Secretary may use the entire amount deposited in the special account under paragraph (1) for the purposes set forth in subparagraph (B) of such section 204(h)(2).

(f) DESCRIPTION OF PROPERTY.—The exact acreage and legal description of the property conveyed under this section shall be determined by a survey satisfactory to the Secretary. The cost of the survey shall be borne by the Board or its designee, as the case may be.

(g) ADDITIONAL TERMS AND CONDITIONS.—The Secretary may require such additional terms and conditions in connection with the conveyance under this section as the Secretary considers appropriate to protect the interests of the United States.

SEC. 2837. LAND CONVEYANCE, HAWTHORNE ARMY AMMUNITION PLANT, MINERAL COUNTY, NEVADA.

(a) CONVEYANCE AUTHORIZED.—The Secretary of the Army may convey, without consideration, to Mineral County, Nevada, all right, title, and interest of the United States in and to a parcel consisting of approximately 440 acres located at the Hawthorne Army Ammunition Plant, Mineral County, Nevada, and commonly referred to as the Babbitt Housing Site.

(b) DESCRIPTION OF PROPERTY.—The exact acreage and legal description of the real property to be conveyed under subsection (a) shall be determined by a survey satisfactory to the Secretary. The cost of the survey shall be borne by Mineral County, Nevada.

(c) ADDITIONAL TERMS AND CONDITIONS.—The Secretary may require such additional terms and conditions in connection with

inserting in lieu thereof “paragraph (2), (3), (4), (5), or (6) of section 2233(a)”.

SEC. 2853. REPEAL OF RESTRICTIONS ON LAND TRANSACTIONS RELATING TO PRESIDIO OF SAN FRANCISCO, CALIFORNIA.

Section 2856 of the Military Construction Authorization Act for Fiscal Year 1994 (division B of Public Law 103–160; 107 Stat. 1908) is repealed.

SEC. 2854. REPORT ON USE OF FUNDS FOR ENVIRONMENTAL RESTORATION AT CORNHUSKER ARMY AMMUNITION PLANT, HALL COUNTY, NEBRASKA.

(a) **REPORT REQUIRED.**—The Secretary of the Army shall submit to Congress a report describing the manner in which funds available to the Army for operation and maintenance (including funds in the Defense Environmental Restoration Account established under section 2703(a)(1) of title 10, United States Code) will be used by the Secretary for environmental restoration and maintenance of the real property that comprises the Cornhusker Army Ammunition Plant, Hall County, Nebraska.

(b) **CONTENTS.**—The report shall include the following:

(1) The funding plan for environmental restoration at the Cornhusker Army Ammunition Plant.

(2) A legal opinion stating whether any portion of the funds to be used for such environmental restoration may be used for the repair of the roads at the Plant in order to bring such roads into compliance with applicable State and local public works codes.

(3) A survey of the roads at the Plant that identifies which roads, if any, are in need of repair in order to bring the roads at the Plant into compliance with such codes.

(4) An estimate of the cost of the repair of the roads referred to in paragraph (3) in order to bring the roads into compliance.

(5) An explanation of the purpose, cost, and source of funds for any proposed preservation of documents or other materials relating to the cultural, historical, and natural resources associated with the Plant.

(c) **SUBMISSION OF REPORT.**—The Secretary shall submit the report required by this section not later than May 1, 1995.

SEC. 2855. ENGINEERING, DESIGN, CONSTRUCTION, AND RELATED SERVICES FOR WOMEN IN MILITARY SERVICE FOR AMERICA MEMORIAL.

The Secretary of the Army is authorized, upon request by the Women in Military Service for America Memorial Foundation, Inc., to provide engineering, design, construction management, and related services, directly or by contract, to the Women in Military Service for America Memorial Foundation, Inc., on a reimbursable basis, for the purpose of repair, restoration, and preservation of the main gate structures, center plaza, and hemicycle of the Arlington National Cemetery, Arlington, Virginia, and the construction of the Women in Military Service for America Memorial.

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment G
Interview Documentation

INTERVIEW DOCUMENTATION FORM

The following is a list of individual interviewed for this five-year review. See the attached contact record(s) for a detailed summary of the interviews.

<u>Gary Carson</u> Name	<u>GWTP Operator</u> Title/Position	<u>Bay West</u> Organization	<u>07-31-2014</u> Date
<u>Randy Gard</u> Name	<u>President</u> Title/Position	Grand Island Area Economic Development <u>Corporation</u> Organization	<u>07-30-2014</u> Date
<u>Craig Lewis</u> Name	<u>Building Department Director</u> Title/Position	City of Grand Island <u> </u> Organization	<u>07-30-2014</u> Date
<u>Chad Nabity</u> Name	<u>Director</u> Title/Position	<u>Hall County Regional Planning Department</u> Organization	<u>07-30-2014</u> Date
<u>Patti Thomason</u> Name	<u>Technical Lead</u> Title/Position	<u>USACE NWO</u> Organization	<u>07-31-2014</u> Date
<u>Dave Kachek</u> Name	<u>Geologist</u> Title/Position	<u>USACE NWO</u> Organization	<u>07-31-2014</u> Date
<u>Ed Southwick</u> Name	<u>Project Manager</u> Title/Position	<u>NDEQ</u> Organization	<u>08-26-2014</u> Date

INTERVIEW RECORD

Site Name: Cornhusker Army Ammunition Plant		EPA ID No.: NE2213820234	
Subject: Five Year Review		Time: 8:00	Date: 07/31/2014
Type: <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other Location of Visit:		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing	
Contact Made By:			
Name: Angela Mason		Title: Project Manager	Organization: USACE NWK
Individual Contacted:			
Name: Gary Carson		Title: GWTP Operator	Organization: Bay West
Telephone No:		Street Address:	
Fax No:		City, State, Zip:	
E-Mail Address:			
Summary Of Conversation			
<ol style="list-style-type: none"> 1. What is your overall impression of the project? The injection program has matured and overall the project is entering the wind down phase. 2. What effects have site operations had on the surrounding community? No effects. 3. Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details. No 4. Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details. No 5. Do you feel well informed about the site's activities and progress? Does not get much information regarding the wider scope of the project and activities that occur (i.e., subsurface injection work). Used to get a lot of this information during annual project meeting but no longer attends those meetings. 6. Do you have any comments, suggestions, or recommendations regarding the site's management or operations? There should be consideration to replacing the GAC system with a UV system. A UV system would simplify O&M considerably. The plant has been kept updated for the most part. The PLC controls might be getting antiquated as they have not been updated since the plant was built. The SCADA software was updated in 2007. A new air dryer was installed in March 2010. The air compressors get quarterly 			

maintenance by Ingersoll Rand. The HVAC system and well pumps get annual maintenance. The carbon is changed out approximately every 18 months.

The LTM events have switched from spring to August so that subsurface injections can occur in the spring before crops are planted. EW-7 is the only well online and the injection points are being placed far enough away (minimum of 1200 feet away) from EW-7 so as not to impact the EW-7 or the plant. EW-7 is inspected annually and is currently pumping at around 500 gpm.

7. Is there a continuous on-site O&M presence? Please describe staff and activities.

Gary is at the site half time now, typically Monday through Thursday from 7 am until 12 pm.

8. Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines in the last five years? If so, do they impact the protectiveness of the remedy?

Process sampling has changed from monthly to quarterly as of January 2014. Canal maintenance has changed from an annual task (occurring May through September) to a task that will only occur if it is required or requested by CPNRD, who is the owner of the canals. The electronics equipment used to be calibrated annually but that is being switched to every other year.

9. Have there been any unexpected O&M difficulties or costs in the last five years?

The air dryer went out but was covered under the warranty service and was replaced. The sensing unit went out in the air compressor and was replaced. Some of the air diaphragm pumps were changed out. Equipment within the plant is painted as needed, typically every 2 to 3 years. Rehab work was performed on EW-7 in 2013/2014. In August 2013 a three step process was performed consisting of 1) phosphoric acid and biodispersant; 2) clay dispersant; and 3) chlorine disinfection. In December 2013 EW-7 was redeveloped using sulfamic acid and glacial acetic acid. In June 2014 EW-7 was redeveloped using sonic and hydro-surfing. The rehab work was done because the specific capacity of EW-7 has decreased around 23% from initial installation of the well. The rehab efforts did not result in an increase in specific capacity for the well; however, modeling done by Bay West indicated that EW-7 is still maintaining capture of the plume at the current specific capacity. A video was taken of EW-7 after the August 2013 rehab event and the well appeared to be clean and in good shape.

10. Have there been any opportunities to optimize O&M or sampling efforts? Please describe changes and resulting cost savings or improved efficiency.

The plant lighting was changed to motion sensors. Process sampling was changed from monthly to quarterly. Looking into replacement of the GAC system with a UV system would be another opportunity to optimize operations of the plant.

INTERVIEW RECORD		
Site Name: Cornhusker Army Ammunition Plant		EPA ID No.: NE2213820234
Subject: Five Year Review		Time: 4:30 Date: 07/30/2014
Type: <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other Location of Visit:		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing
Contact Made By:		
Name: Angela Mason	Title: Project Manager	Organization: USACE NWK
Individual Contacted:		
Name: Craig Lewis	Title: Building Department Director	Organization: City of Grand Island
Telephone No: 308-385-5325 Fax No: E-Mail Address: CraigL@grand-island.com		Street Address: 100 East First Street City, State, Zip: Grand Island, NE 68802
Summary Of Conversation		
<ol style="list-style-type: none"> 1. What is your overall impression of the project? The project is going very well. 2. What effects have site operations had on the surrounding community? There have been no negative effects on the community. 3. Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details. No 4. Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details. No 5. Do you feel well informed about the site's activities and progress? Reasonably so 6. Do you have any comments, suggestions, or recommendations regarding the site's management or operations? No 7. Have you received periodic updates and/or maps regarding the location of the contaminated groundwater plume originating from the former Cornhusker Army Ammunition Plant? What is the date of your most recent information? Do you know if the map is being used to enforce the Grand Island Ordinance/during the well permitting process? The last version of the map received was the 2012 map in a PDF version and the 		

PDF version works fine for his purposes.

8. Based on current zoning requirements, is it possible for someone to live on land purchased at CHAAP (i.e., is the CHAAP land being restricted to agricultural/industrial uses only)?

The city only looks at a 2 mile radius within city limits and enforces the established institutional controls within that radius. Anything beyond that radius is covered by the County.

9. Area you aware of any recent land transactions within the CHAAP boundaries?
No

INTERVIEW RECORD

Site Name: Cornhusker Army Ammunition Plant		EPA ID No.: NE2213820234	
Subject: Five Year Review		Time: 3:00	Date: 07/30/2014
Type: <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other Location of Visit:		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing	
Contact Made By:			
Name: Angela Mason		Title: Project Manager	Organization: USACE NWK
Individual Contacted:			
Name: Chad Nabity		Title: Director	Organization: Hall County Regional Planning Department
Telephone No: 308-385-5240 Fax No: 308-385-5423 E-Mail Address: cnabity@grand-island.com		Street Address: 100 E 1 st Street City, State, Zip: Grand Island, NE 68802	

Summary Of Conversation

1. What is your overall impression of the project?
 The project has progressed in fits and starts because funding makes it difficult to operate continuously. The RDX/TNT groundwater cleanup has been going fine but the rest of the cleanup seems to be occurring sporadically (i.e., building demolition and soil cleanup)
2. What effects have site operations had on the surrounding community?
 None
3. Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.
 No
4. Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details.
 No
5. Do you feel well informed about the site's activities and progress?
 Have seen a consistent decrease in the size of the groundwater plume but have not received an updated map for a couple of years. Mr Nabity inquired as to whether ArcView versions of the maps could be provided and if that was not possible, if the CADD files could be provided so they could incorporate the map into their GIS system.

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operations?

No

7. Based on current zoning requirements, is it possible for someone to live on land purchased at CHAAP (i.e., is the CHAAP land being restricted to agricultural/industrial uses only)?

No houses are allowed to be built on the CHAAP excessed land with the exception of 2 homes that already existed. One of the homes is the groundskeeper's quarters at the shooting park and the other is a vacant/abandoned home on land owned by Southern Power. There is no county licensing procedure for irrigation wells installed as that is handled at the State level. County licensing is required for residential wells but residents in the area of the groundwater cleanup are required to hook up to the city water lines.

INTERVIEW RECORD		
Site Name: Cornhusker Army Ammunition Plant		EPA ID No.: NE2213820234
Subject: Five Year Review		Time: 2:30 Date: 07/30/2014
Type: <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other Location of Visit:		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing
Contact Made By:		
Name: Angela Mason	Title: Project Manager	Organization: USACE NWK
Individual Contacted:		
Name: Randy Gard	Title: President	Organization: Grand Island Area Economic Development Corporation
Telephone No: 308-381-7500 Fax No: E-Mail Address: rgard@grandisland.org		Street Address: 123 N Locust Street, Suite 201 City, State, Zip: Grand Island, NE 68802
Summary Of Conversation		
<ol style="list-style-type: none"> What is your overall impression of the project? It is being ran well, no negative comments. What effects have site operations had on the surrounding community? None Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details. No Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details. No Do you feel well informed about the site's activities and progress? Yes Do you have any comments, suggestions, or recommendations regarding the site's management or operations? Once remediation has been completed what is the plan for the treatment plant and the land it sits on. What is the current use of land purchased in 2009? As of December 2013 the EDC sold all but 260 acres of their land. Most of this land has been converted back to farm ground but a small section of it was sold to a 		

manufacturer.

Load Line 2 was sold by EDC to a farmer. All remnants of the load line have been removed, two center pivots have been installed, and the land is now irrigated crops.

Load Line 3 was sold by EDC to Hornady Manufacturing. A warehouse is in the process of being built on this land.

Load Line 4 was sold by EDC to a farmer. All remnants of the load line have been removed and the land is now irrigated crops.

Load Line 1 – the Southern Power District sold most of their land in early 2014 to a farmer. All remnants of the load line have been removed, a center pivot has been installed, and the land is now irrigated crops.

INTERVIEW RECORD

Site Name: Cornhusker Army Ammunition Plant		EPA ID No.: NE2213820234	
Subject: Five Year Review		Time: 11:00	Date:
Type: <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other Location of Visit:		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing	
Contact Made By:			
Name: Angela Mason		Title: Project Manager	Organization: USACE NWK
Individual Contacted:			
Name: Patti Thomason Dave Kachek		Title: Lead Technical Geologist	Organization: USACE NWO
Telephone No: 402-995-2298		Street Address: 1616 Capitol Avenue	
Fax No:		City, State, Zip: Omaha, NE 68102	
E-Mail Address:			
Summary Of Conversation			
<ol style="list-style-type: none"> 1. What is your overall impression of the project? The project is running smoothly and on schedule. The injections are working well and helping to reduce the plume. Predictive plume work has been performed using annual model updates. 2. What effects have site operations had on the surrounding community? No adverse effects other than increased truck traffic during events. There has been a benefit to the community because land has been sold to farmers and is being used. There is a good relationship with farmers and we work with them to schedule events at the site around their farming schedule. 3. Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details. Nothing negative 4. Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details. No 5. Do you have any comments, suggestions, or recommendations regarding the site's management or operations? The site has been managed well. The contractor is very responsive to requests. 6. What actions have been taken regarding the issues identified in the second Five Year Review Report (see attached table). 7. Have there been any new land transactions within the last 5 years with the land owned 			

by the government?

No government land has been sold within the last 5 years.

Issue	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
Compile lines of evidence to build a case for shutting down the GWTP.	USACE	USACE	Sep-11	Continual effort. Annual groundwater modeling is performed and the results of the modeling are discussed in the LTM reports along with recommendations for future operations at the site	on-going
Complete additional follow-on field verification, at a minimum, during the four-month and eight-month performance monitoring events to ensure that capture of the on-post explosives plume is being achieved as specified in the OU1 ROD Amendment. Optimize the pumping rate on EW 7 to ensure that capture is being achieved with minimal drawdown.	USACE	USACE	Jul-10	This is verified annually with the groundwater modeling updates. To date, EW-7 continues to maintain capture and is pumping at a rate of approximately 500 gpm.	Annual action
Consider less frequent sampling or abandonment of several upgradient, historically non-detect monitoring wells.	USACE	USACE	Mar-10	This is evaluated during preparation of each LTM Report. Sampling frequencies have been changed for some of the wells and many wells have been abandoned. In 2012, 2 wells were abandoned and in 2013 25 wells were abandoned.	Evaluated annually
Incorporate recent changes to the GWTP resulting from the iron and manganese precipitation, into the O&M Manual.	USACE	USACE	Sep-11	No changes were made to the O&M manual because when EW-4, EW-5, and EW-6 were taken off-line, the problem with the iron and manganese precipitation within the GWTP were eliminated.	none
Make the GWTP and the potential future enhanced bioremediation activities more sustainable by:	USACE	USACE	Sep-11	A cost analysis was completed and coupled with the annual groundwater modeling results to determine the most effective way of treating groundwater. The criteria for shut down of the plant is when groundwater leaving the boundary of the site does not exceed cleanup criteria. This criteria is evaluated as part of the annual LTM reports.	Evaluated annually
a.) Exploring the possibility of phasing out operation of the pump and treat system and transitioning to enhanced bioremediation as the sole means of groundwater remediation.					
b.) Scaling back the level of effort for future enhanced bioremediation activities.				An evaluation was done and as a result the bioremediation activities are now focused on the source areas. The number of injection points have been increased while the level of baseline and performance monitoring sampling has been decreased. As of 2014, monitoring of bioremediation activities is now done during the LTM event which occurs in August.	2012-2013
c.) Relaxing the criteria for determining when to change-out the activated carbon in order to reduce the rate of activated carbon consumption while still maintaining an adequate margin of safety to guard against breakthrough.				No change was made because frequency of change out was drastically reduced when EW-4, EW-5, and EW-6 were taken off-line. The carbon is changed every 18 months using the same criteria as before.	none
d.) Considering replacing the 25 HP transfer pump with a variable frequency drive pump.				A variable frequency drive pump was installed at EW-7 in 2008.	11/14/2008
e.) Adjusting the settings on the set-back thermostat to reduce the use of the heaters on weekends and evenings.				This has not been implemented as it would take a very long time to heat the plant back up after reducing the thermostat.	none
f.) Replacing the air dryer with a more energy efficient unit.				The air dryer was replaced in 2010. The old unit used 40% of the compressed air while the new unit uses 5% or less.	3/8/2010
Optimize the GWTP by:	USACE	USACE	Sep-11	A more efficient air dryer was installed in 2010 that uses 5% or less of the compressed air where the old unit used 40%.	3/8/2010
a.) Reducing the compressed air usage.					
b.) Utilizing variable frequency drives on centrifugal pumps (feed pumps on GAC units).				This did not get implemented because the plant runs on a constant rate basis (~500 gpm).	none
c.) Removing effluent pumps.				The pumps were not removed but they have been mothballed. They remain in place in the event that gravity feed of discharge water to the canals does not work.	none

Issue	Party Responsible	Oversight Agency	Milestone Date	Action Taken and Outcome	Date of Action
d.) Revising the carbon change-out criteria.				No change was made. Frequency of changeout was drastically reduced when EW-4, EW-5, and EW-6 were taken off-line. It is now changed every 18 months using the same criteria as before with only EW-7 on-line.	none
e.) Modifying the discharge structures.				No modifications were made to the discharge structures. There have been no problems to date with discharge of the treated groundwater.	none
Provide an updated GIS plume map to CPNRD and the City of Grand Island yearly.	USACE	USACE	Sep-10	Maps are provided annually to the CPNRD, the City of Grand Island, and the County. The 2012 map is the most recent map as the 2013 LTM report is still in the draft stages and has not been finalized. A request was made that the map be provided in either ArcView or CADD in addition to the PDF file. USACE-NWO will check with the contractor on whether this is possible.	Annual action
An annual inspection will be performed as part of LTM activities so that any land utilization improvements over the contaminant plume will be documented. The findings of this part of the LTM inspection will be tabulated and presented in subsequent five-year reviews	USACE	USACE	Dec-14	This action has been incorporated as part of the LTM activities and is summarized in the LTM reports.	2009
Make appropriate repairs to eliminate the fall hazard at the Northwest Sewage Treatment Plant.	USACE	USACE	Sep-11	Status of this item is unknown. USACE-NWO will verify with contractor whether this action occurred.	TBD
Compare the levels of remaining soil contamination to residential values to determine if any soil OUs may be returned to unrestricted use and removed from the CERCLA/Five-Year Review process. OUs with soil contamination exceeding residential levels will remain with deed restrictions and/or land use controls.	USACE	USACE	Sep-11	No additional soil sampling has been done so there is no data to make this determination at this time.	none

INTERVIEW RECORD

Site Name: Cornhusker Army Ammunition Plant		EPA ID No.: NE2213820234	
Subject: Five Year Review		Time: 15:00	Date: 8-26-2014
Type: <input type="checkbox"/> Telephone <input type="checkbox"/> Visit <input checked="" type="checkbox"/> Other Location of Visit: Filled out		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing	
Contact Made By:			
Name: Angela Mason		Title: Project Manager	Organization: USACE-NWK
Individual Contacted:			
Name: Ed Southwick		Title: Project Manager	Organization: NDEQ
Telephone No: 402-471-2181		Street Address: 1200 N Street, Suite 400, PO Box 68509	
Fax No:		68509	
E-Mail Address: Ed.Southwick@nebraska.gov		City, State, Zip: Lincoln, Nebraska 68509	
Summary Of Conversation			
<ol style="list-style-type: none"> 1. What is your overall impression of the project? Positive 2. What effects have site operations had on the surrounding community? None 3. Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details. No 4. Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details. No 5. Do you feel well informed about the site's activities and progress? Yes 6. Do you have any comments, suggestions, or recommendations regarding the site's management or operations? No 7. Are you aware of any changes in State laws or regulations that may impact the project or the protectiveness of the remedy? No 8. Is the site in compliance with any state permitting or reporting requirements? Yes 			

Third Five-Year Review Report
for
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Attachment H
Documents Reviewed

Bay West. 2011. Proposal for Long-Term Maintenance of OU1 LTO, OU1/OU3 LTM, OU1 RAO, and the Decant Station, Volume 1: Technical. Cornhusker Army Ammunition Plant. Prepared for USACE. November.

Bay West and URS Group, Inc. (BW-URS). 2014. Draft Report. 2013 Subsurface Injection Annual Report OU1 Remedial Action Operation. Cornhusker Army Ammunition Plant. Prepared for USACE. July.

Bay West and URS Group, Inc. (BW-URS). 2014. Monitoring Well Installation and Abandonment Letter Report, 2013 Long-Term Monitoring Program. Cornhusker Army Ammunition Plant. Prepared for USACE. March.

Bay West and URS Group, Inc. (BW-URS). 2014. Final Report. 2012 Subsurface Injection Annual Report OU1 Remedial Action Operation. Cornhusker Army Ammunition Plant. Prepared for USACE. February.

Bay West and URS Group, Inc. (BW-URS). 2013. Draft Report. March 2013 Annual Sampling Event for the Long-Term Monitoring Program. Cornhusker Army Ammunition Plant. Prepared for USACE. October.

Bay West and URS Group, Inc. (BW-URS). 2013. Final Report. March 2012 Annual Sampling Event for the Long-Term Monitoring Program. Cornhusker Army Ammunition Plant. Prepared for USACE. June.

Bay West and URS Group, Inc. (BW-URS). 2012. Final Report. 2011 Subsurface Injection Annual Report OU1 Remedial Action Operation. Cornhusker Army Ammunition Plant. Prepared for USACE. December.

Bay West and URS Group, Inc. (BW-URS). 2012. Monitoring Well Installation and Abandonment Letter Report, 2012 Long-Term Monitoring Program. Cornhusker Army Ammunition Plant. Prepared for USACE. December.

Bay West and URS Group, Inc. (BW-URS). 2011. Final Report. 2010 Subsurface Injection Annual Report OU1 Remedial Action Operation. Cornhusker Army Ammunition Plant. Prepared for USACE. November.

Bay West and URS Group, Inc. (BW-URS). 2011. Draft Report. March 2011 Annual Sampling Event for the Long-Term Monitoring Program. Cornhusker Army Ammunition Plant. Prepared for USACE. November.

Bay West and URS Group, Inc. (BW-URS). 2010. Final Report. 2009 Subsurface Injection Annual Report OU1 Remedial Action Operation. Cornhusker Army Ammunition Plant. Prepared for USACE. September.

Bay West and URS Group, Inc. (BW-URS). 2010. Draft Report. March 2010 Annual Sampling Event for the Long-Term Monitoring Program. Cornhusker Army Ammunition Plant. Prepared for USACE. November.

Bay West and URS Group, Inc. (BW-URS). 2009. Draft Report. March 2009 Annual Sampling Event for the Long-Term Monitoring Program. Cornhusker Army Ammunition Plant. Prepared for USACE. November.

Bay West and URS Group, Inc. (BW-URS). 2008. Final Report. 2007 Subsurface Injection Annual Report OU1 Remedial Action Operation. Cornhusker Army Ammunition Plant. Prepared for USACE. March.

CET Environmental Services, Inc., 2005. Groundwater Recovery and Treatment System Operation and Maintenance Manual, Revision 5.1, Operable Unit No. 1, Groundwater Treatment Plant, Cornhusker Army Ammunition Plant (CHAAP), Grand Island, Nebraska. January.

HydroGeoLogic, Inc., March 2004. First Five-Year Review, Cornhusker Army Ammunition Plant, Grand Island, Nebraska.

ICF Kaiser Engineers, 1996. U.S. Army Environmental Center, Cornhusker Army Ammunition Plant, Final Remedial Investigation/Feasibility Study. November.

ICF Kaiser Engineers, 1996. U.S. Army Environmental Center, Cornhusker Army Ammunition Plant, Final Remedial Investigation Addendum Operable Unit Two. November.

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Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment I
Media Articles

THE STATE OF NEBRASKA
HALL COUNTY

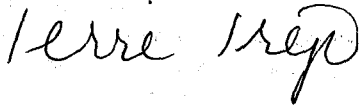
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My commission expires

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Notary Public

State of Nebraska - General Notary
LEANN L. WILSEY
My Commission Expires
April 2, 2018



Public Notice

NOTICE OF THIRD FIVE-YEAR REVIEW
CORNHUSKER ARMY AMMUNITION PLANT,
GRAND ISLAND, NEBRASKA

The U.S. Army Corps of Engineers (USACE) is initiating the third Five-Year Review for the Cornhusker Army Ammunition Plant (CHAAP). This review includes Operable Units (OUs) 1 (Groundwater), 2 (No Further Action), 3 (Groundwater), and 4 (Deed Restrictions). The Five-Year Review Team includes the U.S. Environmental Protection Agency (EPA) Region 7, the Nebraska Department of Environmental Quality (NDEQ), and other local agencies.

Components of the selected remedy for OU1 include groundwater extraction and treatment. The selected remedy addresses groundwater contaminated with explosives in excess of the cleanup goals established in the September 2001 Record of Decision (ROD) Amendment for OU1.

Components of the selected remedy for OU2 include no further remedial action. The selected remedy was outlined in the September 1998 ROD for OU2.

Components of the selected remedy for OU3 include excavation and off-site disposal of soil and long-term groundwater monitoring. The selected remedy addresses soil contaminated with lead and explosives and groundwater contaminated with chlorinated organic compounds in excess of the cleanup goals established in the December 1999 ROD for OU3.

Components of the selected remedy for OU4 include institutional controls in the form of deed restrictions to prevent residential use. The selected remedy addresses the unsaturated zone as outlined in the February 2000 ROD for OU4.

A review of the selected remedies with regard to protection of human health and the environment will be included in the Five-Year Review Report. This Five-Year Review is being conducted as a matter of policy. The report for this Five-Year Review will be made available to the public after finalization in September 2015. Questions or requests for information can be submitted to:

U.S. Army Corps of Engineers
Omaha District (NWO)
Doug Simpleman
1616 Capitol Avenue
Omaha, NE 68102
402-995-2753

Douglas.P.Simpleman@usace.army.mil

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Board to reactivate Reuse Committee to hear plans on sale of CAAP land

[0](#)

By Tracy Overstreet

tracy.overstreet@theindependent.com Follow Tracy on Twitter or find her on Facebook and Google Plus. |

Updated 8 months ago

The Hall County board's Reuse Committee will be reactivated in the coming weeks.

The county board decided Tuesday that the committee should reconvene in order to hear the latest land development plans from the Grand Island Area Economic Development Corp., which intends to sell off about 600 acres of land that was proposed for an industrial park.

"I'm chair of that committee and it hasn't met in about three years," said Supervisor Steve Schuppan, who was against reactivating the committee.

The Reuse Committee ceased having regular meetings when the bulk of its work was done — which was in about 2008.

The committee had been formed in 1993 as a direct result of federal legislation proposed by then-U.S. Sen. J.J. Exon, who was the ranking member of the Senate Armed Services Committee. Exon called for local residents, not military leaders or federal officials, to determine how the 20-square-mile former ordnance production plant would be used and who would buy the land. The plant was active during World War II and the Korea and Vietnam wars and was declared surplus in 1989.

The Reuse Committee was charged with overseeing the Army's cleanup of land contaminated with explosives residue and then designating how the land would be used and selecting buyers in an effort to get the land back on the tax rolls.

Much of the land was sold at public auction and purchased by farmers for row-crop production.

However, the Reuse Committee, in action ratified by the Hall County board, also earmarked the Husker Harvest Days property to be preserved for that outdoor farm show. It also set aside wildlife land for the Nebraska Game and Parks Commission, the city of Grand Island Heartland Public Shooting Park and flood control project land for the Central Platte Natural Resources District.

The center of the ordnance plant, comprising four bomb production load lines, was identified in numerous plans as being prime space for industrial development. The Reuse Committee had designated the Nebraska Public Power District to buy the land for future development of a coal-fired power plant and industrial park, but when NPPD abandoned that plan in 2007, the county sought other interested buyers.

Six proposals were submitted, including one by the Grand Island Area Economic Development Corp. to use the land for an industrial park and foreign-trade zone.

The EDC purchased 1,750 acres from the Army in 2008 for \$3.6 million. EDC President Randy Gard said this week that the land is just too expensive to develop because it needs costly infrastructure upgrades. The EDC has negotiated agreements to sell 600 acres of the Cornhusker property and then buy new land near the Platte Valley Industrial Park.

Hall County board Chairwoman Pam Lancaster said she believes the Reuse Committee and the public should have the opportunity to hear more about the EDC plan and be able to offer comments.

Before the Reuse Committee can meet, however, it needs to be reappointed.

The Reuse Committee has comprised three Hall County supervisors, the Grand Island mayor, the president of the Grand Island Area Economic Development Corp., a Grand Island Area Chamber of Commerce representative, an industrial property lessee, an agricultural land lessee, a congressional liaison and a representative from the Hall County Airport Authority/Central Nebraska Regional Airport.

The most recent members, appointed in 2009, were: Hall County Supervisors Bud Jeffries (deceased), Dan Purdy and Dan Wagoner (no longer in office); Grand Island Mayor

Margaret Hornady (no longer in office); EDC President Marlan Ferguson (no longer in that position); chamber representative Orv Qualsett; ag lessee Bob Peters; congressional liaison John Webster (no longer in that position); and Central Nebraska Regional Airport Executive Director Mike Olson. The industrial lessee position had been unfilled after a DTE Railcar representative dropped off the board when that company was sold to Freight Car America.

Lancaster said the appropriate new officeholders will be appointed and interest determined in representatives for the other open positions.

She had named Schuppan, Purdy and Supervisor Bob McFarland to the Reuse Committee earlier this year, but the action had not yet been ratified by the county board in an official resolution, along with the other new officeholders including Grand Island Mayor Jay Vavricek and Gard.

Author

Tracy Overstreet



Similar articles

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Reuse Committee chairman resigns

By Tracy Overstreet

tracy.overstreet@theindependent.com | Posted: Wednesday, December 4, 2013 12:05 am

Hall County Supervisor Steve Schuppan resigned his appointment as chairman of the county's Reuse Committee on Tuesday.

The resignation came in response to Hall County board Chairwoman Pam Lancaster asking Schuppan why he hadn't followed through on the county board's Nov. 19 vote to reinstate the Reuse Committee membership, which includes finding a current farm tenant and industrial tenant from the former Cornhusker Army Ammunition Plant, to serve on that committee.

The Reuse Committee was formed in 1993 to oversee the disbursement of the 20-square-mile ammunition plant west of Grand Island from federal ownership to private ownership.

The county board directed on Nov. 19 that the committee meet in December or January to hear the Grand Island Area Economic Development Corp.'s plans to sell 600 acres of plant land to an area farmer. In 2008, the Reuse Committee and county board had selected the EDC over five other potential buyers, including farmers, to own that ground for development as an industrial park.

Schuppan voted against the reinstatement of the committee at the Nov. 19 meeting and used his opposition to stalemate the committee's re-creation.

"I don't know that a committee gets to trump the county board action," Lancaster told him on Tuesday.

"I agree with that," Schuppan said. "I thought maybe, if everybody thought about this for two weeks, they might change their mind.

"If you want to go ahead and reform this committee and do a little micromanaging of the EDC, that's fine with me. I will resign as chairman," he said. "I don't think it's a good idea."

Schuppan said it's not good for the county to meddle with the EDC's plan — plus the county has no jurisdiction because the EDC bought the land for \$3.6 million and holds title to it. The EDC is a private organization and has legal right to sell its own land, he said.

Schuppan said he met with EDC President Randy Gard over the summer and Gard indicated then that a land sale was eminent.

"He said they are spending all their money servicing that debt and they needed to make a change so they had more money free to do what they're supposed to be doing," he said.

Lancaster said that, while Schuppan may have known that a land sale was coming, it came as a shock to other county board members and to the city. The county pays \$40,000 annually to the EDC, while the city pays \$350,000, and neither was informed of the land sale, she said. Lancaster called for a written plan with the EDC on how and when it will report changes to the county.

While Lancaster said she knows the county has no authority to stop the sale or even alter it, that doesn't mean the county has to agree with it.

"History will say whether this was a smart thing to do," she said of the EDC's impending land sale.

The purpose of reinstating the Reuse Committee is to give the public the opportunity to hear directly what the EDC plans to do with the Cornhusker land and for the public to give input. Lancaster said she has heard from other potential buyers who were disappointed the EDC didn't auction off the land so other buyers would have had an opportunity to purchase it.

"I don't want to participate in what I think is the micromanagement of the EDC," Schuppan said.

"That's your opinion," she said. "It's not micromanaging to ask people where our taxpayers' money is going and being spent."

Lancaster accepted Schuppan's resignation.

She'll appoint a different chairman, who will have the authority to call a Reuse Committee meeting and update the membership list, which also includes the currently sitting EDC president and the mayor of Grand Island.

"I think, if you're going to chair a meeting, you have to believe in the direction that committee is going," said Supervisor Dave Ziola, who praised Schuppan for stepping down.

The other two county representatives on the Reuse Committee are Supervisors Bob McFarland and Dan Purdy.

The committee hasn't met on a regular basis since 2008, when the EDC bought the last parcel of environmentally cleared land. About three parcels of land remain, but they aren't expected to be ready for sale for several years.

Nearly all off-site RDX contamination gone

By Tracy Overstreet

tracy.overstreet@theindependent.com | Posted: Saturday, September 21, 2013 7:46 pm

Only one small area of RDX contamination remains in Grand Island off the former Cornhusker Army Ammunition Plant site — and it registers just barely above the safe drinking water standard.

The safe drinking water standard is 2 parts per billion of RDX, an explosives residue. The single contaminated well has a reading of 2.1 parts per billion, said Corey Anderson of URS, an Omaha firm contracted by the U.S. Army Corps of Engineers to complete the environmental cleanup of the former ammunition production plant.

The Cornhusker Army Ammunition Plant measured 20 square miles during its heyday of bomb production during World War II. It was reactivated during the Korean War and the Vietnam War. The plant land, bordered by Capital Avenue and Husker Highway on the north and south, 60th Road on the east and Schauppsville Road on the west, was declared surplus and began to be sold off on public auction in the 1990s.

But before land can be sold, it must be environmentally cleaned. Most of the land needed little to no remediation. However, land around two of the plant's five load lines has needed more work, as has groundwater that became contaminated under the plant and then migrated northeast into Grand Island city limits.

The Army spent more than \$5 million in 1986 to extend city water lines to potentially affected areas in northwest Grand Island where the contaminated groundwater plume was found because people in those areas were using private wells for drinking water. RDX is believed to cause cancer if consumed by humans over a long period of time.

The Army also set about a massive cleanup effort that included the 1998 construction of a pump and treat station along 13th Street on the plant site. That station pumps up the contaminated groundwater, cycles it through an RDX removal system and discharges the clean water into Silver Creek.

The pump and treat station was forecasted to operate through at least 2020, but that was shortened two years ago to a projected 2015 conclusion due to additional cleanup methods the Army implemented.

However, Army Corps of Engineers Project Manager Doug Simpleman said the pump and treat station will continue to operate until complete cleanup is known.

"We're going to operate for at least the next five years," on the pump and treatment system, Simpleman said.

The Army's extra cleanup efforts are injections of a molasses-based substance that is helping break down the RDX contamination. Anderson said the injections are made annually around known "hot spots" or areas of high RDX readings.

The highest RDX reading recorded in March 2013 is 70 parts per billion near the former Load Line 1 just south of 13th Street near 70th Road, Anderson said.

A hollow rod is used to bore into the ground at the level where the contamination is known to exist — on site that is 35 to 40 feet, Anderson said. The molasses is then injected at that depth all the way to the surface to create a treatment zone, or wall, for the contamination to pass through and begin breaking down.

Testing on the down gradient side of the injections shows that they are working.

"There has been substantial degradation of the explosives plume in the off-site and the former on-site area," Anderson said.

"The off-site plume has shrunk dramatically due to the on-site work that has been done — primarily the pump-and-treat system that has captured the on-site plume, not allowing any further off-site migration of the RDX plume," Anderson said.

The off-site plume, which remains only at one site in the right of way on the east side of Webb Road and north of Capital Avenue, is not expected to get any lower and not expected to migrate farther east.

"The depth of the off-site plume is right around 60 feet," Anderson said. "That 2.1 detection is only in a single well.

"We only have one well off site that still has RDX above the health advisory," he said.

Anderson said the RDX is heavier than water, so it sinks in the aquifer. The off-site contamination is not expected to get any lower in the ground because it has sunk through sandy soil layers and reached a clay layer.

That clay layer is called the "Fullerton Formation," which Anderson said is a natural "aquitard," meaning it is not permeable by the contamination.

"Our off-site remedy since 2001 has been natural attenuation — essentially letting Mother Nature break down the contaminants in the subsurface through natural attenuation," Anderson said.

Natural attenuation is expected to resolve all the off-site contamination within the next five years, Anderson said.

Another benefit to the Army's cleanup efforts is the T&E Feedlot on the east side of the former plant. Testing shows that RDX levels are substantially lower after passing under the feedlot.

“The conditions produced by the feedlot appear to be conducive to the bacteria that break the RDX down — they do provide benefit to cleaning up the groundwater as it passes underneath,” Simpleman said.

But the feedlot cannot be considered part of the formal cleanup effort.

“We have the hydrologic capture to prevent the RDX from continuing to migrate off site and we have injections where we’re trying to knock down the source area so there’s less of it to leach into the aquifer,” Simpleman said of the Army’s efforts.

“The explosives plumes are being cleaned up rather effectively and the off-site plume has shown great improvement from initial sampling that happened 15 to 20 years ago,” Simpleman said.

“The treatment systems appear to be operative effectively and the contaminate levels are coming down.”

The Cornhusker site: Where do we go from here?

By Tracy Overstreet

tracy.overstreet@theindependent.com | Posted: Saturday, November 30, 2013 11:30 pm

Major industrial development has been mapped to occur west of Grand Island at the former Cornhusker Army Ammunition Plant land for 25 years.

The primary industrial area — in former bomb production lines — was finally sold by the Army five years ago to the Grand Island Area Economic Development Corp.

The EDC sold off 500 acres of its 1,750-acre purchase early on for row-crop production and about two years ago sold another 350 acres to Hornady Manufacturing.

Now under new leadership, the EDC is proposing to sell off 500 to 600 additional acres, leaving just 260 acres for future industrial development at what the state had been working on with local officials to be an 800-acre “mega-site” for a 1,000-worker company.

EDC President Randy Gard said the search for such companies, those comparable to the existing CNH plant, are akin to “elephant hunting.”

Taxpayer money is better spent on smaller business development at the Platte Valley Industrial Park, which has nearby Interstate 80 access, Gard said.

Platte Valley is now a premier site after 28 years of land purchases, water and sewer extensions, storm drainage work and paving.

Hall County Supervisor Gary Quandt called Gard “short-sighted.” The land sale that is scheduled to occur in early December would be selling out on a longtime community dream and could be a setback that cannot be recovered from, Quandt said.

County board Chairwoman Pam Lancaster said she’s upset enough about the change in direction to consider forgoing payment of the county’s \$40,000 of annual funding to the EDC, particularly if the EDC makes money from the Cornhusker land sale.

Gard said when the EDC closes on the land sale in December, it will “turn right around” and buy land near the Platte Valley Industrial Park.

“I end up with a little bit less than \$300,000 left between the two transactions,” he said.

“If they have money in the bank, why do taxpayers need to put in another \$40,000?” Lancaster asked.

The city of Grand Island contributes \$350,000 annually toward the EDC efforts. That money was paid out in October.

Lancaster said she is also reappointing the county's Reuse Committee, which had federally granted authority to select land buyers for the Cornhusker land.

The reappointment is expected to be part of the county's Dec. 3 board meeting, but will likely carry little weight because the plant land sales are virtually complete (aside from small acreages that remain under federal cleanup plans for explosives contamination) and the Reuse Committee chairman, Supervisor Steve Schuppan, is against calling the committee to order.

The county has no authority to stop what is a private land sale between the EDC and an area farmer, county legal counsel Jack Zitterkopf told the county board earlier this month.

Infrastructure key

Meanwhile, Gard said he's acting in the best interests of taxpayers — and with the data of two studies.

One, the Battelle study, identified eight growth segments for the Nebraska Department of Economic Development. Those businesses are:

- Manufacturing
- Agriculture, food processing, agricultural machinery
- Business management, administration, financial, software, computer services
- Transportation, warehousing, distribution/logistics
- Biosciences (fertilizer, medical products, medical)
- Health services
- Hospitality/tourism
- Renewable energy (fuels, hydro, solar, wind)

Those business are a better fit at the Platte Valley Industrial Park, which has two Interstate 80 access points along Highway 281 and South Locust Street, Gard said.

He also is following a labor study that indicates Grand Island has a high percentage of 22- to 44-year-olds — a highly sought-after workforce age group — that can be a competitive advantage to landing new businesses locally.

Grand Island Public Schools has also started its Career Pathways Institute, which is expected to help boost the training in what has been workforce skill shortage areas, such as welding and nursing.

Nebraska Department of Economic Development Director Cathy Lang said it has to be a community's choice what type of business development — or industrial park development — to pursue.

But the state was clearly excited about the Cornhusker Industrial Park potential. It helped fund a \$150,000 business plan for the Cornhusker site and issued a nearly \$1 million Community Development Block Grant for infrastructure development.

Nebraska Department of Economic Development Deputy Director Gary Hamer said Nebraska lacks an 800-acre to 1,000-acre “mega site” that is site ready.

“The strategy is — are you looking to develop a lot of smaller sites or to market a larger site for a larger customer,” Hamer said.

By selling off the bulk of the Cornhusker acreage, “it limits our opportunities,” Hamer said of both Grand Island and Nebraska.

But Gard aptly pointed out the \$6 million expense for extending sewer and water lines to the Cornhusker site and the \$16 million cost for rebuilding the rail lines there that connect to both the Union Pacific and BNSF.

It’s that dual rail line access that is both the highest benefit and the site’s greatest deterrent.

“The infrastructure is going to cost money. The local question is whether the target is worth the infrastructure,” Hamer said. “If you would land one of those mega-site companies, it would have a tremendous impact on the community and the region.”

The capital investment in such a new company could reach the \$1 billion (billion with a b) mark, he said.

“The infrastructure doesn’t have to be there, but you have to have a way to get the infrastructure to you by X and how it’s going to be paid for,” Hamer said of what is a very competitive market.

Former EDC President Marlan Ferguson, who resigned from the job earlier this year to become Aurora city administrator, said the \$150,000 business plan that was completed opens the door for eligibility for more than \$10 million worth of federal Economic Development Agency grants.

The Nebraska Legislature also passed a new law, LB66, that makes tax-increment financing available to the Cornhusker site, as well as a former military site in Sidney that is being developed with rail line capability and transloading. The tax-increment financing could help fund sewer and water line extensions.

Strategy, opportunity

There’s also a possibility to find other private revenue sources for infrastructure development, Ferguson said.

“If you have the right company, both BNSF and U.P. would step to the plate ... to improve track going into the plant,” Ferguson said. “Freight Car America for the right usage would upgrade their track.”

One of the key factors, he said, is not to give up too much land too soon — and not to give up the land under the rail lines.

When the Hall County board designated buyers, it gave Freight Car America's predecessor the right only to buy the rail lines — not the land underneath them. The EDC owns the land under the rail lines.

If there were adequate resources, former EDC President Pat Downs said, it would be ideal to keep and develop adequate land at both the Platte Valley Industrial Park and the Cornhusker Industrial Park site.

“The best of both worlds, you'd have both strategies available — interstate access for those companies that truck and the other for the companies that need the rail,” Downs said.

Ferguson agreed, saying the different industrial parks are complementary, but attract different companies.

“The issue is we were always able to market Grand Island with three types of industrial parks,” Ferguson said. “One is the airport, where the airport would own the property and the buildings ... then the Platte Valley Industrial Park, which is in city limits in an MSA city with very close access to the interstate, and then the Cornhusker Industrial Park, with access to two major railroads, an area that is more conducive to heavy industry.”

“Without having that capability, it really hurts your overall package to offer,” Ferguson said.

Gard said he hasn't turned his back on the Cornhusker site — there will still be 260 acres of EDC land there.

Southern Power District also owns 1,100 acres at Cornhusker that it hopes to develop with industrial uses.

“It is a long-term strategy,” Hamer said. “But if you don't have it, you have no opportunity.”

Off-site RDX contamination cleanup completed

By Tracy Overstreet

tracy.overstreet@theindependent.com | Posted: Wednesday, December 10, 2014 11:13 pm

Grand Island has hit a 33-year milestone.

Groundwater contaminated with unsafe levels of TNT and RDX is no longer beneath Grand Island city limits.

“Our cleanup has been successful, and things have been cleaning up slowly but steadily,” said Doug Simpleman, project manager for the Army Corps of Engineers in Omaha.

The plume of contaminated groundwater was discovered in 1981 beneath the former Cornhusker Army Ammunition Plant west of Grand Island. Subsequent testing revealed it had also migrated under properties in northwest Grand Island. The former plant was bordered by Capital Avenue on the north, Husker Highway on the south, 60th Road on the east and Schauppsville Road on the west.

“The plume ran from the northeast of the plant for about five miles, and it’s really kind of done now. It ends at the (T&E) Feedlot,” Simpleman said. “It’s pretty good news.”

Hall County Supervisor Pam Lancaster said it’s great news, which Simpleman shared with local leaders during a Nov. 5 update meeting at the plant.

“The contaminated water plume is now contained beneath the ammunition plant ... so, therefore, in no way, shape or form does it affect the community outside that parameter,” she told her county supervisor colleagues.

Lancaster said the groundwater contamination had been mentioned by site judges as one of the reasons the Grand Island Veterans Home is moving to Kearney, but that never was a threat, and that should be very clear now, she said.

The 20-square-mile Cornhusker facility produced bombs during World War II, the Korean War and Vietnam War and was put on standby status in October 1973.

Discovery of the contamination in private drinking water wells led the Army to spend more than \$5 million in 1985 to extend Grand Island city water lines to rural subdivisions that are now part of the Capital Heights and Le Heights areas in northwest Grand Island.

The concern was that drinking the contaminated water over a long period of time could cause cancer.

RDX was originally discovered at 371 parts per billion (ppb) and TNT at 445 ppb on the plant site and at levels just over 100 ppb off site. Both have a safe drinking water standard of 2 ppb, Simpleman said.

Once safe drinking water was in place, the Army began a multi-decade cleanup process that started with burning about 40,000 tons of explosives-contaminated soil at the plant in 1987 and 1988.

In 1993, the Army spent another \$2 million to extend additional city water lines in northwest and north central Grand Island.

In 1998, a \$9 million water pump-and-treat facility was built on 13th Street just west of 60th Road. Contaminated water was pumped into the facility and cycled through an explosives-removal systems and then discharged as clean water into the Silver Creek. That process continues today.

The Army later began injecting “hot spots” of contamination with a molasses-based substance to help degrade the RDX and TNT at a quicker rate. That injection process and the natural reaction the contamination has had with bacteria under T&E Feedlot have helped lower contamination levels, Simpleman said.

“The off-site RDX plume is below the MCL (safe drinking water standard) for the first time,” he said.

The Army also spent millions to clear and burn contaminated load line structures, which were the bomb production lines, on the former plant site in the late 1990s and early 2000s.

“We still have contamination in the source areas — underneath the old load lines,” Simpleman said.

The hottest levels of point-source contamination — below what was Load Line 1 — are currently at 30 ppb for TNT and 7 ppb for RDX, he said.

“With the RDX and TNT, 20 years is kind of what our modeling is showing at this time before everything is clean,” Simpleman said. “Hopefully, we can speed that process up, but the source areas have more contamination and it takes longer.”

Cleanup also continues at what is considered to be one of the most heavily contaminated areas of the former plant — the burning grounds, which has buried and unexploded gravel mines.

During munition production, wastewater contaminated with explosives was deposited in 56 earthen surface impoundments, according to past articles in The Independent. Dried solids were periodically scrapped from those impoundments and taken to the burning grounds for incineration and burial. Explosives-contaminated mops, buckets and other equipment were also buried there.

The burning grounds cleanup has delayed the construction of a primary water detention cell for the northwest flood control project being built by the Central Platte Natural Resources District, the city of Grand Island, Hall County and Merrick County.

The project will remove about 1,500 Grand Island homes, 55 businesses and 10,000 acres of Hall County cropland from the floodplain.

“Unfortunately, because of the gravel mines, everything has to be sifted a cubic yard at a time, and it’s a slow process,” Simpleman said. “We still have grids to excavate, and if we find heavily contaminated grids, that could slow us down.”

Simpleman said excavation should be complete by January 2015, but that will be followed by required environmental testing to make sure there are no chemicals or contaminants to deal with before that area is cleared for use as a water detention cell.

“I can’t do the environmental sampling because it wasn’t safe,” Simpleman said. “Obviously, you can’t have a drill rig on an area where you have explosives buried — explosives that are shock sensitive.

“There’s no chronic exposure to a gravel mine. It’s an acute exposure,” he said.

Once the gravel mines are cleared, he estimated, the environmental testing will take 24 to 36 months.

“I understand the NRD is behind, and they are anxious to get in there, but they simply can’t until the area is cleared to be free of both explosives and contaminants,” Simpleman said. “You certainly don’t want someone to go out there and build a detention cell and an explosion happens. That’s not going to help anybody.”

While that work continues on site, there’s no further worry about contamination that had spread off site through groundwater, although groundwater testing off site will continue “for the immediate future,” he said.

“The good thing is we’ve achieved one of our goals, which is to not have the contamination off site,” Simpleman said. “It looks like we’re there.”

Third Five-Year Review Report
for
Cornhusker Army Ammunition Plant
Grand Island, Nebraska

Attachment J
Soil Contamination Model

MODEL FOR RISK FROM DIRECT CONTACT WITH SOIL CONTAMINATED FROM IRRIGATION WATER

There is a consideration is whether non-volatile contaminants in the irrigation water could be deposited to surface soil in concentrations that might pose risks for receptors via direct contact with the soil. The accumulation of RDX and 2,4,6-TNT from contaminated irrigation water in soil can be estimated by calculating the amounts of these contaminants in the volume of groundwater used in a year's irrigation and calculating the soil concentrations that would result if those amounts were diluted in soil.

Irrigation is normally performed to provide 0.75 inches of water per week to fields in normal cases and up to 1.5 inches under drought conditions. If irrigation is provided from the beginning of May to the middle of August, this would be about 15 weeks. Under normal conditions by this model, these rates would provide 11.25 inches of water per year; under drought conditions, 22.5 inches. Average annual water use for irrigation in Nebraska in 2008 was less than 10 inches (Johnson *et al.*, 2011).

The volume of water that would be provided per square inch of soil surface for a year's irrigation would be:

$$V_{iw} = W * t * C$$

where V_{iw} = volume of irrigation water applied per year(L/yr),

W = irrigation water applied per week (1.5 cu. in/wk),

t = time (15 weeks), and

C = conversion factor (0.01639 L/cu. in)

This yields 0.369 L of irrigation water applied per square inch of soil surface per year under drought conditions; for normal conditions, the amount of water applied would be about half this quantity.

For that amount of soil receiving the contaminants, annual tilling is assumed to mix soils from 0 to 2 feet in depth. Contaminants that enter through the square inch of soil surface would thus be mixed into a column 24 inches deep with a volume of 24 cu. inches. If soil is assumed to have a density of 1.33 gm/cm³, the weight of the column would be 523 gm. For purposes of the model, it is assumed that 100 percent of the contaminants would be transferred from the irrigation water to the soil column.

The concentrations of RDX and 2,4,6-TNT in the soil can then be calculated from:

$$C_{soil} = \frac{C_{iw} * V_{iw}}{W_{soil}}$$

where C_{soil} = the concentration of the contaminant in the soil (mg/kg),

C_{iw} = concentration of the contaminant in the irrigation water (µg/L),

V_{iw} = volume of irrigation water applied (L), and

W_{soil} = weight of the soil receiving the contaminant.

The highest concentrations being currently seen in monitoring wells are 228 µg/L RDX and 182 µg/L 2,4,6-TNT. Using these in the model with drought conditions, RDX and 2,4,6-TNT concentrations in soil would increase by 0.161 and 0.128 mg/kg/yr.

Using the assumptions of the Regional Screening Levels (USEPA, 2015) for a resident, the soil level associated with a 10^{-4} cancer risk for RDX is 600.0 mg/kg while the level associated with an HQ of 1 is 230 mg/kg. For 2,4,6-TNT, the levels of 10^{-4} cancer risk and HQ of would be 2,100 and 36 mg/kg, respectively.

Using drought conditions, HQs of 1 would be reached by deposition from irrigation water according to the model in 1,430 years for RDX and 280 years for 2,4,6-TNT. Therefore, deposition of RDX and 2,4,6-TNT in soil from groundwater with exposure to future receptors does not call the protectiveness of the remedy into question.

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Attachment K
Ecological Risk Evaluation

ECOLOGICAL RISK ISSUES

INTRODUCTION

The purpose of this Appendix is to evaluate whether changes in the ecological risk assessment (ERA) methodology and ecological screening levels since the 1996 ERA may affect the protectiveness of the remedy for the Cornhusker Army Ammunition Plant (CHAAP). The first item in this evaluation is a comparison of the methods used during the 1996 ERA versus currently acceptable ecological risk assessment methods. This evaluation also includes a comparison of the ecological screening levels (ESLs) used in the 1996 ERA with more current values. In the 1996 ERA, certain areas of the Site (the Nitrate Area, the Shop Area, the Pesticide/Fertilizer Storage Area and the Major Drainage Ditches) were considered to represent poor quality habitat where exceedances of ESLs would be less important. These areas were examined on May 22, 2015 by a field biologist to determine whether these characterizations are still considered accurate.

ORIGINAL 1996 ECOLOGICAL RISK ASSESSMENT

The original 1996 ERA consisted mostly of a screening of chemicals to determine those that might pose an ecological risk. In this screening, representative concentrations of chemicals detected on site were compared to ecological screening levels (ESLs), referred to as Toxicity Reference Values (TRVs) in the 1996 ERA. This comparison was done by dividing the representative concentration by the TRV to obtain an Environmental Effects Quotient (EEQ). Representative concentrations used for this comparison differ between media and include maximum detections, 95 % Upper Confidence Levels, and average concentrations while ESLs were selected from available scientific and legal sources. For the metals lead, mercury, selenium, and zinc, an additional effort was made to quantitate doses for food web exposures to deer mice, white-tailed deer and American robin.

The 1996 ERA found that the greatest potential for adverse ecological effects occurred in soil based on exposures to 2,4,6-TNT, aluminum, lead, silver, and thallium. Given habitat conditions at the locations of the detections, these did not appear to be a concern for the ecosystem at CHAAP. Lead in the Pistol Range soil and mercury in Shop Area soil were cited as posing significant risks. Polycyclic aromatic hydrocarbons (PAHs) in the Nitrate Ponds and atrazine and cyanide in Silver Creek surface water were suggested as having potential for adverse effects.

COMPARISON OF ECOLOGICAL RISK ASSESSMENT METHODS

The ERA performed in conjunction with the 1996 Remedial Investigation (RI) for CHAAP predates current USEPA guidance on the performance of ecological risk assessments. Current guidance includes the *Framework for Ecological Risk Assessment* (EPA/63-/R-92/001) and *Guidelines for Ecological Risk Assessment* (EPA/630/R-95/002F). The 1996 ERA was conducted in accordance with the USEPA guidance available at the time. Following these guidance documents, the ERA does go through the Step 2 Screening Level Exposure Estimate and Risk Calculation with some modifications that would represent refining of exposure circumstances and toxicity.

COMPARISON OF ECOLOGICAL SCREENING LEVELS

Collection of 1996 ERA Toxicity Reference Values

The 1996 ERA was reviewed to identify the ESLs used in the evaluation of ecological risks. The 1996 ERA identified the ESLs as Toxicity Reference Values (TRVs). This terminology is used to avoid possible confusion between the ERA screening values and the more current ESLs identified in this Appendix.

Soil - The TRVs used as ESLs in the 1996 ERA for surface soil are presented in Table 1. In the 1996 ERA, TRVs were available for effects on both terrestrial plants and earthworms. In Table 1, only the lower of the two values is presented for later comparison to newer values. The primary sources of the TRVs are USEPA soil Eco-SSLs. Where Eco-SSLs were not available, the secondary source was USEPA Region 5 ESL soil screening benchmarks. For aluminum, the Oak Ridge National Laboratories (ORNL) Plants Screening Benchmark was used. For hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), 2,4,6-trinitrotoluene (TNT), and Aroclor 1260, TRVs were based on values obtained from the literature.

For RDX, the lowest observed adverse effect level (LOAEL) from a study in plants by Cataldo *et al.* (1990) was used. Similarly, the Aroclor 1260 TRV was based on a LOAEL for earthworms (Talmadge and Opresko, 1995). The TRV for PCBs Aroclor 1254 and 1260 came from Will and Suter (1994).

Sediment - The TRVs for sediment in the 1996 ERA, as presented in Table 2, were selected based on the lowest value given in the USEPA Sediment Quality Criteria, the National Oceanic and Atmospheric Administration Sediment Quality Guidelines, Ontario Sediment Quality Guidelines, or sediment benchmarks (Hull and Suter, 1994).

Surface Water - Table 3 shows that TRVs for surface water were selected mainly from the Nebraska water quality criteria. Nebraska surface water quality criteria (SWQCs) were used in the 1996 ERA as the primary source of surface water ESLs. The

secondary source was the Federal Ambient Water Quality Criteria. Tertiary sources in literature and USEPA proposed values were used where no value was available in the primary or secondary sources. The Nebraska SWQCs for copper, lead, and zinc were hardness dependent and calculated based on a hardness value of 76.6 milligrams per liter (mg/L) CaCO₃ from the Nitrate Ponds.

Selection of Current ESLs

Soil – The selection of current ESLs for soil, detailed in Table 4, is based on a hierarchy of sources. The primary sources are the USEPA Eco-SSLs. If an Eco-SSL was not available, the USEPA Region 5 ESLs were the secondary source. The next source consisted of ORNL Screening Benchmarks. For RDX and 2,4,6-TNT, draft Eco-SSLs of 71 and 8.0 milligrams per kilogram (mg/kg) (Checkai *et al.*, 2012) are used, respectively.

Water – The ESLs for sediment, examined in Table 5, uses the lowest of the Consensus Probable Effect Concentrations (PECs) and Threshold Effect Concentrations (TECs), and the USEPA Region 5 sediment ESLs as the basis for selection.

Sediment – The selection of the sediment ESLs, presented in Table 6, used a hierarchy of sources. The first source, also used as the primary source in selecting the 1996 ERA ESLs, is the Nebraska Water Quality Criteria (WQC). If available, the Nebraska WQC is used. If not, the lower of the USEPA Region 5 surface water ESLs or the USEPA Region 3 BTAG screening levels is selected.

Comparison of 1996 ERA TRVs to Current ESLs

In Tables 7, 8, and 9, the TRVs and current ESLs are compared side-by-side for soil, sediment, and surface water, respectively.

Soil - Table 7 presents the comparisons of TRVs used as ESLs for soil in the 1996 ERA to the current ESLs selected above. Only two new ESLs are identified; the other ESLs are the same as the TRVs used in the 1996 ERA. New ESLs have been proposed for RDX and 2,4,6-TNT. Both the new ESLs, 71 mg/kg for RDX and 8 mg/kg for 2,4,6-TNT, are higher than the TRVs previously used.

Sediment – As shown in Table 8, most of the changes in ESLs in sediment have been decreases, which will produce increases in Environmental Effect Quotients (EEQs). Some of these increases are due to ESLs being promulgated for chemicals which had no screening levels in the 1996 ERA. Increases in risks for the other contaminants of potential ecological concern (COPECs) are relatively minor, with only two being more than two-fold changes.

Surface Water – Most of the surface water ESLs are taken from Nebraska WQCs, the same source used for deriving the 1996 ERA TRVs. Arsenic is the COPEC with the greatest increase in toxicity with its screening level dropping from 190 micrograms per liter ($\mu\text{g/L}$) to $16.7 \mu\text{g/L}$. Other changes in ESLs are relatively minor, except for atrazine for which the TRV of $1 \mu\text{g/L}$ has been replaced by an ESL of $12 \mu\text{g/L}$.

Comparison of 1996 ERA EEQs to Current EEQs

EEQs have been re-calculated using the newly selected ESLs and compared to the EEQs presented in the 1996 ERA. The purpose of these comparisons is to screen individual Study Areas. Those with elevated EEQs based on the new ESLs may require further attention while the others may be cleared from further consideration. These comparisons are presented in Tables 10, 11, and 12 for soil, sediment, and surface water respectively.

Soil

Load Line 1 - The ESLs for RDX and 2,4,6-TNT are the only two values to change from those originally selected in the 1996 ERA TRVs. They are both less stringent than the 1996 ESLs, especially for the RDX ESL. The EEQ for RDX dropped from 0.082 to 0.012 while the EEQ for 2,4,6-TNT dropped slightly from 1.5 to 1.3. Lead and 2,4,6-TNT are the only two COPECs with EEQs greater than 1. The lead EEQ is 5.1 and the 2,4,6-TNT EEQ is 1.3. Exceedances of the lead EEQ occur in other Study Areas, including some, but not all of the load lines. EEQs for other COPECs at Load Line 1 are less than 1, indicating no potential for adverse ecological effects.

Load Line 2 – The change in ESL for 2,4,6-TNT results in a slight drop in the EEQ from 0.25 to 0.22. None of the COPECS at Load Line 2 have EEQs greater than 1.

Load Line 3 - The change in ESL for 2,4,6-TNT results in a slight drop in the EEQ from 0.14 to 0.12. None of the other ESLs or their resulting EEQs change. Barium, lead, and selenium have EEQs of 1.2, 4.4, and 3.6, respectively.

Load Line 4 - The change in ESL for 2,4,6-TNT results in a slight drop in the EEQ from 0.47 to 0.41. Selenium has an EEQ of 1.1.

Load Line 5 - The change in ESL for 2,4,6-TNT results in a slight drop in the EEQ from 0.037 to 0.033. Cadmium, lead, and zinc have EEQs of 7.1, 3.1, and 5.9, respectively.

Burning Grounds - With the increases in the ESLs for RDX and 2,4,6-TNT, the EEQ for RDX drops from 4.3 to 0.6 while the EEQ for 2,4,6-TNT drops slightly from 15 to 13. Copper, lead, and zinc have EEQs of 3.3, 2.4, and 12, respectively.

Abandoned Burning Area - No ESL has changed for this Study Area. Cadmium and lead have EEQs of 3.2 and 1.9, respectively.

Sanitary Landfill – The RDX and 2,4,6-TNT EEQs have dropped with the change in ESLs. The RDX EEQ has decreased from 0.32 to 0.045 while the 2,4,6-TNT EEQ has decreased from 0.061 to 0.053. These changes have no significant effect on ecological risks. Aluminum at 17,000 mg/kg has an EEQ of 340, but aluminum is a major naturally occurring metal in soil. Copper, lead, and zinc all have EEQs between 2.1 and 3.2. These are all trace metals that frequently occur naturally in association in soils. Vanadium, which has an EEQ of 18, is also a naturally occurring constituent in soil, but not an expected contaminant at CHAAP.

Pistol Range – As expected, the predominant COPEC at this Study Area is lead with an EEQ of 118. This Study Area with a 95%UCL of 1300 mg/kg lead has been remediated. Dibutyl phthalate, which may have been present in smokeless powder used in small arms cartridges, has an EEQ of 17. None of the EEQs for the other COPECs exceeds 1, and only the ESL for RDX has increased, decreasing the RDX EEQ by seven-fold.

Nitrate Area – None of the ESLs for this Study Area have changed. Chromium has an EEQ of 78 based on the ESL of 0.4 mg/kg. The USEPA Region 5 ESL is based on a study of earthworm exposure, which is not cited. It appears to be a common practice to set total chromium ESLs on the basis of studies where hexavalent chromium is the actual form used on an apparent assumption that all the chromium encountered in a medium may be hexavalent. This use of such studies results in a generally elevated estimate of risks. The other COPEC with an EEQ greater than 1 is lead, which has an EEQ of 5.2. All the other COPECs have EEQs less than 1 and no changes in their ESLs.

Gravel and Clay Pit Area – None of the ESLs have changed for the COPECs in this Study Area. The principal COPEC at this Study Area is thallium with an EEQ of 78. This result is almost certainly a false positive and should be disregarded. Results from the older inductively coupled plasma spectrometry (ICP-AES) have been shown to give a false positive result 99.9 percent of the time due to overlapping of emission lines of other metals (Chapnick *et al.*, 2010). Thallium is actually a very infrequent contaminant at hazardous waste sites and is not an expected COPEC based on operations at this site. The other COPEC with an elevated EEQ is dibutyl phthalate.

Shop Area - The ESL for 2,4,6-TNT increased slightly while ESLs for the other COPECs remained the same. The principal COPECs at this Study Area are dibutyl phthalate (EEQ= 574), chromium (EEQ=130), and lead (EEQ=41). Dibutyl phthalate's use as a plasticizer and a component of solvents may account for its presence at this Study Area. Chromium risk, as previously discussed, is likely to be overestimated. Lead at 447 mg/kg may have been remediated. Mercury and zinc also show EEQs greater

than 1. This Study Area was identified as being poor habitat in the 1996 ERA and is being re-examined as part of this review effort.

North and South Magazine Area – The ESLs for silver and zinc, the COPECs in this Study Area, have not changed. The EEQ for zinc shows a slight exceedance at 2.4 while the EEQ for silver is less than 1.

Sewage Treatment Plants - Only the ESL for RDX has changed, resulting in a decrease in the associated EEQ. Total chromium is the principal COPEC with an EEQ of 60; as previously discussed, this risk is likely overestimated, especially in this case where organic materials in the sewage stream should contribute to reduction of hexavalent chromium to the relatively non-toxic trivalent form.

Pesticide/Fertilizer Storage Areas – None of the ESLs for COPECs at this Study Area have changed. EEQs between 2.6 and 8.5 occur for dibutyl phthalate, DDT, lead, and zinc. DDT is an expected contaminant in this Study Area. Dibutyl phthalate may also have been a component of materials used here. This Study Area was identified as being poor habitat in the 1996 ERA and is being re-examined as part of this review effort.

Major Drainage Ditches – None of the ESLs for COPECs in this Study Area have changed. The predominant COPEC is aluminum with an EEQ of 640. As previously discussed, aluminum is a major metal occurring naturally in the soil and not an expected contaminant from processed occurring at the Site. Chromium has an EEQ of 97; again as previously discussed, this EEQ likely represents a substantial overestimate of ecological risk. Copper, lead, and zinc have similar EEQs, and their tendency to occur in association in soil naturally has been previously mentioned.

Sediment

For sediment, mean and maximum concentrations were compared TRVs in the 1996 ERA to calculate EEQs.

Silver Creek – The EEQ for cyanide, the only COPEC in Silver Creek, drops slightly and is well below 1.

Nitrate Area - The major changes in EEQs are associated with anthracene and 2-methylnaphthalene. The anthracene EEQ drops from 293 for the mean and 533 for the maximum concentrations to 1.5 and 2.8, respectively. The 2-methylnaphthalene EEQ increases from 10 for the mean and 35 for the maximum to 20 and 69, respectively. Otherwise, EEQs for all the other COPECs are relatively low, indicating that there is little potential for ecological risks.

Surface Water

For surface water, mean and maximum concentrations were compared TRVs in the 1996 ERA to calculate EEQs.

Silver Creek – The only COPEC in Silver Creek with an EEQ greater than 1 in the 1996 ERA was atrazine, a common agricultural contaminant in the area not related to site operations. The EEQ decreases from 10 for the mean and 25 for the maximum concentrations in the 1996 ERA to 0.88 and 2.1 for the mean and maximum, respectively, with the current ESLs.

Nitrate Area – Most of the metals show EEQs above 1 in both the 1996 ERA and the current assessment. These elevated EEQs are all related to soil particles suspended in the samples, as evidenced by the high levels of iron (13.5 mg/L mean and 22 mg/L maximum detection) and are artifacts of turbidity.

INSPECTION OF FOUR STUDY AREAS FOR QUALITY OF HABITAT

The Shop Area, Pesticide/Fertilizer Storage Areas, Nitrate Area, and major drainage ditches were examined by a field biologist from the Omaha USACE District on May 22, 2015. The overall impression of these areas was that they are currently being used as industrial areas with little potential to support ecological receptors. Copies of the field observation reports and pictures for these areas are included in Attachment 1.

All of the areas were highly modified to accommodate industrial use. Buildings, gravel roads, abandoned vehicles, active vehicles, train repair stations, storage tanks and various impervious surfaces dominated the landscapes. The "natural" environment that exists between these developed areas primarily consists of a mixture of mostly opportunistic weedy species of varying strata. The habitat was highly fragmented and provides very little refuge or forage value for permanent or migratory fauna. More information is available on the data sheets that were filled out during the site investigation. Photos are also attached depicting typical views at the site.

Conclusions

While the 1996 ERA was not conducted according to current guidance, it was conducted in accordance with USEPA guidance available at the time. The ERA does meet the substantive requirements of a Screening Level Ecological Risk Assessment with some refinements.

The review of the CHAAP ERA has shown that ecological screening levels for soil all have the same values as in the original assessment, except for RDX and 2,4,6-trinitrotoluene. The screening levels for both of these have been raised, 2,4,6-TNT only slightly and RDX by seven-fold. Sediment screening levels were mostly different than original values, some going up and some down. Surface water screening levels were mostly taken from Nebraska water quality criteria and did not change.

While there are still a number of EEQs that exceed 1 for chemicals detected at CHAAP, it should be noted that these are screening values and screening level EEQs greater than 1 call for further evaluation, not necessarily remedial action. These values do not show a numerical probability of adverse effects or increased severity of effects (that is, a receptor exposed to a chemical with an EEQ of 10 may or may not have a greater probability of showing an adverse effect than a receptor exposed to a chemical with an EEQ of 3 and the EEQ=10 exposed receptor may or may not show more severe or additional effects beyond those of the EEQ=3 exposed receptor).

At CHAAP, 19 of 23 metals in soil show EEQs slightly greater than 1 (1-10 range) that are the result of these chemicals being present at natural background levels. While noting that these may pose a risk, this is not due to contamination from the site and would not usually be subject to remediation. This review has found additional reasons why some of the chemicals with higher EEQs in the 1996 ERA do not pose a significant potential for ecological risks. **Soil** - The number of areas with significant EEQs is limited.

- The Pistol Range had 1,300 mg/kg lead with an EEQ of 118 and dibutyl phthalate, a component of smokeless powder, with an EEQ of 17.
- The Shop Area had 447 mg/kg lead and dibutyl phthalate with an EEQ of 574.
- The Shop Area, the Sewage Treatment Plants, and the major drainage ditches all had EEQs of 60 to 130 for effects of total chromium. The ESLs for total chromium are derived from studies where receptors are exposed to hexavalent chromium and thus are overestimates.
- The sanitary landfill and major drainage ditches show elevated EEQs due to aluminum and vanadium. Aluminum is one of the major metals naturally occurring in soil. Neither aluminum nor vanadium is expected to be a contaminant at CHAAP.
- Thallium with an EEQ of 86 was reported at the Gravel and Clay Pit Area. Thallium at the time the data was taken had a problem with spectral emission line interference from other elements that resulted in 99.9+ percent false positives. Thallium is actually a rare element at hazardous waste sites and would not have been used at CHAAP.
- Lead frequently gave EEQs between 2 and 5 at low levels that could not be dismissed as background in the ERA (20-50 mg/kg).
- Total chromium also gave some EEQs in the range of 60 to 90, using screening values based on dosing receptors with hexavalent chromium.

Sediment - The maximum detection of anthracene in sediment gave an EEQ of 533 in the ERA, but only 2.8 using the current screening level. 2-Methylnaphthalene and the common laboratory contaminant bis(2-ethyl hexyl) phthalate are the only two other

chemicals giving potentially significant EEQs. Neither of these is attributable to DOD operations.

Surface Water - Surface water samples had a number of COPECs with EEQs running from 2 to 115. RDX and 2,4,6-TNT were not present in the surface water. Most of the other COPECs were metals, except for atrazine, which is a widespread contaminant in the area due to agricultural use. High levels of the major soil metals aluminum and iron indicate that the surface water results are artifacts of turbidity.

There is no evidence of contaminants from DOD operations at CHAAP impacting surface water in Silver Creek or the Nitrate Area. Elevated metals EEQs in surface water from the Nitrate Area are the result of turbidity in the samples.

Overall, a review of the ERA, including comparison to current ecological screening levels, indicates that ecological risk issues do not affect the protectiveness of the remedy.

TABLES

TABLE 1
1996 ERA ECOLOGICAL SCREENING LEVELS FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	1996 ERA TRV	Source
<u>Explosives</u>			
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	10	LOAEL plants - Cataldo <i>et al.</i> , 1990
Trinitrotoluene, 2,4,6-	118-96-7	7	LOAEL earthworm - Talmadge and Opresko, 1995
<u>Semi-Volatile Organic Compounds</u>			
Bis(2-ethylhexyl)phthalate	117-81-7	0.925	SO EPA R5 ESL Soil Screening Benchmark
Butyl Benzyl Phthlate	85-68-7	0.239	SO EPA R5 ESL Soil Screening Benchmark
Dibutyl Phthalate	84-74-2	0.15	SO EPA R5 ESL Soil Screening Benchmark
Diethyl Phthalate	84-66-2	24.8	SO EPA R5 ESL Soil Screening Benchmark
<u>PCBs/Pesticides</u>			
Aroclor 1260	11096-82-5	40	Will and Suter, 1994
DDD	72-54-8	0.758	SO EPA R5 ESL Soil Screening Benchmark
DDE, p,p'-	72-55-9	0.596	SO EPA R5 ESL Soil Screening Benchmark
DDT	50-29-3	0.021	Eco-SSL Mammalian Soil Screening Benchmark
<u>Metals</u>			
Aluminum	7429-90-5	50	ORNL Plants Screening Benchmark
Arsenic, Inorganic	7440-38-2	18	Eco-SSL Plants Soil Screening Benchmark
Barium	7440-39-3	330	Eco-SSL Inverts Soil Screening Benchmark
Beryllium and compounds	7440-41-7	21	Eco-SSL Mammalian Soil Screening Benchmark
Cadmium	7440-43-9	0.36	Eco-SSL Mammalian Soil Screening Benchmark
Chromium(III), Insoluble Salts	16065-83-1	26	Eco-SSL Avian Soil Screening Benchmark
Chromium, Total	16065-83-1	0.4	SO EPA R5 ESL Soil Screening Benchmark
Cobalt	7440-48-4	13	Eco-SSL Plants Soil Screening Benchmark
Copper	7440-50-8	13	Eco-SSL Plants Soil Screening Benchmark
Lead and Compounds	7439-92-1	11	Eco-SSL Avian Soil Screening Benchmark
Mercury (elemental)	7439-97-6	0.1	Eco-SSL Inverts Soil Screening Benchmark
Nickel Soluble Salts	7440-02-0	38	Eco-SSL Plants Soil Screening Benchmark
Selenium	7782-49-2	0.52	Eco-SSL Plants Soil Screening Benchmark
Silver	7440-22-4	4.2	Eco-SSL Avian Soil Screening Benchmark
Thallium (Soluble Salts)	7440-28-0	1	Eco-SSL Plants Soil Screening Benchmark
Vanadium and Compounds	7440-62-2	2	Eco-SSL Plants Soil Screening Benchmark
Zinc (Metallic)	7440-66-6	46	Eco-SSL Avian Soil Screening Benchmark

All concentrations given in milligrams per kilogram.

TABLE 2
1996 ERA ECOLOGICAL SCREENING LEVELS FOR SEDIMENT
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	1996 ERA TRV	Source
<u>Volatile Organic Compounds</u>			
Methyl Ethyl Ketone	78-93-3	NA	
Toluene	108-88-3	0.67	USEPA SQC
<u>Semi-Volatile Organic Compounds</u>			
Bis(2-ethylhexyl)phthalate	117-81-7	NA	
Butyl Benzyl Phthlate	85-68-7	11	USEPA SQC
Cresol, p-	106-44-5	NA	
<u>Polycyclic Aromatic Hydrocarbons</u>			
Anthracene	83-32-9	0.0003	Sediment Benchmarks Hull& Suter
Benzo(a)anthracene	56-55-3	0.108	Sediment Benchmarks Hull& Suter
Benzo(a)pyrene	50-32-8	0.14	Sediment Benchmarks Hull& Suter
Benzo(b)fluorathene	205-99-2	NA	
Chrysene	218-01-9	0.34	OMEE Sediment Guidelines
Fluoranthene	206-44-0	0.6	NOAA SQC ER-L
Methylnaphthalene, 2-	91-57-6	0.07	NOAA SQC ER-L
Naphthalene	91-20-3	0.16	NOAA SQC ER-L
Phenanthrene	85-01-8	0.24	NOAA SQC ER-L
Pyrene	129-00-0	0.49	OMEE Sediment Guidelines
<u>Inorganics</u>			
Beryllium and compounds	7440-41-7	NA	
Chromium, Total	16065-83-1	26	OMEE Sediment Guidelines
Cyanide	7440-50-8	0.1	Sediment Benchmarks Hull& Suter
Lead and Compounds	7439-92-1	31	OMEE Sediment Guidelines
Nitrite/Nitrate	7439-97-6	NA	
Zinc (Metallic)	7440-66-6	120	OMEE Sediment Guidelines

All concentrations given in milligrams per kilogram.

TABLE 3
1996 ERA ECOLOGICAL SCREENING LEVELS FOR SURFACE WATER
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	1996 ERA	Source
Atrazine	1212-24-9	1	Nebraska WQC
Bis(2-ethylhexyl)phthalate	117-81-7	32.2	Aquatic Screening Benchmark
Aluminum	7429-90-5	87	Nebraska WQC
Antimony (metallic)	7439-89-6	30	AWQC
Arsenic, Inorganic	7440-38-2	190	Nebraska WQC
Chromium, Total	16065-83-1	11	AWQC
Cobalt	7440-48-4	3.06	Aquatic Screening Benchmark
Copper	7440-50-8	9.4	AWQC
Iron		1000	
Lead and Compounds	7439-92-1	2.3	Nebraska WQC
Vanadium and Compounds	7440-62-2	19.1	Aquatic Screening Benchmark
Zinc (Metallic)	7440-66-6	84.6	AWQC

All concentrations given in micrograms per liter.

TABLE 4
SELECTION OF CURRENT ECOLOGICAL SCREENING LEVELS FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	ECO-SSL Plant	USEPA Region 5 ESL	ORNL Inverts	ORNL Microbes	ORNL Plants	Other	Ecological Screening Level
Explosives											
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4									71	71
Trinitrotoluene, 2,4,6-	118-96-7									8	8
Semi-Volatile Organic Compounds											
Bis(2-ethylhexyl)phthalate	117-81-7					0.925					0.925
Butyl Benzyl Phthlate	85-68-7					0.239					0.239
Dibutyl Phthalate	84-74-2					0.15					0.15
Diethyl Phthalate	84-66-2					24.8					24.8
PCBs/Pesticides											
Aroclor 1260	11096-82-5					0.758			40		40
DDE, p,p'-	72-55-9					0.596					0.596
DDT	50-29-3			0.021							0.021
Metals											
Aluminum	7429-90-5								50		50
Arsenic, Inorganic	7440-38-2				18						18
Barium	7440-39-3		330								330
Beryllium and compounds	7440-41-7			21							21
Cadmium	7440-43-9			0.36							0.36
Chromium(III), Insoluble Salts	16065-83-1	26									26
Chromium, Total	16065-83-1					0.4					0.4
Cobalt	7440-48-4				13						13
Copper	7440-50-8				13						13
Lead and Compounds	7439-92-1	11									11
Mercury (elemental)	7439-97-6		0.1								0.1
Nickel Soluble Salts	7440-02-0				38						38
Selenium	7782-49-2				0.52						0.52
Silver	7440-22-4	4.2									4.2
Thallium (Soluble Salts)	7440-28-0				1						1
Vanadium and Compounds	7440-62-2				2						2
Zinc (Metallic)	7440-66-6	46									46

All concentrations given in milligrams per kilogram.

¹Checkai, Draft Plant Based EcoSSL

²Checkai, Draft Plant Based EcoSSL

TABLE 5
SELECTION OF CURRENT ECOLOGICAL SCREENING LEVELS FOR SEDIMENT
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	Consensus PEC	Consensus TEC	SD EPA R5 ESL	Ecological Screening Level
<u>Volatile Organic Compounds</u>					
Methyl Ethyl Ketone	78-93-3			0.0424	0.0424
Toluene	108-88-3			1.22	1.22
<u>Semi-Volatile Organic Compounds</u>					
Bis(2-ethylhexyl)phthalate	117-81-7			0.182	0.182
Butyl Benzyl Phthlate	85-68-7			1.97	1.97
Cresol, p-	106-44-5			0.0202	0.0202
<u>Polycyclic Aromatic Hydrocarbons</u>					
Anthracene	83-32-9	0.845	0.0572		0.0572
Benzo(a)anthracene	56-55-3	1.05	0.108		0.108
Benzo(a)pyrene	50-32-8	1.45	0.15		0.15
Benzo(b)fluorathene	205-99-2			10.4	10.4
Chrysene	218-01-9	1.29	0.166		0.166
Fluoranthene	206-44-0	2.23	0.423		0.423
Methylnaphthalene, 2-	91-57-6			0.0202	0.0202
Naphthalene	91-20-3	0.561	0.176		0.176
Phenanthrene	85-01-8	1.17	0.204		0.204
Pyrene	129-00-0	1.52	0.195		0.195
<u>Inorganics</u>					
Beryllium and compounds	7440-41-7				NV
Chromium, Total	16065-83-1	111	43.4	43.4	43.4
Cyanide	7440-50-8			0.0001	0.0001
Lead and Compounds	7439-92-1	128	35.8	35.8	35.8
Nitrite/Nitrate	7439-97-6				NV
Zinc (Metallic)	7440-66-6	459	121	121	121

All concentrations given in milligrams per kilogram.

TABLE 6
SELECTION OF CURRENT ECOLOGICAL SCREENING LEVELS FOR SURFACE WATER
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	Nebraska WQC	SW EPA R5 ESL	EPA R3 BTAG	Ecological Screening Level
Atrazine	1212-24-9	12		1.8	12
Bis(2-ethylhexyl)phthalate	117-81-7	22	0.3	16	22
Aluminum	7429-90-5	87		87	87
Antimony (metallic)	7439-89-6	30	80	30	30
Arsenic, Inorganic	7440-38-2	16.7	148	5	16.7
Chromium, Total	16065-83-1	12	42	85	12
Cobalt	7440-48-4		24	23	23
Copper	7440-50-8	7.13	1.58	9	7.13
Iron		1000		300	1000
Lead and Compounds	7439-92-1	1.88	1.17	2.5	1.88
Vanadium and Compounds	7440-62-2	20	12	20	20
Zinc (Metallic)	7440-66-6	104.4	65.7	120	104.4

All concentrations given in micrograms per liter.

Cu, Pb, and Zn Nebraska WQCs calculated on basis of 76.6 hardness using equations:

$$\text{Cu WQC} = 0.96 * e^{(0.8545 * \ln(\text{hardness}) - 1.702)}$$

$$\text{Pb WQC} = (1.46203 - 0.145712 * \ln(\text{hardness})) * 1.275 * e^{(\ln(\text{hardness}) - 4.705)}$$

$$\text{Zn WQC} = 0.986 * e^{(0.8473 * \ln(\text{hardness}) + 0.884)}$$

TABLE 7
COMPARISON OF 1996 ERA TRVs TO CURRENT ESLs FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	1996 SLERA ESLs	Ecological Screening Level	Change in Risk?
<u>Explosives</u>				
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	10	71	Decreased risk
Trinitrotoluene, 2,4,6-	118-96-7	7	8	Decreased risk
<u>Semi-Volatile Organic Compounds</u>				
Bis(2-ethylhexyl)phthalate	117-81-7	0.925	0.925	No change
Butyl Benzyl Phthlate	85-68-7	0.239	0.239	No change
Dibutyl Phthalate	84-74-2	0.15	0.15	No change
Diethyl Phthalate	84-66-2	24.8	24.8	No change
<u>PCBs/Pesticides</u>				
Aroclor 1260	11096-82-5	40	40	No change
DDD	72-54-8	0.758	0.758	No change
DDE, p,p'-	72-55-9	0.596	0.596	No change
DDT	50-29-3	0.021	0.021	No change
<u>Metals</u>				
Aluminum	7429-90-5	50	50	No change
Arsenic, Inorganic	7440-38-2	18	18	No change
Barium	7440-39-3	330	330	No change
Beryllium and compounds	7440-41-7	21	21	No change
Cadmium	7440-43-9	0.36	0.36	No change
Chromium(III), Insoluble Salts	16065-83-1	26	26	No change
Chromium, Total	16065-83-1	0.4	0.4	No change
Cobalt	7440-48-4	13	13	No change
Copper	7440-50-8	13	13	No change
Lead and Compounds	7439-92-1	11	11	No change
Mercury (elemental)	7439-97-6	0.1	0.1	No change
Nickel Soluble Salts	7440-02-0	38	38	No change
Selenium	7782-49-2	0.52	0.52	No change
Silver	7440-22-4	4.2	4.2	No change
Thallium (Soluble Salts)	7440-28-0	1	1	No change
Vanadium and Compounds	7440-62-2	2	2	No change
Zinc (Metallic)	7440-66-6	46	46	No change

All concentrations given in milligrams per kilogram.

TABLE 8
COMPARISON OF 1996 ERA TRVs TO CURRENT ESLs FOR SEDIMENT
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	1996 ERA TRVs	Ecological Screening Level	Change in Risk?
<u>Volatile Organic Compounds</u>				
Methyl Ethyl Ketone	78-93-3	NA	0.0424	Increased risk
Toluene	108-88-3	0.67	1.22	Decreased risk
<u>Semi-Volatile Organic Compounds</u>				
Bis(2-ethylhexyl)phthalate	117-81-7	NA	0.182	Increased risk
Butyl Benzyl Phthlate	85-68-7	11	1.97	Increased risk
Cresol, p-	106-44-5	NA	0.0202	Increased risk
<u>Polycyclic Aromatic Hydrocarbons</u>				
Anthracene	83-32-9	0.0003	0.0572	Decreased risk
Benzo(a)anthracene	56-55-3	0.108	0.108	No change
Benzo(a)pyrene	50-32-8	0.14	0.15	Decreased risk
Benzo(b)fluorathene	205-99-2	NA	10.4	Increased risk
Chrysene	218-01-9	0.34	0.166	Increased risk
Fluoranthene	206-44-0	0.6	0.423	Increased risk
Methylnaphthalene, 2-	91-57-6	0.07	0.0202	Increased risk
Naphthalene	91-20-3	0.16	0.176	Decreased risk
Phenanthrene	85-01-8	0.24	0.204	Increased risk
Pyrene	129-00-0	0.49	0.195	Increased risk
<u>Inorganics</u>				
Beryllium and compounds	7440-41-7	NA	NA	NA
Chromium, Total	16065-83-1	26	43.4	Decreased risk
Cyanide	7440-50-8	0.1	0.1	No change
Lead and Compounds	7439-92-1	31	35.8	Decreased risk
Nitrite/Nitrate	7439-97-6	NA	NA	NA
Zinc (Metallic)	7440-66-6	120	121	Decreased risk

All concentrations given in milligrams per kilogram.

TABLE 9
COMPARISON OF 1996 ERA TRVs TO CURRENT ESLs FOR SURFACE WATER
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	1996 ERA TRVs	Ecological Screening Level	Change in Risk?
<u>Organics</u>				
Atrazine	1212-24-9	1	12	Decreased risk
Bis(2-ethylhexyl)phthalate	117-81-7	32.2	22	Increased risk
<u>Metals</u>				
Aluminum	7429-90-5	87	87	No change
Antimony (metallic)	7439-89-6	30	30	No change
Arsenic, Inorganic	7440-38-2	190	16.7	Increased risk
Chromium, Total	16065-83-1	11	12	Decreased risk
Cobalt	7440-48-4	3.06	23	Decreased risk
Copper	7440-50-8	9.4	7.13	Increased risk
Iron		1000	1000	No change
Lead and Compounds	7439-92-1	2.3	1.88	Increased risk
Vanadium and Compounds	7440-62-2	19.1	20	Decreased risk
Zinc (Metallic)	7440-66-6	84.6	104	Decreased risk

All concentrations given in micrograms per liter.

TABLE 10
COMPARISON OF 1996 ERA TO CURRENT ENVIRONMENTAL EFFECT QUOTIENTS FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	95%UCL	1996 ERA TRVs	Ecological Screening Level	Mean	
					1996 ERA EEQ	Current EEQ
Load Line 1						
Explosives						
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	0.824	10	71	0.082	0.012
Trinitrotoluene, 2,4,6-	118-96-7	10.5	7	8	1.5	1.3
Metals						
Lead and Compounds	7439-92-1	56.1	11	11	5.1	5.1
Silver	7440-22-4	1.26	4.2	4.2	0.30	0.30
Load Line 2						
Explosives						
Trinitrotoluene, 2,4,6-	118-96-7	1.74	7	8	0.25	0.22
Metals						
Mercury (elemental)	7439-97-6	0.03	0.1	0.1	0.30	0.30
Selenium	7782-49-2	0.284	0.52	0.52	0.55	0.55
Silver	7440-22-4	0.725	4.2	4.2	0.17	0.17
Load Line 3						
Explosives						
Trinitrotoluene, 2,4,6-	118-96-7	0.958	7	8	0.14	0.12
Metals						
Barium	7440-39-3	389	330	330	1.2	1.2
Lead and Compounds	7439-92-1	48	11	11	4.4	4.4
Mercury (elemental)	7439-97-6	0.025	0.10	0.10	0.25	0.25
Selenium	7782-49-2	1.88	0.52	0.52	3.6	3.6
Silver	7440-22-4	0.841	4.2	4.2	0.20	0.20
Load Line 4						
Explosives						
Trinitrotoluene, 2,4,6-	118-96-7	3.3	7	8.0	0.47	0.41
Metals						
Mercury (elemental)	7439-97-6	0.066	0.1	0.1	0.66	0.66
Selenium	7782-49-2	0.594	0.52	0.52	1.1	1.1
Silver	7440-22-4	0.395	4.2	4.2	0.094	0.094
Load Line 5						
Explosives						
Trinitrotoluene, 2,4,6-	118-96-7	0.262	7	8	0.037	0.033
Metals						
Arsenic, Inorganic	7440-38-2	6.67	18	18	0.37	0.37
Barium	7440-39-3	244	330	330	0.74	0.74
Cadmium	7440-43-9	2.57	0.36	0.36	7.1	7.1

TABLE 10
COMPARISON OF 1996 ERA TO CURRENT ENVIRONMENTAL EFFECT QUOTIENTS FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	95%UCL	1996 ERA TRVs	Ecological Screening Level	Mean	
					1996 ERA EEQ	Current EEQ
Lead and Compounds	7439-92-1	34	11	11	3.1	3.1
Silver	7440-22-4	2.19	4.2	4.2	0.52	0.52
Zinc (Metallic)	7440-66-6	271	46	46	5.9	5.9
Burning Grounds						
Explosives						
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	42.5	10	71	4.3	0.60
Trinitrotoluene, 2,4,6-	118-96-7	106	7	8	15	13
Metals						
Copper	7440-50-8	42.5	13	13	3.3	3.3
Lead and Compounds	7439-92-1	26.9	11	11	2.4	2.4
Mercury (elemental)	7439-97-6	0.09	0.10	0.10	0.90	0.90
Silver	7440-22-4	0.324	4.2	4.2	0.077	0.077
Zinc (Metallic)	7440-66-6	549	46	46	12	12
Abandoned Burning Area						
Metals						
Cadmium	7440-43-9	1.15	0.36	0.36	3.2	3.2
Lead and Compounds	7439-92-1	21	11	11	1.9	1.9
Selenium	7782-49-2	0.404	0.52	0.52	0.78	0.78
Sanitary Landfill						
Explosives						
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	3.17	10	71	0.32	0.045
Trinitrotoluene, 2,4,6-	118-96-7	0.426	7	8	0.061	0.053
Metals						
Aluminum	7429-90-5	17000	50	50	340	340
Arsenic, Inorganic	7440-38-2	8.14	18	18	0.45	0.45
Barium	7440-39-3	287	330	330	0.87	0.87
Copper	7440-50-8	28.9	13	13	2.2	2.2
Lead and Compounds	7439-92-1	24.5	11	11	2.2	2.2
Mercury (elemental)	7439-97-6	0.323	0.1	0.1	3.2	3.2
Nickel Soluble Salts	7440-02-0	20.5	38	38	0.54	0.54
Selenium	7782-49-2	0.772	0.52	0.52	1.5	1.5
Silver	7440-22-4	0.306	4.2	4.2	0.073	0.073
Vanadium and Compounds	7440-62-2	36.7	2	2	18	18
Zinc (Metallic)	7440-66-6	94.6	46	46	2.1	2.1
Pistol Range						
Explosives						
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	0.525	10	71	0.053	0.007
Semi-Volatile Organic Compounds						

TABLE 10
COMPARISON OF 1996 ERA TO CURRENT ENVIRONMENTAL EFFECT QUOTIENTS FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	95%UCL	1996 ERA TRVs	Ecological Screening Level	Mean	
					1996 ERA EEQ	Current EEQ
Dibutyl Phthalate	84-74-2	2.54	0.15	0.15	17	17
Metals						
Arsenic, Inorganic	7440-38-2	4.58	18	18	0.25	0.25
Beryllium and compounds	7440-41-7	1.21	21	21	0.058	0.058
Lead and Compounds	7439-92-1	1300	11	11	118	118
Mercury (elemental)	7439-97-6	0.037	0.1	0.1	0.37	0.37
Selenium	7782-49-2	0.366	0.52	0.52	0.70	0.70
Nitrate Area						
Semi-Volatile Organic Compounds						
Bis(2-ethylhexyl)phthalate	117-81-7	0.436	0.93	0.93	0.47	0.47
Butyl Benzyl Phthalate	85-68-7	0.066	0.24	0.24	0.28	0.28
Diethyl Phthalate	84-66-2	0.118	25	25	0.0048	0.0048
PCBs/Pesticides						
Aroclor 1260	11096-82-5	0.147	40	40	0.0037	0.0037
Metals						
Chromium, Total	16065-83-1	31.1	0.40	0.40	78	78
Lead and Compounds	7439-92-1	57.5	11	11	5.2	5.2
Mercury (elemental)	7439-97-6	0.047	0.10	0.10	0.47	0.47
Selenium	7782-49-2	0.165	0.52	0.52	0.32	0.32
Silver	7440-22-4	0.454	4.2	4.2	0.11	0.11
Zinc (Metallic)	7440-66-6	131	46	46	2.8	2.8
Gravel and Clay Pit Area						
Semi-Volatile Organic Compounds						
Dibutyl Phthalate	84-74-2	2.63	0.15	0.15	18	18
Metals						
Mercury (elemental)	7439-97-6	0.021	0.1	0.1	0.21	0.21
Thallium (Soluble Salts)	7440-28-0	86.1	1	1	86	86
Shop Area						
Explosives						
Trinitrotoluene, 2,4,6-	118-96-7	0.565	7	8	0.081	0.071
Semi-Volatile Organic Compounds						
Bis(2-ethylhexyl)phthalate	117-81-7	0.021	0.925	0.925	0.023	0.023
Dibutyl Phthalate	84-74-2	86.1	0.15	0.15	574	574
PCBs/Pesticides						
Aroclor 1254		2.5	40	40	0.063	0.063
Aroclor 1260	11096-82-5	0.57	40	40	0.014	0.014
DDT	50-29-3	0.011	0.021	0.021	0.52	0.52
Metals						
Cadmium	7440-43-9	2.43	0.36	0.36	6.8	6.8

TABLE 10
COMPARISON OF 1996 ERA TO CURRENT ENVIRONMENTAL EFFECT QUOTIENTS FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	95%UCL	1996 ERA TRVs	Ecological Screening Level	Mean	
					1996 ERA EEQ	Current EEQ
Chromium, Total	16065-83-1	51.8	0.40	0.40	130	130
Lead and Compounds	7439-92-1	447	11	11	41	41
Mercury (elemental)	7439-97-6	0.461	0.10	0.10	4.6	4.6
Selenium	7782-49-2	0.261	0.52	0.52	0.50	0.50
Silver	7440-22-4	0.904	4.2	4.2	0.22	0.22
Zinc (Metallic)	7440-66-6	569	46	46	12	12
North and South Magazine Area						
Metals						
Silver	7440-22-4	1.13	4.2	4.2	0.27	0.27
Zinc (Metallic)	7440-66-6	110	46	46	2.4	2.4
Sewage Treatment Plants						
Explosives						
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	0.295	10	71	0.030	0.0042
Metals						
Arsenic, Inorganic	7440-38-2	11.7	18	18	0.65	0.65
Barium	7440-39-3	374	330	330	1.1	1.1
Cadmium	7440-43-9	1.84	0.36	0.36	5.1	5.1
Chromium, Total	16065-83-1	23.8	0.4	0.4	60	60
Copper	7440-50-8	62.1	13	13	4.8	4.8
Lead and Compounds	7439-92-1	68	11	11	6.2	6.2
Mercury (elemental)	7439-97-6	0.348	0.1	0.1	3.5	3.5
Selenium	7782-49-2	1.89	0.52	0.52	3.6	3.6
Silver	7440-22-4	79.1	4.2	4.2	19	19
Zinc (Metallic)	7440-66-6	388	46	46	8.4	8.4
Pesticide/Fertilizer Storage Areas						
Semi-Volatile Organic Compounds						
Dibutyl Phthalate	84-74-2	1.28	0.15	0.15	8.5	8.5
Diethyl Phthalate	84-66-2	0.31	25	25	0.013	0.013
PCBs/Pesticides						
DDD	72-54-8	0.094	0.76	0.76	0.12	0.12
DDE, p,p'-	72-55-9	0.025	0.60	0.60	0.042	0.042
DDT	50-29-3	0.146	0.021	0.021	7.0	7.0
Metals						
Lead and Compounds	7439-92-1	94	11	11	8.5	8.5
Mercury (elemental)	7439-97-6	0.05	0.10	0.10	0.50	0.50
Zinc (Metallic)	7440-66-6	119	46	46	2.6	2.6
Major Drainage Ditches						
PCBs/Pesticides						

TABLE 10
COMPARISON OF 1996 ERA TO CURRENT ENVIRONMENTAL EFFECT QUOTIENTS FOR SOIL
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	95%UCL	1996 ERA TRVs	Ecological Screening Level	Mean	
					1996 ERA EEQ	Current EEQ
DDT	50-29-3	0.0085	0.021	0.021	0.40	0.40
Metals						
Aluminum	7429-90-5	32000	50	50	640	640
Cadmium	7440-43-9	1.52	0.36	0.36	4.2	4.2
Chromium, Total	16065-83-1	38.8	0.4	0.4	97	97
Cobalt	7440-48-4	40.3	13	13	3.1	3.1
Copper	7440-50-8	28.1	13	13	2.2	2.2
Lead and Compounds	7439-92-1	25	11	11	2.3	2.3
Mercury (elemental)	7439-97-6	0.0338	0.10	0.10	0.34	0.34
Silver	7440-22-4	1.09	4.2	4.2	0.26	0.26
Vanadium and Compounds	7440-62-2	84.8	2.0	2.0	42	42
Zinc (Metallic)	7440-66-6	133	46	46	2.9	2.9

All concentrations given in milligrams per kilogram.

TABLE 11
COMPARISON OF 1996 ERA TO CURRENT ENVIRONMENTAL EFFECT QUOTIENTS FOR SEDIMENT
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	Mean	Maximum	1996 ERA TRVs	Ecological Screening Level	Mean		Maximum	
						1996 ERA EEQ	Current EEQ	1996 ERA EEQ	Current EEQ
Silver Creek									
<u>Inorganics</u>									
Cyanide	7439-92-1	0.76	1.88	31	35.8	0.025	0.021	0.061	0.053
Nitrate Area									
<u>Volatile Organic Compounds</u>									
Methyl Ethyl Ketone	78-93-3	0.005	0.008	NA	0.0424	-	0.12	-	0.19
Toluene	108-88-3	0.008	0.011	0.67	1.22	0.012	0.0066	0.016	0.0090
<u>Semi-Volatile Organic Compounds</u>									
Bis(2-ethylhexyl)phthalate	117-81-7	0.748	1.3	NA	0.182	-	4.1	-	7.14
Butyl Benzyl Phthalate	85-68-7	0.243	0.47	11	1.97	0.022	0.12	0.043	0.24
Cresol, p-	106-44-5	1.43	2.7	NA	0.0202	-	71	-	134
<u>Polycyclic Aromatic Hydrocarbons</u>									
Anthracene	83-32-9	0.088	0.16	0.0003	0.0572	293	1.5	533	2.8
Benzo(a)anthracene	56-55-3	0.143	0.27	0.108	0.108	1.3	1.3	2.5	2.5
Benzo(a)pyrene	50-32-8	0.078	0.14	0.14	0.15	0.56	0.52	1.0	0.93
Benzo(b)fluorathene	205-99-2	0.163	0.31	NA	10.4	-	0.016	-	0.030
Chrysene	218-01-9	0.295	0.48	0.34	0.166	0.87	1.8	1.4	2.9
Fluoranthene	206-44-0	0.511	0.98	0.6	0.423	0.85	1.2	1.6	2.3
Methylnaphthalene, 2-	91-57-6	0.708	1.4	0.07	0.0202	10	35	20	69
Naphthalene	91-20-3	0.658	1.3	0.16	0.176	4.1	3.7	8.1	7.4
Phenanthrene	85-01-8	0.436	0.86	0.24	0.204	1.8	2.1	3.6	4.2
Pyrene	129-00-0	0.558	1.1	0.49	0.195	1.1	2.9	2.2	5.6
<u>Inorganics</u>									
Beryllium and compounds	7440-41-7	0.99	1.73	NA	NA	-	-	-	-
Chromium, Total	16065-83-1	38.7	51.5	26	43.4.	1.5	-	2.0	-
Lead and Compounds	7439-92-1	33.5	42	31	35.8	1.1	0.94	1.4	1.2
Nitrite/Nitrate	7439-97-6	2.5	4.7	NA	NA	-	-	-	-
Zinc (Metallic)	7440-66-6	189	248	120	121	1.6	1.6	2.1	2.0

All concentrations given in milligrams per kilogram.

TABLE 12
COMPARISON OF 1996 ERA TO CURRENT ENVIRONMENTAL EFFECT QUOTIENTS FOR SURFACE WATER
Cornhusker Army Ammunition Plant, NE

Analyte	CAS Number	Mean	Maximum	1996 ERA ESLs	Ecological Screening Level	Mean		Maximum	
						1996 ERA EEQ	Current EEQ	1996 ERA EEQ	Current EEQ
Silver Creek									
<u>Organics</u>									
Atrazine	1212-24-9	10.6	25	1	12	10.6	0.88	25	2.1
Bis(2-ethylhexyl)phthalate	117-81-7	1.23	3.2	32.2	22	0.038	0.056	0.099	0.15
<u>Metals</u>									
Arsenic, Inorganic	7440-38-2	10.5	12.5	190	16.7	0.055	0.63	0.066	0.75
Nitrate Area									
Bis(2-ethylhexyl)phthalate	117-81-7	1.23	3.2	32.2	22	0.038	0.056	0.10	0.15
<u>Metals</u>									
Aluminum	7429-90-5	6930	10000	87	87	80	80	115	115
Antimony (metallic)	7439-89-6	51.9	91.3	30	30	1.7	1.7	3.0	3.0
Arsenic, Inorganic	7440-38-2	5.29	5.45	190	16.7	0.028	0.32	0.029	0.33
Chromium, Total	16065-83-1	103	156	11	12	9.4	8.6	14	13
Cobalt	7440-48-4	9.3	13.2	3.06	23	3.0	0.40	4.3	0.57
Copper	7440-50-8	43.3	58.6	9.4	7.13	4.6	6.1	6.2	8.2
Iron		13500	22000	1000	1000	14	14	22	22
Lead and Compounds	7439-92-1	43.4	65	2.3	1.88	19	23	28	35
Vanadium and Compounds	7440-62-2	26.8	38.4	19.1	20	1.4	1.3	2.0	1.9
Zinc (Metallic)	7440-66-6	314	433	84.6	104.4	3.7	3.0	5.1	4.1

All concentrations given in micrograms per liter.

Bold EEQs are greater than 1.

ATTACHMENT 1

Field Observation Report

Cornhusker
22 MAY 15

Drainage Ditch

II. TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? ☒ yes ☐ no If no, go to Section IIB: Shrub/Scrub.
2. What percentage or area of the site is wooded? (25 % acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.

ocular estimate
3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.
Dominant plant, if known: Siberian Elm, cottonwood
4. What is the predominant size of the trees at the site? Use diameter at breast height.
☒ 0-6 in. ☐ 6-12 in. ☐ > 12 in.
5. Specify type of understory present, if known. Provide a photograph, if available.

Brome

IIB. SHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? ☐ yes ☒ no If no, go to Section IIC: Open Field.
2. What percentage of the site is covered by scrub/shrub vegetation? (% acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.
3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.
4. What is the approximate average height of the scrub/shrub vegetation?
☐ 0-2 ft. ☐ 2-5 ft. ☐ > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

☐ Dense ☐ Patchy ☐ Sparse

III. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? ☒ yes ☐ no If yes, please indicate the type below:

☐ Prairie/plains ☐ Savannah ☐ Old field ☐ Other (specify) Ab next to waterway

2. What percentage of the site is open field? (0 % _____ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

Ab

4. What is the approximate average height of the dominant plant? none

5. Describe the vegetation cover: ☐ Dense ☐ Sparse ☐ Patchy Dirt

III. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? ☐ yes ☐ no If yes, identify and describe them below.

None

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?

None

4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

Notes: Glassed waterway. Dry at time of survey.

Cornhusker

22 MAY 15

Nitrate Area

II. TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? ☒ yes ☐ no If no, go to Section IIB: Shrub/Scrub.
2. What percentage or area of the site is wooded? (10-15 % acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.

ocular estimate
3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.
Dominant plant, if known: Honey locust, Juniper
4. What is the predominant size of the trees at the site? Use diameter at breast height.
☒ 0-6 in. ☐ 6-12 in. ☐ > 12 in.
5. Specify type of understory present, if known. Provide a photograph, if available.

Primarily brome

IIB. SHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? ☒ yes ☐ no If no, go to Section IIC: Open Field.
2. What percentage of the site is covered by scrub/shrub vegetation? (5 % acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.

ocular estimate

3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.

Honey locust, Juniper
4. What is the approximate average height of the scrub/shrub vegetation?
☐ 0-2 ft. ☒ 2-5 ft. ☐ > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

☐ Dense

☐ Patchy

☒ Sparse

IIC. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? ☒ yes ☐ no If yes, please indicate the type below:

☐ Prairie/plains

☐ Savannah

☐ Old field

☐ Other (specify)

Ag / Blume

2. What percentage of the site is open field? (50 % _____ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

Brome

4. What is the approximate average height of the dominant plant? 18"

5. Describe the vegetation cover: ☒ Dense

☐ Sparse

☐ Patchy

IID. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? ☐ yes ☒ no If yes, identify and describe them below.

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?

Turkey

Blue birds

4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

Notes: A majority of the site is industrial or developed to support industry (roads, gates, etc.). Railcar replacement repair area. Train tracks.

Cornhusker
22 May 15

Pesticide storage
and
Shop Area

II. TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? ☒ yes ☐ no If no, go to Section IIB: Shrub/Scrub.
2. What percentage or area of the site is wooded? (5 % _____ acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.

Ocular estimate
3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.
Dominant plant, if known: Honey locust, Cottonwood, Juniper
4. What is the predominant size of the trees at the site? Use diameter at breast height.
☒ 0-6 in. ☐ 6-12 in. ☐ > 12 in.
5. Specify type of understory present, if known. Provide a photograph, if available.

Bismarck
Mustard
Rumex

Horseweed

IIB. SHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? ☒ yes ☐ no If no, go to Section IIC: Open Field.
2. What percentage of the site is covered by scrub/shrub vegetation? (≤5 % _____ acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.

Ocular estimate

3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.

Locust + Juniper

4. What is the approximate average height of the scrub/shrub vegetation?

☐ 0-2 ft.

☒ 2-5 ft.

☐ > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

☐ Dense ☐ Patchy ☒ Sparse

IIC. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? ☒ yes ☐ no If yes, please indicate the type below:

☐ Prairie/plains ☐ Savannah ☐ Old field ☒ Other (specify) Fallow Field, Ag

2. What percentage of the site is open field? (40 % _____ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

Brome
Rumex
Pennycress

4. What is the approximate average height of the dominant plant? 18"

5. Describe the vegetation cover: ☒ Dense ☐ Sparse ☐ Patchy

IID. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? ☐ yes ☐ no If yes, identify and describe them below.

None

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?

None

4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

Notes: Heavy industrial use. Five buildings. Train tracks.
Gravel roads. Power lines. Lots of vehicles.



Photo 1

Date: May 22, 2015

Site: CHAAP

Description: Load Line 2 – all load lines are in similar condition.



Photo 2

Date: May 22, 2015

Site: CHAAP

Description: Former Nitrate Area



Photo 3

Date: May 22, 2015

Site: CHAAP

Description: Nitrate Area



Photo 4

Date: May 22, 2015

Site: CHAAP

Description: Hornaday Operations