

Final Revision 1

Igloo Exteriors and Revetments

RCRA Facility Investigation

Sampling Work Plan

Fort Wingate Depot Activity
McKinley County, New Mexico

December 12, 2025

Prepared for:



Department of the Army
The Assistant Secretary of the Army
Installations, Energy and Environment
110 Army Pentagon
Washington, DC 20310-0110

Prepared by:



U.S. Army Corps of Engineers
Engineer Research and Development Center
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3909 Halls Ferry Road
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Form 298 placeholder

FINAL APPROVAL LETTER PLACEHOLDER

Upon approval by the New Mexico Environment Department–Hazardous Waste Bureau of this Igloo Exteriors and Revetments RCRA Facility Investigation Sampling Work Plan, a copy of the signed approval letter will be placed here.

DOCUMENT CERTIFICATION

**Final Revision 1, Igloo Exteriors and Revetments, RCRA Facility Investigation Sampling
Work Plan
Fort Wingate Depot Activity, McKinley County, NM**

40 CFR 270.11

December 12, 2025

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Cheryl Frischkorn

Ms. Cheryl Frischkorn
Base Realignment and Closure (BRAC), Environmental Coordinator
Fort Wingate Depot Activity, BRAC Directorate

Fort Wingate Depot Activity
New Mexico

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BIA Zuni	Bureau of Indian Affairs – Zuni Representative
BIA-NR	Bureau of Indian Affairs – Navajo Representative
BRAC	(U. S. Army) Base Realignment and Closure
USEPA	United States Environmental Protection Agency, Region 6
ERDC	Engineer Research and Development Center
FWDA BEC	Fort Wingate Depot Activity Base Environmental Coordinator
NM	New Mexico
NMED HWB	New Mexico Environment Department Hazardous Waste Bureau
NN	Navajo Nation
OH	Ohio
POZ	Pueblo of Zuni
USACE	U.S. Army Corps of Engineers

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List of Acronyms

°C	degrees Celsius
ACM	Asbestos Containing Material
AOC	Area of concern
APP	Accident prevention plan
AUF	Area use factor
BAF	Bioaccumulation factor
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BRAC	Base Realignment and Closure
CBU	Cluster bomb unit
CEC	Cation exchange capacity
COC	Chemical of concern
CoC	Chain of custody
COPC	Chemical of potential concern
COPEC	Chemicals of potential ecological concern
CSM	Conceptual Site Model
DL	Detection limit
DoD	Department of Defense
DOI	Department of Interior
DU	Decision unit
EB	Equipment blank
EC	Exposure Concentration
ECP	Environmental Condition of Property
ELAP	Environmental Laboratory Accreditation Program
FWDA	Fort Wingate Depot Activity
GPS	Global positioning system
HASP	Health and safety plan
HMX	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
ID	Identification
IDW	Investigation derived waste
ISM	Incremental sampling methodology
kg	kilograms
LCS	Laboratory control sample
LOAEL	Lowest observed adverse effects level
LOD	Limit of detection
LOQ	Limit of quantification
mg/kg	milligram per kilogram
MI	Multiple increment

MS	Matrix spike
MSD	Matrix spike duplicate
MQO	Measurement quality objectives
NMED	New Mexico Environment Department
NOAEL	No observed adverse effects level
PAL	Project action limit
PARCC	Precision, accuracy, representativeness, completeness, and comparability
PETN	Pentaerythritol Tetranitrate
PPE	Personal protective equipment
PUF	Plant uptake factor
QA	Quality assurance
QC	Quality control
QSM	Quality Systems Manual
RAG	Risk assessment guidance
RCRA	Resource Conservation and Recovery Act
RDX	Hexahydro-1,3,5-trinitro-1,3,5-triazine
RFI	RCRA Facility Investigation
RSD	Relative standard deviation
RSL	Regional screening level
RSLERA	Refined screening level ecological risk assessment
SLERA	Screening level ecological risk assessment
SSL	Soil screening level
SSO	Site safety officer
SOP	Standard operating procedure
SWMU	Solid waste management unit
TCR	Target Cancer Risk
Tetryl	Methyl-2,4,6-trinitrophenylnitramine
TNT	2,4,6-Trinitrotoluene
TRT	Target risk thresholds
TRV	Toxicity reference value
USACE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USMDA	U.S. Missile Defense Agency
V.1	Volume 1
V.2	Volume 2
WP	Work plan
XRF	X-ray fluorescence

Executive Summary

ES 1 Introduction

This Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan (WP) describes investigation activities to be performed at the exteriors of earthen covered magazines (hereafter referred to as “igloos”) and revetments at Fort Wingate Depot Activity (FWDA), New Mexico. This Final Revision 1 RFI WP has been prepared for submission to the New Mexico Environment Department – Hazardous Waste Bureau (NMED-HWB), in accordance with the requirements of the FWDA RCRA Permit (Section VII.H.1.a of RCRA Permit (NM6213820974)) for the FWDA (NMED, 2015) and to address the December 19, 2024 Notice of Disapproval provided by NMED (NMED, 2024).

ES 2 Purpose

The purpose of this work plan is to determine the nature and extent of potential contamination using discrete sampling at the igloo exteriors and revetments (NMED, 2024), and to evaluate any potential risk associated with this contamination. The results of this effort will be used as the basis for determining whether additional remedial actions are warranted at these igloo exteriors and revetments.

ES 3 Historical Data Review

In response to the NMED NOD (NMED, 2024), this work plan no longer selects and samples igloos and revetments with the highest previously measured concentrations of lead or proposes the use of ISM sampling. It now presents a discrete sampling approach focused on Igloo Block C in Parcel 4A, a contiguous igloo block that is representative of conditions at FWDA.

This approach was developed after the Army had reviewed all the historical soil data from NMED approved documents that have been collected at igloo drains and swales as well as and revetments at FWDA (Sections 2.2 and 2.3) and evaluated them against the current NMED human health SSLs to establish concentrations trends and frequency of exceedances of current NMED Soil Screening Levels (SSL) (Section 2.4). These trends were then used to develop the revised sampling approach for igloo exteriors and revetments at FWDA for Parcel 4A, Igloo Block C (Section 3).

ES 4 Approach

The work plan approach integrates the technical components discussed between NMED and Army (Appendix A), as well as operational history and problem formulation, by identifying COCs based on historical data collection from under the igloo drainpipes, fate and transport mechanisms, and exposure pathways to appropriate human and ecological receptors, to produce a site-specific conceptual site model (CSM). This CSM forms the basis for the scope of work and sampling strategy. Each of the steps to developing a site-specific CSM are discussed in Section 3.

Based on this approach, the medium of concern is soil for the igloo swales, samples of which will be analyzed for lead.

Site-specific reasonably anticipated current or future land use for human receptors at both the igloos and revetments is for activities associated with commercial storage of materials. Consequently, the only human receptor that should be considered in the site-specific CSM upon reasonably expected future uses is the commercial/industrial worker. However, NMED has requested that risk for the more conservative exposure scenario of a residential receptor be considered, consequently, both commercial/industrial and residential receptors will be evaluated.

The ecological evaluation was also refined to account for site-specific exposures, such as: (1) site-specific ecological receptors, (2) evaluation of each receptor group's home range to determine if the site area comprised >10% of the receptors home range, and (3) calculating Area Use Factor (AUF) using the study areas for the igloos and revetments. These calculations (Table 3-2) show that the kit fox, red-tailed hawk, and prong horned antelope do not need to be evaluated for the igloo exteriors because the AUFs for these receptors are less than 10% of their respective home ranges. The plant community will be retained for further evaluation, as will the deer mouse and the horned lark.

For the purposes of delineating potential horizontal transport, each apron swale is assigned left "L" or right "R" to correspond with its igloo drain. Each apron swale has been divided into two DUs. Division of the apron swale into two DUs will enable concentration gradients to be evaluated. The road swale has been divided into three DUs. If transport traverses the entire length of either apron swale **AND** topography supports transport across the road, the DUs in the road swales will determine any further potential concentration gradient exists. Discrete samples will be collected from the lowest areas within the DU boundary where lead could accumulate (e.g., rainwater flow paths, depressions/low lying areas), providing the most conservative and protective representation of data associated with the site (NMED, 2024). The following phased sampling approach will be applied as further described in Section 3.2 and illustrated in Figure 3-5.

- **Phase 1:** Two discrete samples will be collected from 0-12 inches (in.) and analyzed for lead from DU 1 for each apron swale.
- **Phase 2:** Concurrent with Phase 1 sampling, two discrete samples will be collected from 12-18 in. from DU 1 **AND** two discrete samples will be collected from 0-12 in. from DU 2 for each apron swale. Phase 2 samples will not be analyzed until Phase 1 analyses are complete and screened against NMED SSLs for human and ecological receptors. If Phase 1 lead concentrations exceed NMED SSLs, Phase 2 samples will be analyzed.
- **Phase 3:** If Phase 2 samples exceed NMED SSLs for human and ecological receptors, Phase 3 will be executed as a separate field mobilization. For Phase 3, two discrete samples will be collected from 12-18 in. within DU 2 **AND** two discrete samples will be collected from 0-12 in. within DU 3 and DU 4 across the road, should topography indicate that transport across the road might reasonably be expected.

If additional samples are needed to define nature and extent following Phase 3, additional step out sampling at other soil location/depths will be proposed in a work plan addendum.

ES 5 Nature and Extent

Nature and extent, as well as concentration gradient that could be indicative of migration of a release, will be accomplished by evaluating lead levels against current NMED SSL for humans and ecological receptors, as well as site-specific background. These comparisons will be made for both 0-12 inch and 12-18 inch depth horizons starting with DUs nearest the drain and moving outward. Nature and extent is further discussed in Section 7.

ES 6 Risk Assessment Evaluation Approach

The risk screening evaluation will follow the steps below and is discussed in detail in Section 8. Per NMED request (NOD, 2024), each sample will be screened individually against NMED SSLs for lead, for potential risk to human and ecological receptors. Data generated from Phase 1 sample collection will be tabulated and evaluated as follows:

- 1) Each DU will be evaluated separately.
- 2) If lead is not detected in any Phase 1 samples, and all LOQs are less than the PAL, then no further risk evaluation or phased sampling will be required.
- 3) For human receptors:
 - a. If the sample concentrations do not exceed the SSL for the human residential receptor, the risk screening is complete for the residential receptor and no Phase 2 analyses or evaluation will be required.
 - b. If the sample concentrations exceed the individual receptor SSLs for the human residential receptor, then the risk screening is not complete for that receptor and Phase 2 analytical data will be evaluated.
 - c. If the sample concentrations do not exceed the SSL for the commercial/industrial worker, the risk screening is complete for the commercial/industrial worker and no Phase 2 analyses or evaluation will be required.
 - d. If the sample concentrations exceed the individual receptor SSLs for the commercial/industrial worker, then the risk screening is not complete for that receptor and Phase 2 analytical data will be evaluated.
- 4) For ecological receptors:
 - a. If lead is detected above the PAL, then the sample concentration will be screened against the site-specific background value of 12.4 mg/kg.
 - b. If the background level for lead is not exceeded, then risk screening is complete, no further risk evaluation will be required for Phase 1, and no Phase 2 analyses or evaluation will be required.

- c. If the background level of lead is exceeded, then risk to the deer mouse and the horned lark is presumed to exist since background is greater than both the Tier 1 and Tier 2 TRVs; evaluation of Phase 2 data will be required.
 - d. If the sample concentrations do not exceed the SSLs for plants (Tier 1 and then Tier 2) the risk screening is complete for plants and no Phase 2 analyses or evaluation will be required.
 - e. If the sample concentrations exceed the SSLs for plants (Tier 1 and then Tier 2) the risk screening is not complete for plants and Phase 2 analytical data will be evaluated.
- 5) All receptors retained from Steps 1 through 4 at specific DUs will be retained for further evaluation.

ES 7 Summary

This WP uses historical data from NMED approved reports for igloo and revetment sampling from parcels 2, 4A, 6, 16, and 24 to develop a sampling approach to generate data within igloo apron and road swales for Igloo Block C in Parcel 4A. For Parcel 4A, swale sample locations were determined by identifying igloo drains with lead soil concentrations greater than the current NMED residential SSL of 200 mg/kg.

Sampling will follow a phased approach. Using a risk decision screening sequence, the lead analysis data will be screened against NMED SSLs to assess both nature and extent, and risk to human/ecological receptors.

The results of the risk screening will result in one of two outcomes:

- 1) Data gaps exist and additional information will be required to support decision making, or
- 2) Data are sufficient to support decision making regarding the potential need for remedial action.

1.0 Introduction

The purpose of this study is to complete the evaluation of the igloo exteriors and revetments at Fort Wingate Depot Activity (FWDA), Gallup, NM. This evaluation will determine whether additional remedial actions may be necessary, in compliance with the Resource Conservation and Recovery Act (RCRA) Permit (NMED, 2015).

A previously submitted workplan (July 2023) proposed sampling the 6 igloos and 6 revetments with highest historical concentrations of metals and explosives. The data obtained from that sampling were to be analyzed statistically to draw facility wide conclusions about contamination in the igloo swales and revetments. Correspondence regarding the development of this work plan can be found in Appendices A and B.

Several hundred igloos and revetments have been previously sampled at FWDA, resulting in a considerable amount of data. The Army and NMED have discussed a path forward that would utilize these data to design a study that would provide sufficient understanding of potential residual contamination near igloo exteriors and revetments.

The initial work plan submitted for this investigation (July 2023) proposed sampling igloos and revetments with the highest concentrations of metals and explosives as measured in previous sampling. Correspondence regarding the development of the initial work plan can be found in Appendices A and B.

After review of the NMED Notice of Disapproval for the initial work plan (NMED; December 2024, Appendix A1), the Army conducted a comprehensive tabulation and evaluation of the previously collected data to better understand facility wide data trends for explosives and lead at igloo drains, aprons, and revetments. The results of these analyses have been utilized to revise this work plan.

1.1 Objectives

The primary objectives of this investigation are to:

- 1) Summarize and evaluate historical data for igloo block drains, apron swales and revetments in all parcels at FWDA to establish concentrations trends and frequency of exceedances of current NMED Soil Screening Levels (SSL).
- 2) To utilize data trends from (1) to design a site-specific sampling plan for igloo block drains, apron swales and revetments as needed for a contiguous igloo block that is representative of conditions at FWDA (Igloo Block C in Parcel 4A).
- 3) Sample soil as needed at these locations for RCRA 8 metals and explosives to quantify potential residual COC levels.
- 4) Use these data to determine if a release has occurred, and if so, the nature and extent of this release to determine whether RCRA 8 metals and/or explosives, if detected, are present in quantities that might pose unacceptable risk to site-specific current/future human and ecological receptors.

- 5) Use these analytical results to develop a generalized site-wide approach for characterizing potential contamination at the remaining, unsampled igloos and revetments at FWDA.

1.2 Regulatory Status

The RCRA permit for FWDA was finalized in December 2005 and became effective December 31, 2005. Since the original permit issuance, the FWDA RCRA permit has been revised through NMED modifications issued in 2011, 2014, and 2015 (NMED, 2011; NMED, 2014; and NMED, 2015). The most recent version of the RCRA permit includes the original permit and subsequent modifications (NMED, 2015) and details the requirements of the installation cleanup.

Since the 1980s, numerous investigations within parcels containing igloos and revetments have been completed at FWDA. The following investigation efforts were referenced for data review in preparation for this study:

- P24 RAR, Final Release Assessment Report Parcel 24, Jan 2014
- P6 RFI, Final RCRA Facility Investigation Report Parcel 6, Sept 2012
- P4 RAR, Final Release Assessment Report Parcel 4A, Igloo Block C, Mar 2009
- P22 RFI, Final RCRA Facility Investigation Report Parcel 22 Revision 2, May 2015
- P16 RFI, Final RCRA Facility Investigation Parcel 16, Aug 2013
- RI/FS, Remedial Investigation/Feasibility Study & RCRA Corrective Action Program, 1997
- P22 PIIM, Final Permittee-Initiated Interim Measures Report Parcel 22, Feb 2015
- P6 PIIM, Final Permittee-Initiated Interim Measures Report Parcel 6 AOC 28, 2016
- P16 PIIM, Final Permittee-Initiated Interim Measures Report Parcel 22, Dec 2017
- P9 IR, Investigation Report, Igloo Block A, Parcel 9, Aug 2018

2.0 Background

2.1 FWDA Installation Description and Setting

Fort Wingate Depot Activity is located in McKinley County in northwestern New Mexico and originally covered 22,120 acres (approximately 34 square miles) (ERM, 1997) (Figure 2-1 and 2-2). Initially opened in 1850, the installation was active until 1993 when it was closed as a result of the Defense Authorization Amendments and Base Realignment and Closure (BRAC) Act of 1988. FWDA's historic military mission was to store, ship, and receive material and to dispose of obsolete or deteriorated explosives, ammunition, and ordnance. FWDA served as a storage and supply facility shipping ammunition to supply armies overseas during World War II and the South Vietnam conflict. The installation was placed in reserve status in 1971 until its closure in 1993 (ERM, 1997).

2.1.1 Site Conditions

2.1.1.1 Climate

Northwestern New Mexico is characterized by a semiarid continental climate. Most precipitation occurs from May through October. Most of the precipitation occurs as rain or hail in summer thunderstorms, and the remainder results from light winter snow accumulations (Metcalf & Eddy, Inc. [M&E], 1992). Spring and fall droughts characterize the area. Mean annual rainfall for the area ranges between 10 and 16 inches, with the recorded average annual precipitation being 11 inches. Depending on local elevations, mean annual rainfall can fluctuate between eight and 20 inches.

The average seasonal temperatures for the area vary with elevation and topographic features. During winter, daily temperatures fluctuate as much as 50 to 70 degrees Fahrenheit (°F) in a 24-hour period. In summer, daily high temperatures are between 85°F and 95°F (M&E, 1992). Average temperatures in winter are about 27°F and in summer 70°F, while extreme temperatures are as low as -30°F in winter and as high as 100°F in summer. There are 100 to 150 frost-free days during the year from the middle of May to the middle of October (M&E, 1992).

2.1.1.2 Topography

The elevation of the FWDA ranges from approximately 8,200 feet above mean sea level in the south to 6,660 feet above mean sea level in the north. Topographically, the FWDA may be divided into three general areas: 1) the rugged north-to-south trending Nutria Monocline (also known as the Hogback) along the western and the southwestern boundaries; 2) the northern hill slopes of the Zuni Mountains in the southern portion; and 3) the alluvial plains marked by bedrock remnants in the northern portion of the FWDA (Sundance, 2016).

Main drainages follow the topography, generally flowing from south to north, and discharge to the South Fork of the Rio Puerco near the northern boundary of the FWDA. However, many tributaries follow the regional trend, flowing from southwest to northeast. Drainages at FWDA are intermittent with flow occurring only during and after heavy rainfall events or during snowmelt. During these events, streams

transport sediment to low-lying areas in the northern part of the installation, creating an extensive alluvial deposit among remnants of bedrock (Sundance, 2016).

2.1.1.3 Soils

The soils found on the installation are consistent with those occurring in cool plateau and mountain regions of New Mexico. The major soil types at the FWDA are variants/complexes of sands, loams, clays, and rocks. These soils are relatively thin, and the parent bedrock is either at or near the surface in more than one quarter of the installation (Sundance, 2016).

The thickness of these soil types varies widely over the installation, with alluvial accumulations deepest along canyon floors and in the Rio Puerco Valley. Bedrock exposures are common throughout the area. Generally, the soils are loamy or loam/clay mixtures and contain varying amounts of silt, sand, gravel, and rock fragments; all of which are fragile. Wind and water cause extensive soil erosion, especially where vegetative cover is absent (Sundance, 2016).

2.1.2 Site History of Igloo and Revetment Usage

Conventional munitions (non-nuclear weapons) and explosives were stored at FWDA in earth-covered magazines known as "igloos". Many of the igloos at FWDA were constructed in the early 1940s (ERM, 1997). When FWDA's active operations ceased in 1993, munitions and explosives were removed from the storage igloos. In addition to the igloos, revetments or open areas surrounded by earthen berms with one entrance/exit through a break in the berm were constructed during the same time period. The revetments were used for the temporary open-air storage of munitions and explosives.

There are a total 10 groups or blocks of igloos and revetments at FWDA (Igloo Block A, B, C, D, E, F, G, H, J, and K), encompassing over 7,400 acres (approximately 33%) of the total land at FWDA. The 10 igloo blocks contain a total of 732 igloos and 254 revetments (ERM, 1997). Approximately, 439 igloos (23 of 100 in Block A, 50 of 103 in Block D, and all of Block E, F, G, H, and J) are located within Parcels (2, 9, and 19) that are currently being retained by the U.S. Missile Defense Agency (USMDA). The remaining 293 igloos (77 of 100 in Block A, 53 of 103 in Block D, and all of Block B, C, and K) are being prepared for transfer from the Army to the DOI (Figure 2-3) (DoD, 2017a; Appendix B).

The igloos and revetments are named based on the block in which they are located along with a four-digit number system. The revetments have a similar naming convention except contain the letter "Y" at the beginning of each revetment name. Example names are provided below:

- Example Igloo Name for Igloo 1000 in Block A: A-1000
- Example Revetment Name for Revetment 0962 in Igloo Block A: Y-A-0962

The igloos were constructed in 1941 and are windowless concrete domes with earthen cover and one entrance/exit through a steel door. The entrance has a concrete apron for loading and unloading of munitions from transport vehicles. Each igloo interior contains a sloped drainage channel on each side that connect to two drains at the front of the igloo, allowing discharge of material from the interior floor

to the exterior of the igloo. These drains discharge to the soil on either side of the concrete apron in front of the igloo. This discharge area is referred to as the apron swales throughout this Work Plan.

The open storage revetments were constructed of compacted earth in 1945 and were for temporary storage of crated munitions when igloo capacity was exceeded. The revetments are located throughout the igloo blocks between the igloos and consist of a central square storage area surrounded by bermed soils with one opening that serves as access. The larger revetments measure 42 feet by 72 feet and the smaller revetments are 34 feet by 64 feet (Sundance, 2018).

2.1.3 Parcel Descriptions

Below is a description of the various igloo block at FWDA and their historical use. Historical use over time was similar for all of the igloo blocks at FWDA, given the volume of munitions that were received and stored at the installation.

2.1.3.1 *Parcel 6, Area of Concern (AOC) 28, Igloo Block B*

Igloo Block B is located in the southwest portion of Parcel 6 and consists of 100 igloo structures and 55 revetments. Igloo Block B was specifically used to store 8-inch projectiles, propellant charges, and cluster bombs units (CBUs), which were transferred to the igloos after being transported to the site by rail. Bulk explosives or chemical weapons were not stored in Igloo Block B. Munitions were stored in wooden ammunition boxes containing multiple metal containers. A minimum of three protective layers were used for storing munitions components, and extreme caution was used during handling and storage. No specific date was identified for the end of munitions storage in the available historical documents (USGS, 2019).

A tenant contractor named TPL, Inc. obtained a facility's use contract with FWDA in 1994 and continued operations until 2007. TPL, Inc. performed demilitarization of military munitions with an emphasis on resource recovery and reuse. Demilitarization operations ranged from simple mechanical separation of munitions into their components, to chemical processes to further extract reusable materials. For several years, TPL, Inc. was a Large Quantity Generator (NMR000000216) of hazardous wastes consisting of fuses and fin assemblies (explosives) that were temporarily stored in a less-than-90-day RCRA storage area in Igloo B-1019. TPL, Inc. conducted operations within the AOC 28 area (USGS, 2019).

2.1.3.2 *Parcel 9, AOC 18, Igloo Block A*

Igloo Block A, containing 100 igloos and 81 revetments, was used to store propellant charges for 8-inch and 155-millimeter (mm) shells, cluster bombs, 2.75-inch and 3.5-inch rocket motors, and 155-mm high explosive (HE) projectiles. A portion of Igloo Block A containing 23 igloos and 10 revetments is in Parcel 9. Munitions were stored at Igloo Block A from 1941 through FWDA closure in 1993 (Sundance, 2018).

2.1.3.3 *Parcel 16, AOC 41, Igloo Block K*

Igloo Block K was historically referred to as "I" Area but was later renamed K Block. K Block has 27 earth covered igloos 60-feet long and originally covered with two feet of rock and soil. Area K was used to store mines, 155-mm and 8-inch HE projectiles. The stored explosives were containerized. No records were

found to indicate that loose powder was ever stored in the Igloo Area or that any of the individual igloos had explosions or releases of explosives to the environment. No information has been found to suggest that other types of hazardous materials were stored in these facilities (Toeroek Associates, 2014).

2.1.3.4 Parcel 24, AOC 18, Igloo Block A

Parcel 24 encompasses approximately 421 acres of this area. Parcel 24 includes most of the Igloo Block A munitions storage area. Igloo Block A is located within an alluvial valley drained by the South Fork of the Puerco River. This area is relatively flat and slopes gently to the north towards the river. Vegetation in this area consists primarily of native grasses, sage brush, and other shrubs. Several smaller drainages also run through Igloo Block A. Igloo Block A is one of several igloo block areas at FWDA previously used for the storage of munitions in the Magazine (Igloo) Area beginning in the early 1940s (USACE SWF, 2014).

2.1.3.5 Parcels 2 and 4A, AOC 29, Igloo Block C

Parcels 2 and 4A are in the west central section of FWDA. Parcel 4A includes most of the Igloo Block C munitions storage area with a small portion extending into Parcel 2. Igloo Block C consists of 36 igloo structures, one Black Powder Magazine, and 33 revetments. Twenty-three (23) of the 36 igloos and 22 of the 33 revetments are located in Parcel 4A. The remaining 13 igloos and 11 revetments are located in Parcel 2. Igloo Block C was used to store M15 mines, propellant charges, and 2.75 inch rocket motors. No records were available indicating or suggesting storage of chemical agents, biological agents, or radiological materials (USACE SWF, 2009).

Igloos C-1551 and C-1552 were constructed in 1943 and are of similar construction but smaller. Igloo C-1553 is designated Black Powder Magazine and was constructed in 1943. It is one-story on a reinforced concrete floor with 12 inch hollow tile walls and concrete roof decking. It measures 8 ft. 4 in. x 8 ft. 4 in. with 40 square feet of usable interior space (USACE SWF, 2009).

2.1.3.6 Parcel 19

Parcel 19 is located in the central section of FWDA, and the vegetation cover across the parcel consists mostly of sparse grass, native weeds, and sagebrush. Parcel 19 encompasses Igloo Blocks D, E, F, and G. Each igloo block is discussed as an individual AOC below.

AOC 30, Igloo Block D

AOC 30 (Igloo Block D) is located in the western portion of Parcel 19 and contains 103 igloos and 17 revetments. The Parcel 22 portion of AOC 30 contains 53 igloos and 13 revetments; the remaining 50 igloos and four revetments are located in Parcel 19. The igloos and revetments were used to store munitions and high explosives (HE); specifically bulk TNT and M15 mines. The FWDA utilized Igloo Block D from the end of 1941 through base closure in 1993.

AOC 31, Igloo Block E

AOC 31 (Igloo Block E) is located in the southern portion of Parcel 19 and consists of 51 igloos and 42 revetments. The igloos and revetments were used to store munitions, specifically 4.2-inch shells, 155-millimeter (mm) and 8-inch projectiles. The FWDA utilized Igloo Block E from the end of 1941 through base closure in 1993.

AOC 32, Igloo Block F

AOC 32 (Igloo Block F) is located in the north-central portion of Parcel 19 and consists of 35 igloos and 14 revetments. The igloos and revetments were used to store munitions, specifically 90-mm canisters and 3.5-inch rocket motors. The FWDA utilized Igloo Block F from the end of 1941 through base closure in 1993.

AOC 34, Igloo Block G

AOC 34 (Igloo Block G) is located in the eastern portion of Parcel 19 and consists of 100 igloos and 8 revetments. The igloos and revetments were used to store munitions, specifically 750-pound general purpose bombs and 90-mm and 155-mm projectiles. The FWDA utilized Igloo Block F from the end of 1941 through base closure in 1993.

2.1.3.7 Parcel Description Summary

Figure 2-3 shows the igloos and revetments in the various blocks/parcels/AOCs.

The descriptions of the parcels under evaluation in this work plan show varied terrain; areas around igloos and revetments could be level or sloped. Given these characteristics, the topography and vegetation characteristics were accounted for in the study design (Section 3).

2.2 Historical Data Collection and Review for Initial Work Plan Purposes

In the initial work plan submission (July 2023), the Army reviewed all of the relevant soils data that has been collected over time at igloos and revetments at FWDA. This data is presented below for informational purposes, including previously collected data in Parcels 2, 4A, and 19. In Section 2.3, the Army presents the subset of this data that has been approved by NMED in submitted reports. In Section 2.3, the NMED-approved data is then evaluated and used to inform the revised sampling approach presented in Section 3 for igloo exteriors and revetments at FWDA.

2.2.1 Parcel 9, AOC 18, Igloo Block A

Sampling at 23 igloos and 10 revetments within Parcel 9, Igloo Block A, was completed in September through December 2008 for explosives by USEPA Method 8330B and RCRA Metals by USEPA Methods 7471 and 6020. Multiple Increment (MI) samples were collected from drainages around the apron at all 23 igloos. Detections of lead ranged from 12.7 mg/kg to 68.3 mg/kg; there were no detections exceeding the NMED residential SSL of 400 mg/kg. None of the explosives constituents were detected above NMED residential SSLs, or, when no NMED SSL was available, above USEPA residential Regional Screening Levels (RSLs). Composite samples were taken at the drains of all 23 igloos. Detections of lead ranged from 72.6 mg/kg to 2,650 mg/kg with fourteen detections over the NMED residential SSL of 400 mg/kg. None of the explosive's constituents were detected above residential standards. In this report, nitroglycerine was determined to be a non-detect in sample A-986 due to the reporting limit being above the screening level, however, by current evaluation practices and in the absence of a Lines-of-Evidence (LOE) evaluation, this would be considered an exceedance of screening criteria. MI samples were collected at all 10 revetments. Detections of lead ranged from 9.9 mg/kg to 16.5 mg/kg; there were no detections of lead exceeding the

NMED residential SSL of 400 mg/kg. None of the explosives constituents were detected above NMED residential SSLs or when appropriate, above USEPA residential RSLs (USACE SWF, 2018).

After review of the 2012 *Release Assessment Report for Parcel 4A Igloo Block C, Final*, NMED approved the report with direction and required a re-sampling event at any Igloo Block C location where lead was detected at concentrations between 200 and 400 mg/kg. In response to the NMED comments within the Approval with Direction letter dated 22 July 2009, the Army used this same process to re-sample igloos in Igloo Block A within Parcel 9. Of the 23 igloos sampled in Igloo Block A, 19 resulted in concentrations between 200 and 400 mg/kg or above the NMED residential SSL of 400 mg/kg for lead and required re-sampling (USACE SWF, 2018).

In October 2010, 38 measurements, one (1) from each drain outfall of the 19 igloos, were analyzed in-situ by x-ray fluorescence (XRF). Of the 38 RCRA metals measurements taken, five measurements exceeded the NMED residential SSL for lead or arsenic. Lead values ranged from non-detect to 504.67 mg/kg at A-983-R (NMED residential SSL = 400 mg/kg). Arsenic exceeded the residential SSL (at the time of 3.9 mg/kg) at that time at one location (A-991-L), with a value of 17.15 mg/kg (USACE SWF, 2018).

Eleven laboratory confirmation samples were taken from those measurements in which XRF results were deemed most likely to exceed NMED residential SSLs. Three of the 11 samples (two for lead and one for arsenic) were greater than the NMED residential SSLs. Lead was identified in sample A-986-L at 2,100 mg/kg and in sample A-999-R at 5,200 mg/kg. Arsenic was identified in sample A-999-R at 6.1 mg/kg (USACE SWF, 2018).

Based on initial September 2008 data and October 2010 XRF measurements or confirmation sample results that exceeded the NMED residential soil screening criteria for lead and/or arsenic, soil removal under both drains was recommended at the following igloos: A-979, A-980, A-981, A-983, A-986, A-988, A-989, A-992, A-993, A-994, A-996, A-998, A-999, and A-1000 (USACE SWF, 2018).

Furthermore, due to an October 2010 XRF measurement/confirmation sample results for lead/arsenic over the NMED residential soil screening criteria, the Army removed soil from the right side of A-987 and the left side of A-991, along with the lead-based paint contaminated drainpipes from each side of all the igloos listed above (USACE SWF, 2018).

2.2.2 Parcel 16, AOC 41, Igloo Block K

AOC 41 - Igloo Block K contains 27 igloos. Previous sampling activities were conducted at Igloo Block K and COCs, including lead and explosives, were identified in concentrations that exceeded the 2012 NMED residential SSLs or 2012 USEPA residential RSLs at 18 igloo drains. Seventeen samples collected from below drain outfalls in Igloo Block K exceeded the NMED residential SSL for lead of 400 mg/kg. The igloos with exceedances and drain locations (left [L] or right [R]) are as follows: K-1524L; K-1524R; K-1525L; K-1527L; K-1527R; K-1528R; K-1529L; K-1531R; K-1533L; K-1540L; K-1541L; K-1542L; K-1543R; K-1545L; K-1546L; K-1547L; K-1547R; and K-1549R. Sample K-1540S001, collected from the left drain of Igloo K-1540L, was reported with a concentration of 510 mg/kg for 2,4-dinitrotoluene, which exceeded the NMED

residential SSL of 15.7 mg/kg. The U.S. Army Corps of Engineers (USACE) removed areas that exceeded NMED residential SSLs and capped the drains, as recommended in the 2013 RFI report (AMEC, 2017).

Another sample, 1641K-1542L-SS-D-SO (duplicate), collected from under the left drain of Igloo K-1542, was included in this removal because of a reported concentration of 6.9 mg/kg for RDX (NMED residential SSL of 6.0 mg/kg) (AMEC, 2017).

Concentrations of arsenic, 4.0 and 6.1 mg/kg, were identified at two igloos drains, K-1527R and K-1543R, respectively that exceeded the NMED residential SSL of 3.9 mg/kg in effect at the time of the field work. Subsequently, the Army conducted a site-specific assessment of background levels at FWDA. Based on the findings of the background study, NMED determined that the mean background concentration for arsenic at FWDA was 5.6 mg/kg with a range of arsenic concentrations between 0.2 mg/kg and 11.2 mg/kg. After this determination, the concentrations previously identified (4.0 and 6.1 mg/kg) fell within the site-specific range for arsenic and did not constitute an exceedance, negating the need for removal in these areas for arsenic (AMEC, 2017).

2.2.3 Parcel 24, AOC 18, Igloo Block A

The 2008 release assessment investigation at AOC 18 resulted in 35 exceedances of lead in composite samples collected at the igloo drains. Lead detections that exceeded the NMED residential SSL of 400 mg/kg ranged from 407 mg/kg to 1,790 mg/kg (USACE SWF, 2014).

After review of the *Release Assessment Report for Parcel 4A Igloo Block C, Final*, NMED approved the report with direction and required a re-sample event at any Igloo Block C location where lead was detected at concentrations between 200 and 400 mg/kg. In response to the NMED comments within the Approval with Direction letter regarding lead concentrations in these soils from previous sampling events for Igloo Block C, the Army used this same process to re-sample Igloo Block A within Parcels 24 and 9 (USACE SWF, 2014).

Based on the 2010 re-sample release assessment investigation results for 8 RCRA metals at AOC 18 within Parcel 24, the following exceedances occurred: 21 XRF results for lead, 5 XRF results for arsenic, 1 XRF result for mercury, 9 confirmation sampling results for lead, and 3 confirmation sampling results for arsenic (USACE SWF, 2014).

Lead was detected by XRF at the following concentrations: 1,333 mg/kg on the left side of A-903; 2,691 mg/kg on the right side of A-907; 1,582 mg/kg on the left side of A-909; 497 mg/kg on the left side of A-920; 514 mg/kg on the right side of A-922; 512 mg/kg on the left side of A-927; 5,290 mg/kg on the left side of A-935; 11,540 mg/kg on the right side of A-936; 445 mg/kg on the right side of A-938; 1,021 mg/kg on the right side of A-941; 764 mg/kg on the left side of A-943; 2,142 mg/kg on the right side of A-946; 2,404 mg/kg on the right side of A-947; 995 mg/kg on the right side of A-950; 784 mg/kg on the right side of A-955; 2,327 mg/kg on the left side of A-955; 523 mg/kg on the left side of A-962; 444 mg/kg on the left side of A-965; 491 mg/kg on the right side of A-969; 447 mg/kg on the right side of A-975; and 828 mg/kg on the left side of A-977 which exceeded the NMED residential SSL of 400 mg/kg. Arsenic was detected by XRF at the following concentrations: 45.3 mg/kg on the right side of A-905; 20.2 mg/kg on the

left side of A-936; 1,088 mg/kg on the right side of A-936; 43.9 mg/kg on the left side of A-945; and 26.9 mg/kg on the left side of A-963 which exceeded the NMED residential SSL of 3.9 mg/kg. Mercury had a concentration of 17.0 mg/kg on the left side of A-970 which exceeded the NMED residential SSL of 15.6 mg/kg (USACE SWF, 2014).

Lead was detected at the following concentrations in the confirmation samples: 440 mg/kg on the left side of A-905; 480 mg/kg on the right side of A-909; 640 mg/kg on the right side of A-914; 1,400 mg/kg on the right side of A-920; 2,300 mg/kg on the right side of A-924; 3,900 mg/kg on the right side of A-929; 430 mg/kg on the left side of A-934; 660 mg/kg on the left side of A-936; and 740 mg/kg on the right side of A-964 which exceeded the NMED residential SSL of 400 mg/kg. Arsenic concentrations were detected at the following concentrations in the confirmation samples: 4.1 mg/kg on the left side of A-905; 4.0 mg/kg on the right side of A-929; and 4.3 mg/kg on the right side of A-948, all of which exceeded the NMED SSL of 3.9 mg/kg in place at the time of sampling (USACE SWF, 2014).

The field portable XRF instrument was used as a screening tool only to guide decision making in the field regarding the need for additional soil removal. Confirmation soil samples were taken for 20% of the XRF measurements. Confirmation soil samples were collected from a depth interval of 0 to 3 inches and co-located with XRF readings. Laboratory analyses did not correlate well with XRF reading results. The confirmation samples were homogenized by the laboratory prior to analysis, whereas the in-situ XRF readings are from direct field soil samples. This resulted in large variability between the XRF soil readings and the laboratory confirmation sample results (USACE SWF, 2014).

XRF readings taken on drainpipes indicated the presence of lead-based paint with significant lead concentrations which may be the source of lead contamination in the soil. Therefore, removal of the igloo drainpipes was included with soil removal in Parcel 24 (USACE SWF, 2014).

The Release Assessment Report recommended removal of all igloo drainpipes coated with lead-based paint and soil from beneath drains where sample results identified concentrations of lead, arsenic, or mercury greater than NMED soil screening criteria. ZAPATA executed the PIIM letter work plan scope using NMED SSLs outlined in the 2019 guidance (Zapata, 2019).

Permittee-Initiated Interim Measures were completed within Parcel 24 Igloo Block A on May 24, 2018, for a subset of drain locations where exceedances of NMED residential screening criteria had been found. These interim measures, included drainpipe removal and plugging, soil excavation, confirmation sampling, and waste profile and disposal. Confirmation sample results from the interim measures at Parcel 24, Igloo Block A showed that soil exceeding NMED cleanup standards had been successfully removed (Zapata, 2019).

2.2.4 Parcel 6, AOC 28, Igloo Block B

The 1997 “Final Remedial Investigation/Feasibility Study & RCRA Corrective Action Program Document” states during the RI, 24 discrete surface soil samples were collected under the igloo drains and 15 discrete surface soil samples were collected in storage revetments (ERM, 1997). These soil samples were analyzed for explosives and were reported below screening levels.

The 2000 “Environmental Baseline Survey for the Transfer of Lands” at FWDA report provides a physical description of Igloo Block B. The buildings were not considered to be potentially hazardous according to the RI/FS Risk Assessment. Environmental issues that would potentially affect the property transfer were not found during this limited investigation (USGS, 2019).

2.2.5 Parcels 2 and 4A, AOC 29, Igloo Block C

The 2009 *Release Assessment Report for Parcel 4A Igloo Block C, Final*, states MI soil sampling was conducted at 100% of the igloos and revetments in C-Block in June 2008. This included 23 igloos, one Black Powder Magazine (C-1553) and 22 revetments in Parcel 4 and 13 igloos and 11 revetments in Parcel 2 (USACE SWF, 2009).

A total of 115 soil samples were collected at AOC 29 consisting of samples collected at the igloos, igloo drains, Black Powder Magazine (C-1553) and all of the revetments. All samples were analyzed for explosives by EPA Method 8330B and for lead by EPA Method 6010B. Test results were tabulated and data screened against the NMED Soil Screening Levels (SSLs) for residential soil and EPA Region 6 Medium-Specific Screening Levels (MSSLs) which were the FWDA’s cleanup standards at the time the report was written. None of the explosives constituents exceeded screening levels. Three samples collected at the igloo drains exceeded the screening level for lead: 405 mg/kg at C-1109, 474 mg/kg at C-1128 and 1,290 mg/kg at C-1105 which exceeded the NMED SSL of 400 mg/kg (USACE SWF, 2009).

The 2012 *Final Release Assessment Report for Parcel 4A, Revision 2*, states additional MI samples at revetment Y-C1111 were collected and a field-portable XRF instrument was used to take in-situ soil readings for 8 RCRA metals at the igloo drain outfall locations with detected lead levels between 200 and 400 mg/kg in September 2010. Discrete samples were collected at twenty percent of the XRF sample locations for confirmation by laboratory analyses in October 2010 (USACE SWF, 2012).

Based on the re-sample release assessment investigation results for 8 RCRA metals at AOC 29, none of the samples exceeded the NMED SSL for residential soils with the exception of three XRF in-situ soil sample results from igloo drains. The field portable XRF instrument was used as a screening tool only to guide decision making in the field regarding the need for additional soil removal (USACE SWF, 2012).

Permittee-initiated interim measures were completed within Igloo Block C in October and November 2013. These interim measures included drainpipe removal and plugging, soil excavation, confirmation sampling, and waste profile and disposal. Confirmation sample results from the interim measures at Igloo Block C showed no metals were detected at concentrations exceeding the NMED SSLs and explosives were not detected (AMEC, 2014).

2.2.6 Parcel 19

Each of the igloo blocks within Parcel 19 are discussed as an individual AOC below.

AOC 30, Igloo Block D

The *Final Remedial Investigation/Feasibility Study Report & RCRA Corrective Action Program Document* (ERM, 1997) described the previous investigation activities conducted at the D Block igloos. During the

Remedial Investigation/Feasibility Study (RI/FS), five igloos were randomly selected for surface soil sampling in the D Block within Parcel 19 (Igloos 22 D1188, D1216, D1220, D1221, and D1229). Surface soil samples were also collected from two revetments (YD1146 and YD1158).

Three surface soil samples were collected from each of the five igloos with one sample collected from under the floor drain outlets on the left and right sides of the igloo door, and the third sample collected in front of the concrete loading area in front of the door. These samples were analyzed for explosives. Of the 15 surface soil samples collected at the five igloos, no explosives were detected.

Three surface soil samples were collected from each of the two revetments with one sample collected from the entrance, the second from the outside of the elbow of the revetment, and the third from the middle of the revetment. These samples were analyzed for explosives. Of the six surface soil samples collected at the two revetments, no explosives were detected.

AOC 31, Igloo Block E

The *Final Remedial Investigation/Feasibility Study Report & RCRA Corrective Action Program Document* (ERM, 1997) described the previous investigation activities conducted at the E Block igloos. During the RI/FS, eight igloos were randomly selected for surface soil sampling in the E Block area (Igloos E1241, E1252, E1268, E1273, E1274, E1276, E1281, and E1286). Surface soil samples were also collected from four revetments (YE1244, YE1253, YE1256, and YE1257).

Three surface soil samples were collected from each of the eight igloos with one sample collected from under the floor drain outlets on the left and right sides of the igloo door, and the third sample collected in front of the concrete loading area in front of the door. These samples were analyzed for explosives. Of the 24 surface soil samples collected at the eight igloos, no explosives were detected.

Three surface soil samples were collected from each of the four revetments with one sample collected from the entrance, the second from the outside of the elbow of the revetment, and the third from the middle of the revetment. These samples were analyzed for explosives. Of the 12 surface soil samples collected at the four revetments, no explosives were detected.

AOC 32, Igloo Block F

The *Final Remedial Investigation/Feasibility Study Report & RCRA Corrective Action Program Document* (ERM, 1997) described the previous investigation activities conducted at the F Block igloos. During the RI/FS, three igloos were randomly selected for surface soil sampling in the F Block area (Igloos F1303, F1307, and F1319). Surface soil samples were also collected from revetment YF1293.

Three surface soil samples were collected from each of the three igloos with one sample collected from under the floor drain outlets on the left and right sides of the igloo door, and the third sample collected in front of the concrete loading area in front of the door. These samples were analyzed for explosives. Of the nine surface soil samples collected at the three igloos, no explosives were detected.

Three surface soil samples were collected from revetment YF1293 with one sample collected from the entrance, the second from the outside of the elbow of the revetment, and the third from the middle of

the revetment. These samples were analyzed for explosives. No explosives were detected in the three surface soil samples.

AOC 34, Igloo Block G

The *Final Remedial Investigation/Feasibility Study Report & RCRA Corrective Action Program Document* (ERM, 1997) described the previous investigation activities conducted at the G Block igloos. During the RI/FS, seven igloos were randomly selected for surface soil sampling in the G Block area (Igloos G1340, G1365, G1371, G1376, G1383, G1389, and 30 G1391). Surface soil samples were also collected from revetment YG1347.

Three surface soil samples were collected from each of the seven igloos with one sample collected from under the floor drain outlets on the left and right sides of the igloo door, and the third sample collected in front of the concrete loading area in front of the door. These samples were analyzed for explosives. Of the 21 surface soil samples collected at the seven igloos, no explosives were detected.

Three surface soil samples were collected from revetment YG1347 with one sample collected from the entrance, the second from the outside of the elbow of the revetment, and the third from the middle of the revetment. These samples were analyzed for explosives. No explosives were detected in the three surface soil samples.

2.3 FWDA Installation Wide Historical Data Collection and Review

In response to the NMED NOD received in 2024 (NMED, 2024), this work plan no longer examines igloos and revetments with the highest concentration of lead using ISM sampling. The revised work plan now summarizes and evaluates NMED-approved historical data for igloo block drains, apron swales, and revetments at FWDA to establish concentrations trends and frequency of exceedances of current NMED Soil Screening Levels (SSL). The results of these analyses have been utilized to revise this work plan and focus on discrete soil sampling in Igloo Block C in Parcel 4A.

Since the 1980s, numerous investigations within parcels relating to igloos and revetments have been completed at FWDA.

The five parcels listed below have a total of five reports that have received NMED approvals for reports containing igloo exterior sampling results relevant to the study design for this work plan:

- Parcel 2 (Igloo Block C)
 - Data were extracted from the two Parcel 4A reports below, where the Parcel 2 data were incorporated
 - Release Assessment Report (RAR), Parcel 4A, Igloo Block C (March 2009); NMED Approval with Direction (22 July 2009)
 - RAR Parcel 4A - Rev 2.0 (October 2012); no record of NMED reviewing; Army submitted petition for the Corrective Action Complete Determination (2 September 2015). The Parcel 2 data were reported in the Parcel 4 PIIM (April 2014); NMED approval (1 August 2014)

- Parcel 6 (Igloo Block B)
 - Investigation Plan (June 2008); included as an appendix to the RFI Work Plan (CH2M Hill, 2011), which was approved by NMED (19 August 2011)
- Parcel 16 (Igloo Block K)
 - RFI Report, Parcel 16 (August 2013); NMED Approval with Direction (22 July 2009)
- Parcel 24 (Igloo Block A)
 - RAR, Parcel 24 (January 2014); NMED Approval with Modification (AwM) (18 May 2015)
- Parcel 4A (Igloo Block C)
 - RAR, Parcel 4A, Igloo Block C (March 2009); NMED Approval with Direction (22 July 2009)
 - RAR Parcel 4A - Rev 2.0 (October 2012); no record of NMED reviewing; Army submitted petition for the Corrective Action Complete Determination (2 September 2015). The Parcel 2 data were reported in the Parcel 4 PIIM (April 2014); NMED approval (1 August 2014)
- No NMED approved reports are available for the igloo exteriors for Parcel 19 (Igloo Blocks D, E, F, G) or Igloo Blocks H or J (in Parcel 2).

These NMED approved reports include data for analyses of explosives, RCRA 8 metals and/or lead for igloo drains, igloo aprons, and revetments. These data are tabulated and screened against current NMED residential SSLs (Appendix D). PIIMs were not included in these data reviews because PIIMs report analytical data associated with remedial actions and are not appropriate for documenting the igloo exteriors at the end of their time of service.

The intent of these data compilations is to evaluate data for overarching trends between igloo blocks that will substantiate the study design for this Parcel 4A igloo exterior work plan. The data from reports for Parcels 2, 6, 16, 24, and 4A are summarized below. For each parcel, the data are organized and discussed in the following groupings: 1) igloo drains; 2) igloo apron swales; and 3) revetments. Each grouping discusses analytical results in the sequence of explosives, RCRA 8 metals, and lead, as applicable.

Since the approval of these reports, the USEPA has revised the lead soil screening level (SSL) from 400 mg/kg to 200 mg/kg for residential soil, and NMED has adopted this SSL. The current screening level is based on a blood lead level of 5 micrograms per deciliter (µg/dL) (USEPA, 2024). Originally, in the historical reports, the lead data were screened against the SSL of 400 mg/kg; however, for this evaluation, the data have been rescreened using the revised SSL of 200 mg/kg for lead for discrete drain samples and 100 mg/kg for composite samples.

The Army recognizes that historical data sets have been generated using different sampling techniques (e.g., igloo drains have been sampled with both discrete and composite samples, while apron swales and revetments have been sampled using multiple increment (MI) sampling). However, this does not detract from the qualitative trends analyses for each data grouping.

Data from Parcels 2, 6, 16, 24, and 4A are discussed below.

2.3.1 Parcel 2

2.3.1.1 Release Assessment Report – 2009

Samples presented in the 2009 Release Assessment Report were collected in 2008; 1 composite sample was collected from the igloo drains from 13 igloos (N=13), one (1) MI sample was collected from the apron swales (N=13) and one (1) MI sample was collected from each revetment (N=11). Samples were analyzed and screened for explosives and lead as summarized below (USACE, 2009). Army received NMED Approval with Direction on 22 July 2009 for this report (Appendix A1).

Igloos - Drains

Explosives: No explosives were detected above NMED SSLs (Table D1-A).

Lead: When compared to the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples, nine (9) samples exceeded the current NMED residential SSL of 200 mg/kg (range 226 – 1290 mg/kg) (Table D1-C).

Igloos – Apron Swales

Explosives: No explosives were detected above NMED SSLs (Table D1-D).

Lead: No exceedances of the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D1-D).

Lead: No exceedances of the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D1-E).

2.3.2 Parcel 6

2.3.2.1 Release Assessment Report – 2008

Samples presented in the 2008 Release Assessment Report were collected as discrete samples from 10 of the 100 igloo drains, as MI samples from 10 of 100 apron swales and as MI samples from 8 of the 54 revetments in Parcel 6. Samples were collected in 2008 and were analyzed and screened for explosives and lead (CH2M Hill, 2008). There is no indication the report by CH2MHill was approved by NMED; however, these data are included in this evaluation because the Parcel 6 RFI Work Plan (CH2M Hill, 2011) included them as an appendix and that work plan was approved on 19 August 2011 (Appendix A1).

Igloos – Drains

Explosives: Two (2) explosives (HMX, 1,3,5-trinitrobenzene) were detected; however, both detections were below the NMED residential SSL (Table D2-A).

Lead: All lead detections were below the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D2-B).

Igloos – Apron Swales

Explosives: No explosives were detected above NMED residential SSLs (Table D2-C).

Lead: All were below the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D2-C).

Revetments

Explosives: All results were non-detect below NMED residential SSLs (Table D2-D).

Lead: All were below the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D2-D).

2.3.3 Parcel 16

2.3.3.1 RCRA Facility Investigation Report – 2014

Samples presented in the 2014 RFI report were collected and analyzed in 2012 for explosives and RCRA 8 metals (USACE, 2014); discrete samples were collected under each drain from the 27 igloos in this block (N=54) and one (1) MI sample was collected from each igloo apron swales (N=27), and one (1) MI sample was collected from each revetment (N=24). Army received NMED Approval with Direction on 22 July 2009 for this report (Appendix A1).

Igloos – Drains

Explosives: Six (6) explosives (p-nitrotoluene, 1,3-dinitrobenzene, 2,4-dinitrotoluene, RDX, HMX, nitroglycerine) were detected at various igloo drain locations; all were below the NMED residential SSLs (Table D3-A).

RCRA 8 Metals: With the exception of lead, no RCRA 8 metals exceeded NMED residential SSLs (Table D3-B).

Lead: When compared to the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples, 26 samples exceeded the criterion, (range 210 – 4200 mg/kg) (Table D3-C).

Igloos – Apron Swales

Explosives: One (1) explosive (4-nitrotoluene) was detected, but at a concentration below the NMED residential SSL. No explosives were detected above NMED residential SSLs (Table D3-D).

Metals: No RCRA 8 metals exceeded NMED residential SSLs (Table D3-E).

Lead: No exceedances of the current NMED residential SSL of 200 mg/kg were found for discrete samples and 100 mg/kg for composite samples (Table D3-E).

Revetments

Explosives: No explosives were detected above NMED residential SSLs (Table D3-F).

Metals: No RCRA 8 metals exceeded NMED residential SSLs (Table D3-G).

Lead: No samples exceeded the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D3-G).

2.3.4 Parcel 24

2.3.4.1 Release Assessment Report – 2014

In 2008, composite samples were collected from 77 igloos drains, 77 MI samples were collected from igloo apron swales, and 70 MI samples were collected from revetments in Igloo Block A, Parcel 24. Samples were analyzed and screened for explosives and lead. In 2010, the 66 composite samples from the 2008 sampling event whose lead results were greater than one half of the NMED SSL at the time (400 mg/kg) were sampled using XRF for RCRA 8 metals. An additional 23 discrete laboratory confirmation soil samples were collected as a subset of the XRF samples and analyzed for RCRA 8 metals. The discrete and composite sampling results are discussed below. The Army received a NMED AwM for this report on 18 May 2015 (Appendix A1).

Igloo Drains

Explosives: Two (2) explosives (1,3,5-trinitrobenzene and PETN) were detected, but at concentrations below the NMED residential SSLs. No explosives were detected above NMED residential SSLs. (Table D4-A).

RCRA 8 Metals: With the exception of lead, no RCRA 8 metals exceeded NMED residential SSLs (Table D4-B).

Lead: There were a total of 78 samples (composite and discrete totaled) that exceeded the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (range 134 to 1460 mg/kg) (Table D4-C).

Igloo Apron Swales

Explosives: Four (4) explosives (nitrobenzene, pentaerythritol tetranitrate, 2-amino-4,6-dinitrotoluene, and 4-amino-2,6-dinitrotoluene) were detected, but at concentrations below the NMED residential SSLs. No explosives were detected above NMED residential SSLs (Table D4-D).

Lead: Lead was not detected above the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D4-D).

Revetments

Explosives: Four (4) explosives (nitrobenzene, 1,3,5-trinitrobenzene, pentaerythritol tetranitrate, and 2-amino-4,6-dinitrotoluene) were detected, but at concentrations below the NMED residential SSLs. No explosives were detected above NMED residential SSLs (Table D4-E).

Lead: Lead was not detected above the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table D4-E).

2.3.5 Parcel 4A

2.3.5.1 Release Assessment Report – 2009

Samples presented in the 2009 Release Assessment Report were collected in 2008 (USACE, 2009). Drains at each igloo (N=23) were composite sampled and analyzed for explosives and lead. Swales (N=23) and

revetments (N=22) were sampled by MI and analyzed for explosives and lead. Army received NMED Approval with Direction on 22 July 2009 for this report (Appendix A2).

Igloos - Drains

Explosives: No explosives were detected above NMED residential SSLs (Table 2-1).

Lead: 16 samples had exceedances of lead (range 117 – 474 mg/kg) when screened against the NMED SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table 2-3).

Igloos – Apron Swales

Explosives: No explosives were detected above NMED residential SSLs (Table 2-4).

Lead: Lead was not detected above the NMED SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table 2-4).

Revetments

Explosives: No explosives were detected above NMED residential SSLs (Table 2-5).

Lead: Lead was not detected above the NMED SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table 2-5).

2.3.5.2 Release Assessment Report – 2012

Previous drain sampling (USACE, 2009) had utilized composite sampling between the two drains at any given igloo. Any location where lead had previously been detected at concentrations between 200 and 400 mg/kg in a composite igloo drain sample, was re-sampled using XRF, and discrete confirmation samples were collected at a 20% frequency of the XRF samples. New discrete drain samples were collected in 2010 and were analyzed and screened for RCRA 8 metals; only discrete confirmation sampling results were used for the purposes of designing the sampling approach for this workplan. The Army does not have a record of NMED reviewing this document (Appendix A2 – Petition for Corrective Action), however, the data from these efforts were reported in the Parcel 4 PIIM (Amec, 2014); NMED approval (1 August 2014) and included in this review.

Igloos - Drains

Explosives: No exceedances of NMED residential SSLs (Table 2-1).

RCRA 8 Metals: No exceedances of NMED residential SSLs (Table 2-2).

Lead: 16 samples had exceedances of lead (range 117 – 474 mg/kg) when screened against the NMED SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table 2-3).

Igloos – Apron Swales

No additional samples were collected at the apron swales.

Revetments

No additional samples were collected at the revetments.

2.3.6 Conclusion

Parcels 2, 6, 16, 24, and 4A showed similar trends in historical data:

- 1) Drains (discrete and/or composite):
 - Explosives: No exceedances of NMED screening criteria
 - RCRA 8 metals: No exceedances of NMED screening criteria for metals except for lead
 - Lead: Exceedances of NMED screening criteria for lead
- 2) Apron Swales (MI):
 - Explosives: No exceedances of NMED screening criteria
 - Lead: No exceedances of NMED screening criteria
- 3) Revetments (MI):
 - Explosives: No exceedances of NMED screening criteria
 - Lead: No exceedances of NMED screening criteria

A review of NMED approved historical data for explosives and lead for the drains, swales and revetments shows consistent data trends across all igloo blocks, regardless which parcel boundary they are within. These data trends have been used to develop the current sampling plan which focuses on the 23 igloos and 22 revetments in Igloo Block C within Parcel 4A (Figure 2-4).

2.4 Applicability of Historical Sampling Results from Parcel 4A for Current Work Plan

Section 2.3 summarized the existing NMED approved igloo exterior and revetment data for Parcels 2, 6, 16, and 24, and 4A, Igloo Block C; no NMED approved reports are available for the igloo exteriors for Igloo Blocks D, E, F, G H or J, therefore, the blocks are not included.

Following the evaluation of the historical data, reports, and NMED letters, in particular the NOD received for the initial version of this work plan (NMED, 2024), the following determinations were made to guide the development of this RFI Work Plan to fully characterize the igloo exteriors in Block C of Parcel 4A.

2.4.1 Revetments

All 22 revetments within Parcel 4A have been sampled using MI and analyzed for explosives and lead; all results are below current SSLs. In an approval with direction letter (22 July 2009) NMED approved results at the revetments from the 2009 Release Assessment Report for Parcel 4A with the exception of one revetment (Y-C1111) which was resampled and analyzed following NMED's direction. NMED has also stated, "...there is no known hotspot in the revetments, the ISM results may reasonably be representative of soil concentrations within the decision/sampling units and are unlikely to underestimate potential risks that may be present within the revetments" (NMED, 2024; Appendix A2). Based on these findings, no further investigation is proposed at the revetments within Parcel 4A in this revised work plan.

2.4.2 Igloos - Drains

All drains at the 23 igloos within Parcel 4A have been sampled and analyzed for explosives and lead. Explosives at the igloo drains were not detected and LOQs were below the NMED SSLs; therefore, no

further evaluation of explosives is proposed at the drains within Parcel 4A. Additionally, since no parent explosive compounds were detected (Tables 2-1), no evaluation of explosives degradation compounds (e.g., SVOCs) are proposed.

Igloo drains with lead concentrations remaining above the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples have been identified (Table 2-3). Removal actions in these areas will be proposed in a separate corrective measures work plan. Since exceedances at these locations are already known, no further evaluation of lead is proposed at the igloo drains in Parcel 4A.

2.4.3 Igloo – Apron Swales

Apron swales at all 23 igloos within Parcel 4A have been sampled using MI and analyzed for explosives and lead. Although no exceedances for explosives or lead have been observed, according to NMED (2024; Appendix A2), “...ISM for apron swales appears to have issues with potentially underestimating hotspots,” and “...a targeted/biased collection of discrete samples from the areas where the COCs accumulate within the apron swales (e.g., rainwater flow paths, depressed spots) provides the most conservative and protective representation of data associated with the site.” Since swale contamination is directly attributable to contamination originating at the igloo drains, lead will be investigated further in this work plan in the apron swales where exceedances for lead were noted at the drains corresponding to these apron swales.

No exceedances of explosives were noted at any drain, therefore, no further investigation of explosives or their degradation products (e.g. SVOCs) is proposed.

All apron swales associated with drains where lead exceeded the current NMED residential SSL of 200 mg/kg for discrete samples and 100 mg/kg for composite samples (Table 2-3, Figure 2-4) will be resampled using discrete sampling to further investigate the igloo exteriors, as discussed in Section 3. In Parcel 4A, 16 igloos show lead exceedances of the current NMED residential SSL of 200 mg/kg under the igloo drains; these locations were therefore selected for additional sampling at both apron swales (N = 32). The specific locations are: C-1108, C-1109, C-1118, C-1121, C-1122, C-1123, C-1124, C-1125, C-1126, C-1128, C-1129, C-1131, C-1132, C-1133, C-1134, and C-1552.

2.4.4 Conclusions

Based upon a detailed evaluation of historical data, the following results have been incorporated into the scope of this revised work plan:

- No further evaluation of revetments is required for metals, explosives or SVOCs
- No further evaluation of igloo drains is required for metals, explosives or SVOCs
- No further evaluation of igloo apron swales is required for explosives or associated degradation compounds (e.g., SVOCs)
- No further evaluation of igloo apron swales is required for RCRA 8 metals **except for lead**

3.0 Work Plan Approach

The site-specific conceptual site model (CSM) and site-specific sampling strategy in this revised work plan approach were developed through problem formulation, which identifies:

- 1) Physical setting of the igloos
- 2) COCs
- 3) Potentially contaminated media and fate and transport mechanism(s)
- 4) Potential human and ecological receptors
- 5) Exposure pathway analysis and a site-specific CSM

Each of these steps are addressed in Section 3.1.

3.1 Problem Formulation and Development of the Site-Specific Conceptual Site Model

An evaluation of historical data for Igloo Block C in Parcel 4A (Section 2.3), supports a site-specific conceptual site model (CSM) that only includes sampling for lead in the igloo apron swales as the area of the igloo exteriors requiring further evaluation. The remainder of this section provides site-specific information to support the site-specific CSM and sampling plan.

3.1.1 Igloo Physical Settings

Igloos are set up as “blocks” within FWDA (Figure 2-2 and 2-3). While some igloos are smaller than others, the general layout of igloos remains consistent across the installation. A schematic showing key igloo exterior features can be found in Figure 3-1. A road runs in front of each igloo. Each igloo has an apron, typically made of concrete, which lies directly in front of a sole igloo entrance door. Munitions were unloaded on the apron and brought into the interior through the front door. There are external drainpipes on either side of the main door that, if needed, can drain the interior of the igloo to apron swale on either side of the apron. If topography allows, additional drainage could occur from the apron swales to lower lying areas, including across the road to the road swale.

The selection of igloo swales to be sampled was determined from analytical results from surficial soil samples taken under the drains (Section 2.3 and 2.4). Sixteen igloos where lead exceeded 200 mg/kg for discrete samples and 100 mg/kg for composite samples were selected for additional sampling at both apron swales (N = 20): C-1108, C-1109, C-1118, C-1121, C-1122, C-1123, C-1124, C-1125, C-1126, C-1128, C-1129, C-1131, C-1132, C-1133, C-1134, and C-1552.

3.1.2 Contaminants of Concern

Based on the evaluation of historical data, only lead results exceeded current NMED residential SSLs. For this reason, lead is the only COC included in this revised work plan (Section 2.4).

3.1.3 Media and Contaminant Fate and Transport

The medium of concern in this work plan is soil (surface and subsurface). For igloo exteriors, this is supported by the exposure pathway analyses for human and ecological receptors discussed below in Sections 3.1.4 and 3.1.5, respectively. There are no permanent surface waters within Igloo Block C at FWDA, and groundwater is monitored, evaluated, and reported separately, therefore, exposure to surface water and groundwater are not complete exposure pathways.

Historically, igloos were used for the indoor storage of conventional munitions. Consequently, the primary release mechanism would be spillage or leakage from these stored munitions to exterior soils from migration along the interior drainage channels. The exterior drainpipes are painted, and paint chips are evident in the soil at some locations. Paint on the drainpipes may also be a primary release mechanism. It is not known whether the paint is lead based or whether the paint formulation contains chromium (Cr), however, total chromium results for Parcel 4A show that total chromium results for Parcel 4A are not greater than FWDA site-specific background. This supports a conclusion that hexavalent chromium (Cr 6+) has not historically been released from paint at the igloo drains, given the high reactivity and short half-life of Cr 6+ in the environment (USEPA, 1998).

Soils under exterior igloo drains have been sampled (Section 2.2) and in most instances, when COC levels exceeded NMED residential SSLs, excavations were performed until all COC concentrations were below NMED residential SSLs, for cumulative cancer risk ($TCR < 1E-05$) or non-cancer hazard ($HQ < 1.0$) (USACE, 2009; USACE, 2012; Amec, 2014). These excavations addressed the vertical component of transport and confirmed that contamination was primarily in surficial soils.

Based upon the physical setting of the igloos (Section 3.1.1), exterior transport would be expected from below the exterior drainpipe and along the apron swales towards the road. Transport via natural drainage pathways could include transport from the apron swales over the road to the road swales when road elevations are lower than the igloo aprons, or transport to other low-lying areas present at a specific location is also possible (Figure 3-1).

3.1.4 Receptors – Human and Ecological

An exposure pathway analysis as part of the development of a CSM includes an evaluation of potential human and ecological receptors that could be exposed to site related COCs (NMED, 2022 and 2017, revised). Each of these receptor categories are evaluated below for inclusion/exclusion in the site-specific CSM.

3.1.4.1 Human Receptors

The igloos are not suitable for human occupancy; their future use would be commercial/industrial activities associated with commercial loading/unloading of materials at the igloo apron and the storage of materials inside the igloo. Therefore, the only human receptor that should be considered in the site-specific CSM based upon reasonably expected future uses is the commercial/industrial worker (NMED, 2022) (Figure 3-3). However, NMED has requested that risk for the more conservative exposure scenario of a residential receptor be considered, and both commercial/industrial and residential receptors will be evaluated. The exposure pathways and media contacted are described more fully in Section 3.1.5.1.

3.1.4.2 Ecological Receptors

The habitat surrounding the igloos is terrestrial, therefore, the ecological community and varying trophic levels in the food web to be considered for evaluation include:

- plant community
 - evaluated qualitatively at the community level
- mammalian omnivore (rodent; representative species - deer mouse)
 - evaluated at all sites
- avian omnivore (representative species - horned lark)
 - evaluated at all sites
- mammalian carnivore (representative species - kit fox)
 - only evaluated at sites larger than 276 acres
- avian carnivore () (apex avian predator; representative species - red-tailed hawk)
 - only evaluated sites larger than 177 acres
- mammalian herbivore (representative species - pronghorn antelope)
 - only evaluated at site larger than 342 acres

Area Use Factors (AUFs) were calculated for three of the six representative receptors (kit fox, red-tailed hawk, and prong horned antelope) using the combined area of the igloo DUs (Table 3-1). To be conservative and protective, the area calculation for maximum exposure included both the apron and road swales for the igloos multiplied by the total number of igloos in Parcel 4A (N=23). The purpose of this calculation was to determine if the site area comprised >10% of the receptor's home range (NMED, 2017, revised). These calculations show that none of these three representative receptors (kit fox, red-tailed hawk, and prong horned antelope) need to be evaluated for the igloo exteriors (Table 3-2) because the AUFs for these receptors are less than 10% of their respective home ranges.

The plant community will be retained for further evaluation, as will the deer mouse and the horned lark.

3.1.5 Exposure Pathway Analysis and Site-Specific CSM

The final exposure pathway analysis integrates the information on source areas, release(s), fate and transport, and exposure to arrive at a site-specific CSM.

3.1.5.1 Human Health

Section 3.1.4.1 described the residential and commercial/industrial receptors that will be evaluated at the selected igloo exterior locations. Under current conditions, only the commercial/industrial worker will be exposed, and this will be to surficial soils in the apron swales closest to the igloo drains. It would not include road swales, nor would it include subsurface soils.

Looking at future exposures, the commercial/industrial worker and residential exposure can be accommodated with the current proposed sampling plan. Residential activities would include the areas in the apron swales that are part of the industrial/commercial exposure, as well as additional areas around/between the igloos and across the road in road swales provided topography indicated this was appropriate. Utilizing the DUs of the apron and road swales closest to the igloo drains as first exposure

areas for the residential receptor provides a conservative high bias for the screening evaluation of the residential receptor. Thus, one data set can be used to screen for both the residential and the commercial/industrial receptors.

Dermal contact, ingestion, and inhalation routes to surface soils will be complete exposure pathways in the igloo apron swales for the commercial/industrial worker (Figure 3-3). This is consistent with workers arriving at, loading/unloading materials in front of the igloos, entering and exiting conveyance vehicles, and walking on either side of the vehicle and in and out of the igloos. For the worker, exposure is incomplete for subsurface soil and surface soils in the road swales on the far side of the road that passes in front of the igloos, as these locations are not reasonably expected to be contacted during work activities. To accommodate exposure for a potential future resident, all soil data including subsurface soil and road swale data will be included in the exposure evaluation for this receptor (Section 3.1.4.1).

Figure 3-3 presents the site-specific human CSM and includes all potential current and future receptors, media and exposure pathways.

3.1.5.2 Ecological

The plant community will be evaluated collectively as a community. Specific species of plants will not be evaluated separately; rather the plant community will be evaluated as a whole. The plant community provides a necessary food source directly or indirectly through the food web for wildlife receptors (NMED, 2017, revised). The plant community is considered to have direct contact with both surface and subsurface soils in all DUs.

Both the deer mouse and horned lark are species of interest in their own right but also serve as a major food source for larger omnivorous and carnivorous species. The deer mouse will be evaluated at each igloo exterior location and is considered to be exposed to both surface and subsurface soils at all DUs. The horned lark will be evaluated at each igloo exterior location and is considered to be exposed to only surface soils at all DUs.

Restricting the evaluation of subsurface soils to a depth of 18 inches in the study design introduces a high bias for the receptors typically screened to depths of 10 feet, as the release mechanism at the igloos is a surface release from the drains.

Figure 3-4 presents the site-specific ecological CSM and includes all potential current and future receptors and media exposure.

3.1.5.3 Conclusions

The exposure pathway analysis has concluded the following receptors need to be evaluated:

Human Receptors (Figure 3-3):

- Commercial/Industrial Worker: surface soils in the apron swales
- Resident: surface and subsurface soils in the apron and road swales

Ecological Receptors (Figure 3-4):

- Plants: community level evaluation for surface and subsurface soil in apron and road swales
- Deer mouse: surface and subsurface soils in the apron and road swales
- Horned lark: surface soils in the apron and road swales

3.2 Sampling Design

The goals of the data collection in this work plan are to collect data of sufficient quality and quantity to:

- 1) Determine the nature and extent of lead in the apron swales, and where appropriate, in road swales exterior to the igloos.
- 2) Evaluate lead levels against NMED SSLs for current and future human health and ecological receptors to determine whether lead is present in quantities that might pose unacceptable risk to site-specific current/future human and ecological receptors.
- 3) Identify any remedial actions that may be necessary at each igloo location.

Igloos exteriors have two general zones: 1) a zone proximate to the igloo entrance, referred to as the apron swale area; and 2) a zone across the access road from the igloo entrance, called the road swale area (Figure 3-2). Apron swales and road swales for each of the drain locations have been assigned to delineate nature and extent and support step out sampling if needed. The process by which these will be sampled is outlined below.

3.2.1 Phased Sampling of Decision Units (DUs)

Igloos are set anywhere from 25 to 65 feet back from the access road (Google Earth Pro, 2016). For the purposes of delineating potential horizontal transport, each apron swale is considered separately from the other and assigned left “L” or right “R” to correspond with its igloo drain. Each apron swale has been divided into two DUs. Division of the apron swale into two DUs will show whether a concentration gradient with distance from the igloo drain is evident. The road swale has been divided into three DUs. If transport has traversed the entire length of either apron swale **AND** topography supports transport across the road, the DUs in the road swales will determine any further potential concentration gradient. Figure 3-2 provides a schematic of the DUs for evaluating nature and extent.

Discrete samples will be collected from the lowest areas within the DU boundary where lead could accumulate (e.g., rainwater flow paths, depressions/low lying areas). This provides the most conservative and protective representation of data associated with the site (NMED, 2024).

A phased sampling approach will be applied as described below and shown in Figure 3-5.

- **Phase 1:** Two discrete samples will be collected from 0-12 inches (in.) and analyzed for lead from DU 1 for each apron swale.
- **Phase 2:** Concurrent with Phase 1 sampling, two discrete samples will be collected from 12-18 in. from DU 1 **AND** two discrete samples will be collected from 0-12 in. from DU 2 for each apron swale. Phase 2 samples will not be analyzed until Phase 1 analyses are complete and screened

against NMED SSLs for human and ecological receptors. If Phase 1 lead concentrations exceed NMED SSLs, Phase 2 samples will be analyzed.

- **Phase 3:** If Phase 2 samples exceed NMED SSLs for human and ecological receptors, Phase 3 will be executed as a separate field mobilization. For Phase 3, two discrete samples will be collected from 12-18 in. within DU 2 **AND** two discrete samples will be collected from 0-12 in. within DU 3 and DU 4 across the road, should topography indicate that transport across the road might reasonably be expected.

If additional samples are needed to define nature and extent following Phase 3, additional step out sampling at other soil location/depths will be proposed in a work plan addendum.

This configuration of DUs is the default standard. If the topography or layout around an igloo indicates a topographic shift, photographic evidence and field sketches will be documented in the study files and sampling locations moved to accommodate such locations specific characteristics.

3.3 Risk Screening

Per NMED request (2024), each sample will be screened individually against NMED SSLs for lead, for potential risk to human and ecological receptors.

3.3.1 Human Health Evaluation

Lead concentrations in each soil sample will be screened for human health against the current USEPA residential lead soil screening level (200 mg/kg) based on a blood lead level of 5 micrograms per deciliter (µg/dL) (USEPA, 2024).

3.3.2 Ecological Evaluation

Three categories of representative receptors will be evaluated: plants, deer mouse and horned lark.

For plants, lead concentration in each soil sample will be screened against the Tier 1 no observed adverse effects level (NOAEL) and the Tier 2 low observed adverse effects level (LOAEL) effect concentrations (NMED, 2017, revised).

For the deer mouse and the horned lark, lead concentrations in each sample will be screened against the Tier 1 TRV NOAEL and the Tier 2 TRV LOAEL (NMED, 2017, revised).

The risk evaluation is discussed in detail in Section 8.0.

4.0 Deliverables, Schedule & Required Coordination

The following shows the deliverables, schedule, and coordination for this work:

- 1) Army delivery of revised Work Plan NMED: December 2025
- 2) Army Field Mob Preparation: 30 – 90 days from NMED approval (weather permitting)
- 3) Army Field Work: 30 days from arrival on-site
- 4) Army Sample Analyses and Validation: 60 – 90 days
- 5) Army preparation and submission of Final Report to NMED: 180 days from completion of data validation

5.0 Field Sampling Approach

Discrete sampling DUs have been assigned to each of the ten igloos selected for resampling in Igloo Block C so that both nature and extent (Section 7.0) and exposure to human and ecological receptors (Section 8.0) can be evaluated with the new analytical data generated. This evaluation will be consistent with Attachment 7 of the RCRA Permit (USEPA Identification (ID) NM 6213820974 for the FWDA 17 Permit, dated December 2005 (Revised February 2015)). The details of this field sampling approach are provided in the following sections.

5.1 Site Safety and Awareness

All work will be performed in accordance with Army safety measure (Army, 2008). A Site and Safety Plan (SSP) has been developed and defines the roles and responsibilities of site personnel, establishes proper levels of personal protective equipment (PPE), and describes emergency response and contingency procedures. The SSP will be maintained at FWDA for inspection during field activities.

All work will be completed by a supervisor, operators, and technicians that have successfully completed 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training in accordance with 29 U.S. Code of Federal Regulations (CFR) 1910.120 and maintained their mandatory annual 8-hour HAZWOPER refresher certification. A dedicated USACE Site Safety Officer (SSO) will be on site during all site activities associated with this Work Plan.

The required PPE for this field work will include long pants, disposable gloves, safety glasses, safety vest and work boots. A handwashing station will be made available for field staff.

5.2 Materials and Methods

Required equipment and materials as well as procedures for sample collection, required volume, handling, preservation and storage, decontamination, and shipment are outlined in the following sections.

5.2.1 Equipment and Materials

The following equipment and materials, at a minimum, may be required:

- Pin flags or rope to mark DU boundaries
- Stainless steel sampling tool (e.g., push probe or hand auger)
- Clean resealable bags (e.g., Ziplock)
- Sample jars or other appropriate containers for QC samples
- Coolers and ice for cold storage of samples after collection
- Field logbook and pen with waterproof blue or black ink for field documentation
- Camera for photographs
- Global Positioning System (GPS) instrument to submeter accuracy measurements (or less if possible) or other survey equipment to document locations of DUs and samples within

- PPE to be worn during sample collection as required by the Health and Safety Plan (Section 5.1)
- Sand for backfill
- Decon materials: Liquinox/Alconox, nylon brush, 6-mil poly sheeting, tap water, analyte-free water, paper towels, aluminum foil, Kimwipes, as appropriate

5.2.2 Discrete Soil Sampling Procedure

As discussed in Section 2.4, the drainage areas of igloos with soil below the drains with concentrations greater than 200 mg/kg were selected for further investigation. For discrete surface soil sampling, the following procedure will be followed at 20 apron swales (Section 3.1.1) in Parcel 4A:

- 1) Personal protective equipment (PPE) (Section 5.1) will be donned prior to sampling activities.
- 2) The DU boundary will be identified as described in Section 3.2.1.
- 3) The areal extent of the DU will be demarcated in the field using pin flags and fixed with a GPS instrument.
- 4) Sample locations will be determined by visual inspection to target the lowest lying area in the DU; the GPS coordinate of the sample location will be recorded.
- 5) The surface will be cleared by carefully cutting/chopping vegetation to ground level as needed; every attempt will be made to minimize vegetation clearing and disturbance. Surficial objects (e.g., other vegetation, rocks, debris, etc.) will be removed in a manner that will ensure the ground is not disturbed where sampling is to occur.
- 6) Two discrete samples will then be collected from the depth interval specified (i.e., 0-12 in. or 12-18 in.) by direct push, hand auger, or other method that ensures sufficient sample collection. The stainless-steel sampler will be pushed into the soil until the sampler is full or sample depth has been reached, whichever comes first. The sampler will be carefully removed from the ground and the soil pushed out of the sampler directly into a sealable bag.
- 7) Within the sample:
 - a. Vegetation and oversized material will be manually removed with tweezers or spatulas. The excluded materials will be documented via photographs and in the field notebook.
 - b. If adequate sample amount cannot be collected from the assigned sample location due to resistance, obstruction, etc., the sample location will be shifted as minimally as possible within the low area and additional mass collected. If this occurs, it will be documented via photographs and in the field notebook.
- 8) The bag containing sample will be labeled with indelible ink. Rock, gravel, and debris greater than approximately 0.5-inch diameter will not be included in the samples unless they are consistent with and part of the overall soil matrix.
- 9) Holes left by sampling will be filled using surrounding soil or, if necessary, sand will be used to bring the subsurface sampling areas back to original grade.
- 10) The sample(s) will be double bagged, taped for shipping and placed on ice in coolers for transport under chain-of-custody protocol (Section 5.2.7) to the analytical laboratory. Copies of the chain-of-custody forms and shipping documents will be retained in the project file.
- 11) All sample collection data will be documented on site in field logbooks at the time of collection.

12) Equipment will be decontaminated at the igloo under investigation as outlined in Section 5.2.3.

This procedure will be repeated in a step out sequence as previously discussed in Section 3.2.1. Discrete samples will be collected from the lowest areas within the DU boundary where lead could accumulate (e.g., rainwater flow paths, depressions).

- **Phase 1:** Two discrete samples from 0-12 inches (in.) will be collected within DU 1 for each apron swale under investigation and analyzed for lead.
- **Phase 2:** Concurrent with Phase 1 sampling, two discrete samples from 12-18 in. will be collected within DU 1 **AND** two discrete samples from 0-12 in. will be collected within DU 2. Phase 2 samples will not be analyzed until Phase 1 analyses are complete and evaluated. If Phase 1 lead concentrations exceed NMED SSLs for human or ecological receptors, Phase 2 samples will be analyzed.
- **Phase 3:** If Phase 2 samples exceed NMED SSLs, then Phase 3 will be executed as a separate field mobilization. Two discrete samples from 12-18 in. will be collected within DU 2 **AND** two discrete samples from 0-12 in. will be collected within DU 3 and DU 4.

If additional samples are needed to define nature and extent following Phase 3, step out sampling, sampling from 18-20 in., and/or supplemental parameters will be proposed in a work plan addendum.

5.2.3 Decontamination Procedures

Decontamination will be performed on 6-mil poly sheeting in an area of the site outside of the sampling area considered to be free from site-related contamination. Sampling equipment will be decontaminated after sampling, using the following procedure:

- 1) remove solid particles from core/auger tools with nylon brush
- 2) rinse with tap water
- 3) soak and wash with laboratory soap solution (Liquinox or Alconox)
- 4) rinse thoroughly with tap water
- 5) rinse thoroughly with analyte-free water
- 6) air dry equipment by placing on large paper towels laid in back of SUV/truck, cover equipment with paper towels and a weight to ensure equipment remains free from dust particles
- 7) wrap equipment in aluminum foil if the equipment is to be transported

Sampling personnel will avoid contacting sampling equipment with the surrounding soils or unprotected hands. Decontaminated sampling equipment will be wiped free of potential dust using a dedicated Kimwipe™ (Kimtech Science™) prior to additional sampling. The laboratory will supply new/clean sample containers for each sample collected. At a minimum, sample personnel will don new, laboratory-quality disposable gloves following decontamination of sampling equipment and prior to additional sample collection. New gloves may also be exchanged for current or donned at any time during sampling at the discretion of the sampler or other project staff.

5.2.4 Field Quality Control Sample Collection

To obtain analytical data of sufficient quality to support decision making, specific procedures will be followed for the evaluation of data quality. These procedures and requirements for their evaluation are described in this section.

Evaluation of field sampling procedures accuracy and precision will be completed through the collection and evaluation of field QC samples. Table 5-1 provides a summarized description of the planned QC samples for this project. All field QC samples will be collected during the field work. Types of samples and collection frequencies for QC samples are discussed in the following subsections.

5.2.4.1 Equipment Blank

Equipment blanks are samples consisting of analyte-free water collected from a final rinse of sampling equipment after the decontamination procedures have been performed. The purpose of equipment blanks is to measure the effectiveness of the decontamination process and materials storage/handling protocols. By analyzing equipment blanks, the potential for cross-contamination of samples by the sampling equipment may be evaluated. Equipment blanks will be collected at one per day or one per 20 samples, whichever is more frequent. Personnel will collect equipment blanks by pouring laboratory-grade deionized water over the decontaminated sampling equipment into laboratory-provided sampling containers. If disposable equipment is used, no equipment blanks will be collected.

5.2.4.2 Field Blank

A field blank is a sample of the water used for equipment blanks. This water will be obtained from the analytical laboratory and will consist of HPLC-grade laboratory blank water. Analytical data concerning this source water will be obtained and provided prior to the commencement of fieldwork. Field blanks will be collected at one per day or one per 20 samples, whichever is more frequent.

5.2.4.3 Field Duplicate

Field duplicates are useful in documenting the precision of the sampling process ranging from assessing homogenization of the samples in the field for the purposes of subsampling to evaluating the heterogeneity of the matrix. They are two separate samples taken from the same source/location, that are stored in separate containers and analyzed independently by the same method and laboratory. In this study, field duplicates will be collected as close as possible, physically and temporally, to the parent sample at a frequency of 5% or one per 20 samples, whichever is greater.

5.2.5 Sample Documentation

All sample information and field sampling will be recorded and logged in bound field notebooks. The record of sampling information will include sample name, sample number, sample location, date/time, sampler's name, the type of sample, the sampling method, and observations pertinent to sampling.

To be consistent with past FWDA sampling efforts and FWDA protocol, each discrete sample identification (ID) number will consist of a combination of: parcel number, AOC/SWMU number, site identifier(s), source of sample, depth of sample, type of sample, and decision unit number (1 to 7)

Example:

Parcel	4A
AOC	29
Site identifier	C-1122 (Igloo Block C number 1122)
Apron Swale side	L, R, or C (left/right of apron looking at igloo or center across the road)
Source of sample	S (soil)
Depth of sample	0-12 or 12-18 (depth in inches)
Type of sample	D (discrete sample)
Decision unit number	03

Discrete soil sample example: 4A-29-C-1122L-S0-12D-03

For quality assurance/quality control (QA/QC) samples, the sample matrix portion of the ID will be changed. Acceptable QA/QC sample matrices are EB for equipment blank and MSMSD for matrix spike/matrix spike duplicate (MS/MSD). The sample ID may also be shortened if it is not associated with a specific soil sample. An example is provided below.

Discrete soil QC sample – equipment blank example: 4A-29-C-1122-S0-12D-03-EB

A summary of all possible discrete samples to be collected in this field mobilization, including sample ID and analyses, can be found in Table 5-2.

5.2.6 Sample Collection and Storage

The collected soil samples will be placed in a sealable bag in the field. A double layer of large Ziploc® plastic bags is suitable since they are shipped in coolers with ice. Immediately upon collection, the sample container will be labelled with indelible waterproof ink, placed into a cooler with ice and cooled to less than or equal to 6 degrees centigrade (°C) prior to shipping the sample overnight to the analytical laboratory. The samples will be analyzed for lead by USEPA Method 6020A with a holding time of 14 days and a standard turnaround basis by a DoD Environmental Laboratory Accreditation Program (ELAP) certified analytical laboratory. The lab will be specified prior to field mobilization and will be certified in this method for the soil matrix.

5.2.7 Sample Transport and Chain-of-Custody

All samples will be shipped overnight to the laboratory. Discussion with the laboratory, including applicable holding times, will determine the exact shipping schedule. If needed, samples can be shipped at the conclusion of each workday at the local shipping facility in Gallup, New Mexico (7 miles west of FWDA). Prior to and during shipment, samples will be stored according to the appropriate USEPA method. Samples will be treated as environmental samples: shipped in heavy duty coolers, packed to prevent

breakage of materials, and ice to preserve samples. Each shipment will also contain the corresponding field blank and equipment blank, held to the same standards.

Chains of Custody (CoCs) will be used to track the sample from the site to the laboratory. At all times, completed CoC forms will accompany each cooler of samples. Information provided on the CoC will include:

- Sample ID (as described in Section 5.2.5)
- Date/time of collection
- Sample type
- Location of collection
- Collection personnel
- Requested analysis
- Shipment date
- Signatures of those in possession of the sample

CoC forms will be sealed in bags, secured inside of the cooler, and accompany all samples shipped to the analytical laboratory to provide sample possession and receipt information. A pair custody seals will be placed on the cooler prior to shipping. A separate copy of the CoCs will be retained at the project field office to be included in the project files. In addition to the CoCs, the sample IDs, date and time collected, collection location, and analysis requested will also be documented in the field logbooks.

5.2.8 Investigation Derived Waste

Investigation derived waste (IDW) may include PPE, solid waste, and decontamination water. Non-hazardous IDW such as decontamination fluids from the washing and rinsing of sampling equipment will be drummed, transported, and disposed of as non-hazardous waste. It is expected that solid IDW (e.g., PPE, paper towels and other disposable waste generated) will be collected separately in trash bags and disposed of as municipal solid waste. The work conducted in this Work Plan is not expected to generate hazardous waste based on previous site knowledge and knowledge of similar type of work at other locations.

5.3 Deviations from Work Plan

All deviations from the procedures outlined in the main body of this Work Plan or its appendices will be documented. The effect the deviation is expected to have on the data, if any, will also be documented. If amenable to photographic documentation, deviations, will be documented photographically as well as in writing in the field notes. Such deviations and the evaluation of them will be included in the final report.

6.0 Laboratory Approach

The most recently published versions of SW-846 methods with FWDA project-specific reporting limits will be used to provide quantitative analytical data to meet the FWDA RCRA permit requirements (NMED 2005, revised 2015). The laboratory performing sample analyses will follow the current version of the U.S. Department of Defense (DoD) Environmental Field Sampling Handbook, Revision 1.0 (DoD 2013) and the current version of the QSM (DoD/DOE 2023). Laboratory analyses will be performed by an independent analytical laboratory with DoD Environmental Laboratory Accreditation Program (ELAP) accreditation. In addition to DoD ELAP accreditation, the laboratory will hold current accreditation in New Mexico for all testing needed for this study. The independent analytical laboratory must have documentation of current accreditation/certification prior to the field work portion of the study commencing and sample acceptance. The analytical results will be validated in accordance with the most recent version of the QSM at the time of validation.

6.1 Laboratory Quality Control

To obtain analytical data of sufficient quality to allow for decision making, specific procedures will be followed for the evaluation of data quality. These procedures and requirements for their evaluation are described in this section.

Evaluation of laboratory equipment accuracy and precision will be completed through the collection and evaluation of analytical laboratory QC samples. Summarized below is a description of the planned laboratory QC samples for this project. The following laboratory QC program must at a minimum include, but not be limited to:

- a) Method Blanks: Shall be performed at a frequency of one per batch of samples, per matrix type, per sample extraction or preparation method
- b) Laboratory Control Samples: Shall be analyzed at a minimum of one per batch of 20 or less samples per matrix type, per sample extraction or preparation method, except for analytes for which spiking solutions are not available
- c) Matrix Spikes (MS)/Matrix Spike Duplicates (MSDs): Will be performed ON PROJECT MATERIAL AND NOT LABORATORY SAMPLES UNRELATED TO THE SITE at a frequency of one per batch of 20 or less samples per matrix type, per sample extraction or preparation method, except for analytes for which spiking solutions are not available. The spike concentration shall be no greater than 25% to 50% of the maximum concentration along the linear segment of the instrument calibration curve for any analyte
- d) Instrument Performance: Calibration of instrumentation and performance of periodic instrument checks according to the manufacturer and USEPA recommendations, and appropriate laboratory QC procedures

- e) Laboratory Performance Evaluation: Participation in performance evaluation and method studies available from USEPA is required for the laboratory. Performance evaluation under such a program is to be conducted, at least, on a semiannual basis
- f) Laboratory Contamination: Each new shipment or lot of solvent, reagent or adsorbent will be evaluated for purity in accordance with appropriate SOPs
- g) Laboratory Standards: Laboratory standards will be prepared and verified in accordance with appropriate laboratory SOPs
- h) QC Limits: Calculation of QC limits and preparation of control charts will be performed in accordance with appropriate laboratory SOPs
- i) Deviations: Out of control events, dilutions, or outlier data, will be noted and corrective action will be taken in accordance with appropriate laboratory SOPs. The laboratory will communicate any deviations to the sponsor within 48 hours so that corrective actions can be evaluated and initiated if appropriate

Documentation of all quality control activities performed specifically in conjunction with this project will be furnished along with sample results. Copies of all raw data, lab notes, analyses printouts, standard curves, etc., shall be furnished upon request. The laboratory will provide a case narrative of the analyses that discusses any deviations or out of specification events that took place during the analyses for each analysis within each sample delivery group.

6.2 Data Quality Assessment and Usability Evaluation

A project action limit (PAL) of 120 mg/kg for lead was determined for this investigation by selecting the lowest of the human health and ecological screening levels for applicable receptors as discussed in Section 3.1.4. This PAL is driven by the Tier 1 NOAEL for the plant community.

Field QA/QC samples and laboratory QA/QC samples are collected and analyzed to assess the data's quality and usability. The parameters that will be used to specify data quality requirements and to evaluate the analytical system performance are precision, accuracy, representativeness, completeness, and comparability (PARCC). These parameters are defined below:

- Precision - a measure of the reproducibility of measurements under a given set of conditions.
- Accuracy - a measure of the bias that exists in a measurement system.
- Representativeness - the degree to which sample data accurately and precisely represent selected characteristics.
- Completeness - a measure of the amount of valid data obtained from the measurement system compared to the amount that is required.
- Comparability - a measure of confidence with which one data set can be compared with another.

Each of these will be evaluated on a project specific basis in the final report. In addition to PARCC, the following subsections discuss sensitivity and data validation and usability to fully assess the data quality.

6.2.1 Sensitivity

Sensitivity is the ability of the method or instrument to detect the contaminant of concern and other target compounds at the level of interest. Appropriate sampling and analytical methods were selected that have QC acceptance limits that support the achievement of established performance criteria. Assessment of analytical sensitivity will require thorough data validation.

Detection and quantitation limits are laboratory specific. To document measurement uncertainty for low concentration data (DoD, 2017b), the laboratory must provide:

- Project-specific RLs, including precision and bias, for each analyte and matrix, as well as its detection limit (DL), limit of detection (LOD), and limit of quantitation (LOQ), as defined below, with associated precision and bias for lead in each matrix of concern (e.g., reagent water, clean sand, etc.) and verify that these values meet project-specific RLs.
- Laboratory SOPs for establishing the DL and for establishing and verifying the LOD and LOQ.
- Verification of the LOD by processing an LOD verification check sample with each batch of samples (i.e., a quality control sample that is spiked at a concentration at or slightly above the LOD to evaluate whether the analyte of interest is in fact “detectable” in the matrix of interest).
- Set the reporting for non-detects to the LOD with a “U” flag, to accurately report non-detects.
- Verify the LOQ in the project-specific matrix by analyzing a minimum of four replicate samples with known concentrations at the LOQ when the project involves the collection of unusual or difficult matrices, or if the project-specific RL is near the LOQ.
- Review low concentration raw data (e.g., chromatograms). If a result is reported above the DL, make sure that the signal-to-noise ratio is at least 3.
- Compare sample result with blank results. If sample results cannot be distinguished from blank results, the data may not be useable for decision.

The following definitions for DL, LOD, and LOQ are taken the DoD Environmental Data Quality Workgroup Factsheet (2017):

- The DL is the smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration with 99% confidence.
- The LOD is defined as the lowest concentration for reliable reporting of a non-detect of a specific analyte in a specific matrix with a specific method at 99% confidence.
- The LOQ is the smallest concentration that produces a quantitative result with known and recorded precision and bias.

Quantitative results, with a known degree of precision and bias, can only be achieved at or above the LOQ. Detections between the DL and the LOQ assure the presence of the analyte. Their numeric values are estimates and therefore will be indicated as such in laboratory reports (DoD, 2017b).

For more complete descriptions of the above information, the DoD factsheet is provided online (DoD, 2017b).

6.2.2 Data Validation and Useability Determination

6.2.2.1 Data Validation

Personnel involved in data validation will be independent of any data generation effort. The project chemist will be responsible for the oversight of data validation following the hierarchy listed below or the current guidance at the time of completion of field work.

- 1) Latest version of *DoD-QSM* (DoD/DOE, 2023)
- 2) *EDQW General Data Validation Guidelines* (DoD, 2019)
- 3) *USACE's Guidance for Evaluating Performance-Based Chemical Data* (USACE, 2005)

Data validation will be performed when the data packages are received from the laboratory. All (100%) of the data from field samples will undergo Stage 2b data validation with an additional 10% reviewed manually back to Stage 3 and/or 4 data validation, depending on the analytical method. The following items will be addressed in the data validation report:

- A review of the data set narrative to identify any issues that the lab reported in the data deliverable.
- A check of sample integrity (sample collection, preservation, and holding times).
- An evaluation of basic QC measurements used to assess the accuracy, precision, and representativeness of data, including QC blanks, laboratory control samples (LCSs), MS/MSDs, surrogate recovery when applicable, and field or laboratory duplicate results.
- A review of sample results, target compound lists, and detection limits to verify that project analytical requirements are met.
- Initiation of corrective actions, as necessary, based on the data review findings.
- Qualification of the data using appropriate qualifier flags, as necessary, to reflect data usability limitations as determined by the risk assessor.
- Qualifier flags, if required, will be applied to the electronic sample results. If multiple flags are required for a result, the most severe flag will be applied to the electronic result. The hierarchy of flags from the most severe to the least severe will be as follows: X, NJ, UJ, U, and J.
- Any data quality issues will be brought to the attention of the project chemist.

6.2.2.2 Data Usability

Limitations on data usability will be determined and assigned by the risk assessor, if appropriate, as a result of the validation process described earlier. If any data limitations are determined, they will be discussed in the uncertainty section of the final report. The results of the data validation will be discussed in a separate report so that overall data quality can be verified through the precision, accuracy, representativeness, comparability, and completeness (PARCC) of sample results (Section 6.2).

6.3 Laboratory-Specific LOQs/LODs/DLs and Project Action Limits (PALs)

To meet measurement quality objectives (MQOs) (USEPA, 2002) for sensitivity, the LODs for non-detects and LOQs for detects will be below the project specific project action level (PAL).

To select a project specific PAL, screening levels for all human and ecological receptors under evaluation were tabulated and lowest value selected as the PAL. The PAL has been set at the lowest screening value of the human and ecological receptors for lead (Table 6-1), which is 1.63 mg/kg.

SW-846 Method 6010 or 6020 will be utilized to achieve the required limits in this work plan and example DLs, LODs, and LOQs will be provided by the laboratory prior to field mobilization. Matrix effects or dilutions may affect the laboratory limits reported for project samples. Should any circumstance occur that causes the analytical limits to increase, the laboratory will inform the Army, take steps to improve the analyses performance and document all of this in the case narrative.

7.0 Nature and Extent Evaluation Approach

Part of this study is being conducted to characterize the nature and extent of lead in surface soil in the igloo drainage areas. The sampling approach for this WP is designed to detect concentration gradients, should they exist between the DUs within the study areas exterior to the igloo. Nature and extent as well as concentration gradient that could be indicative of migration of a release will be accomplished through the systematic planning and DU design, as presented in Section 3.3. The data collected will be used to interpret if migration has occurred and what concentrations of lead are present in the drainage areas.

To define the nature and extent of lead in the drainage areas, the lead concentration for each DU will be compared to the lead concentration from the prior soil horizon and/or DU within the igloo apron and road swales to:

- determine if any spatial patterns are present that would support migration, and
- determine the nature and extent of lead contamination associated with the igloos.

8.0 Risk Assessment Evaluation Approach

This section describes how the data collected in this field effort will be evaluated and interpreted.

8.1 Guidance

All data generated in this study will be related to the soil matrix. The risk/hazard-based screening levels have been determined in accordance with the FWDA soil cleanup levels as defined by the FWDA RCRA Permit USEPA ID No. NM6213820974 Attachment 7 (December 2005, revised April 2015).

As stated in the NMED guidance (NMED, 2022), a NMED SSL was not calculated for lead; NMED adopted the USEPA RSL. USEPA's lead assessment workgroup has recommended the use of the IEUBK model that relates measured lead concentrations in environmental media with an estimated blood-lead level for assessing risks to residential receptors. The model is used to calculate a blood lead level in children when evaluating residential land use and in adults (based on a pregnant mother's capacity to contribute to fetal blood lead levels). However, USEPA recommends the use of the Adult Lead Methodology (ALM) for adults in evaluating occupational scenarios at sites where access by children is reliably restricted. NMED requires the use of USEPA methodologies to back calculate a soil concentration for the residential receptor that would not result in an estimated blood-lead concentration of 5 µg/dL or greater (residential adult of 200 mg/kg). Per NMED request (NMED, 2024), the conservative and protective residential screening value of 200 mg/kg for lead will be used in this evaluation.

The ecological risk-based screening values for lead (Table 6-1) will be used for screening risk for ecological receptors (NMED *RAG for Site Investigations and Remediation, Volume 2 (V.2) Soil Screening Guidance for Ecological Risk Assessments*, 2017, revised).

The FWDA site-specific background value of 12.4 mg/kg (Shaw, 2010) will be incorporated in the risk screening when receptor SSLs are less than background, as is the case for the deer mouse and the horned lark.

8.2 Project Action Limit (PAL) and FWDA Site-Specific Background

The project specific analytical PAL has been set at 1.63 mg/kg (horned lark, Table 6-1), which corresponds to the lowest NMED SSL assigned to all receptors (human and ecological being evaluated). However, a FWDA site-specific background level for lead was established as 12.4 mg/kg (Shaw, 2010). This site-specific background value is greater than the SSLs for both the deer mouse and the horned lark, therefore, for these two receptors, the initial screening value will be the site-specific background value, as outlined in Section 8.3.

8.3 Risk Screening Evaluation Overview – Phase 1

Data generated from Phase 1 sample collection will be tabulated and evaluated as follows:

- 1) Each DU will be evaluated separately.
- 2) If lead is not detected in any Phase 1 samples, and all LOQs are less than the PAL, then no further risk evaluation or phased sampling will be required.
- 3) For human receptors:
 - a. If the sample concentrations do not exceed the SSL for the human residential receptor, the risk screening is complete for the residential receptor and no Phase 2 analyses or evaluation will be required.
 - b. If the sample concentrations exceed the individual receptor SSLs for the human residential receptor, then the risk screening is not complete for that receptor and Phase 2 analytical data will be evaluated.
 - c. If the sample concentrations do not exceed the SSL for the commercial/industrial worker, the risk screening is complete for the commercial/industrial worker and no Phase 2 analyses or evaluation will be required.
 - d. If the sample concentrations exceed the individual receptor SSLs for the commercial/industrial worker, then the risk screening is not complete for that receptor and Phase 2 analytical data will be evaluated.
- 4) For ecological receptors:
 - a. If lead is detected above the PAL, then the sample concentration will be screened against the site-specific background value of 12.4 mg/kg.
 - b. If the background level for lead is not exceeded, then risk screening is complete, no further risk evaluation will be required for Phase 1, and no Phase 2 analyses or evaluation will be required.
 - c. If the background level of lead is exceeded, then risk to the deer mouse and the horned lark is presumed to exist since background is greater than both the Tier 1 and Tier 2 TRVs; evaluation of Phase 2 data will be required.
 - d. If the sample concentrations do not exceed the SSLs for plants (Tier 1 and then Tier 2) the risk screening is complete for plants and no Phase 2 analyses or evaluation will be required.
 - e. If the sample concentrations exceed the SSLs for plants (Tier 1 and then Tier 2) the risk screening is not complete for plants and Phase 2 analytical data will be evaluated.
- 5) All receptors retained from Steps 1 through 4 at specific DUs will be retained for further evaluation.

Figure 8-1 shows the decision logic for the Phase 1 risk screening.

8.4 Risk Screening Evaluation Overview – Phase 2

The initial Phase 2 evaluation will follow a similar sequence as Phase 1. Phase 1 will not be used to screen out receptors from the Phase 2 evaluation because the Phase 2 data are for different sampling locations. Initially in Phase 2, each sample result within each DU, at each depth will be evaluated individually following the process outlined for Phase 1 data evaluation as presented in Section 8.3.

When this initial evaluation is complete, weighted concentration averages for the 0-18 inch soil interval in DU 1 (R or L) will be generated for receptors exposed to both surface and subsurface soils. These weighted averages will be screened using SSLs for plants and the deer mouse in the manner described in Section 8.2.

Figure 8-2 shows the additional decision logic for Phase 2 risk screening.

8.5 Risk Screening Conclusions

At the conclusion of Phase 1, exceedances of NMED SSLs for specific receptors, in specific DUs at specific depths will be summarized. This summary will be used to evaluate nature/extent and risk for each igloo apron and road swale. A similar summary will be generated from Phase 2 data, if collected, with an additional evaluation step that accounts for subsurface soil exposures for plants and the deer mouse.

These data will be used collectively to evaluate nature/extent and potential risk to human/ecological receptors and to support decision making for the igloo apron and road swales.

9.0 Summary

This WP proposes soil sample collection to generate data within igloo apron and road swales for Igloo Block C in Parcel 4A. Sample locations were determined by evaluating historical data collected from the igloo exteriors within Parcel 4A at FWDA to identify igloos with lead soil concentrations under the igloo drains greater than the current NMED residential SSL of 200 mg/kg.

Sampling will follow a phased approach. Using a risk decision screening sequence, the lead analysis data generated will be screened against NMED SSLs to assess both nature and extent, and risk to human/ecological receptors.

The results of the risk screening will result in one of two outcomes:

- 1) Data gaps exist and additional information will be required to support decision making, or
- 2) Data are sufficient to support decision making regarding the potential need for remedial action.

10.0 Deliverables

Deliverables shall include electronic versions of draft and final reports, and respective data as outlined below.

10.1 Report

A report on the findings from the execution of this Work Plan will be written. At a minimum, the report will include the following:

- a) Brief overview/background of the project
- b) Sample Collection - sampling sites and locations tabulated and plotted on a figure showing locations of igloos under evaluation; a summary and cross referencing to study documents will be made as needed
- c) Field Procedures - a synoptic summary with cross referencing to project documents
- d) Quality Control (field) - description; cross referencing project documents as needed
- e) Analyses - description of what was analyzed for, methodologies etc.
- f) Results and Discussion - Data evaluation will include the following:
 - i. Tabular Data Summaries (e.g., simple statistics, validation qualifiers)
 - ii. Laboratory and validation qualifiers will be incorporated when they impact the evaluation
 - iii. Site-specific aspects (e.g., matrix effects, dilution required, etc.) that might impact the data discussions will be incorporated as appropriate
 - iv. Data usability evaluation
 - v. Calculations that were performed to conducting the analyte screening
 - vi. Screening of analytical data against USEPA/NMED lead SSLs for residential receptors, as defined in the WP
 - vii. Discussion of uncertainty
- g) Conclusion - Final conclusions for the study

10.2 Submittal of Electronic Copy

The following will be submitted to the NMED:

- a) Electronic PDF copy of the report and all accompanying figures, tables, photos, field data sheets, and raw data sheets
- b) Portable Document Format (PDF) files of all laboratory reports for chemical analysis, validation reports and miscellaneous parameters

11.0 References

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Figures

**Figure 2-1: Regional Map of Fort Wingate Depot Activity,
McKinley County, New Mexico**

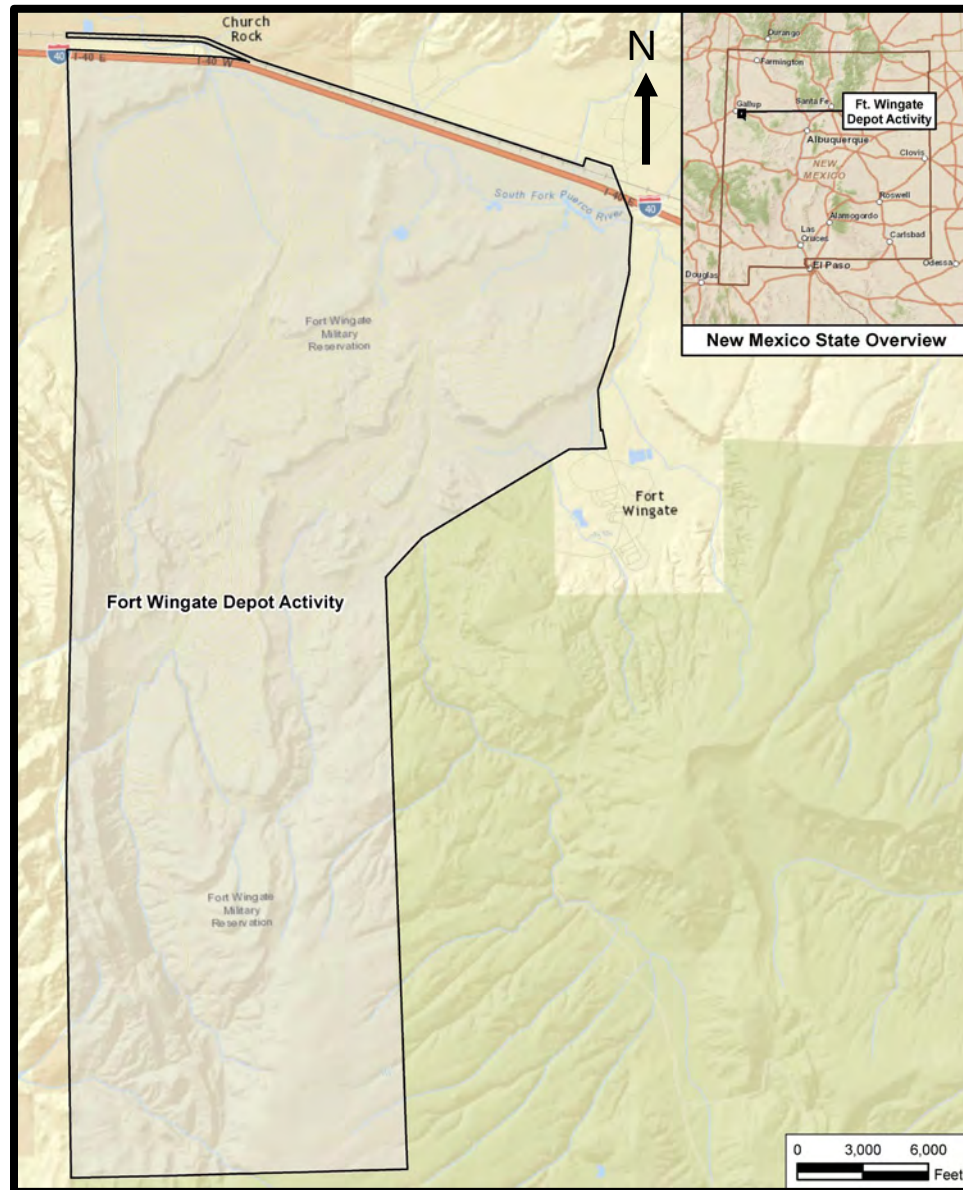


Figure 2-2: Overview Map of Parcels and Igloo Blocks within Fort Wingate Depot Activity



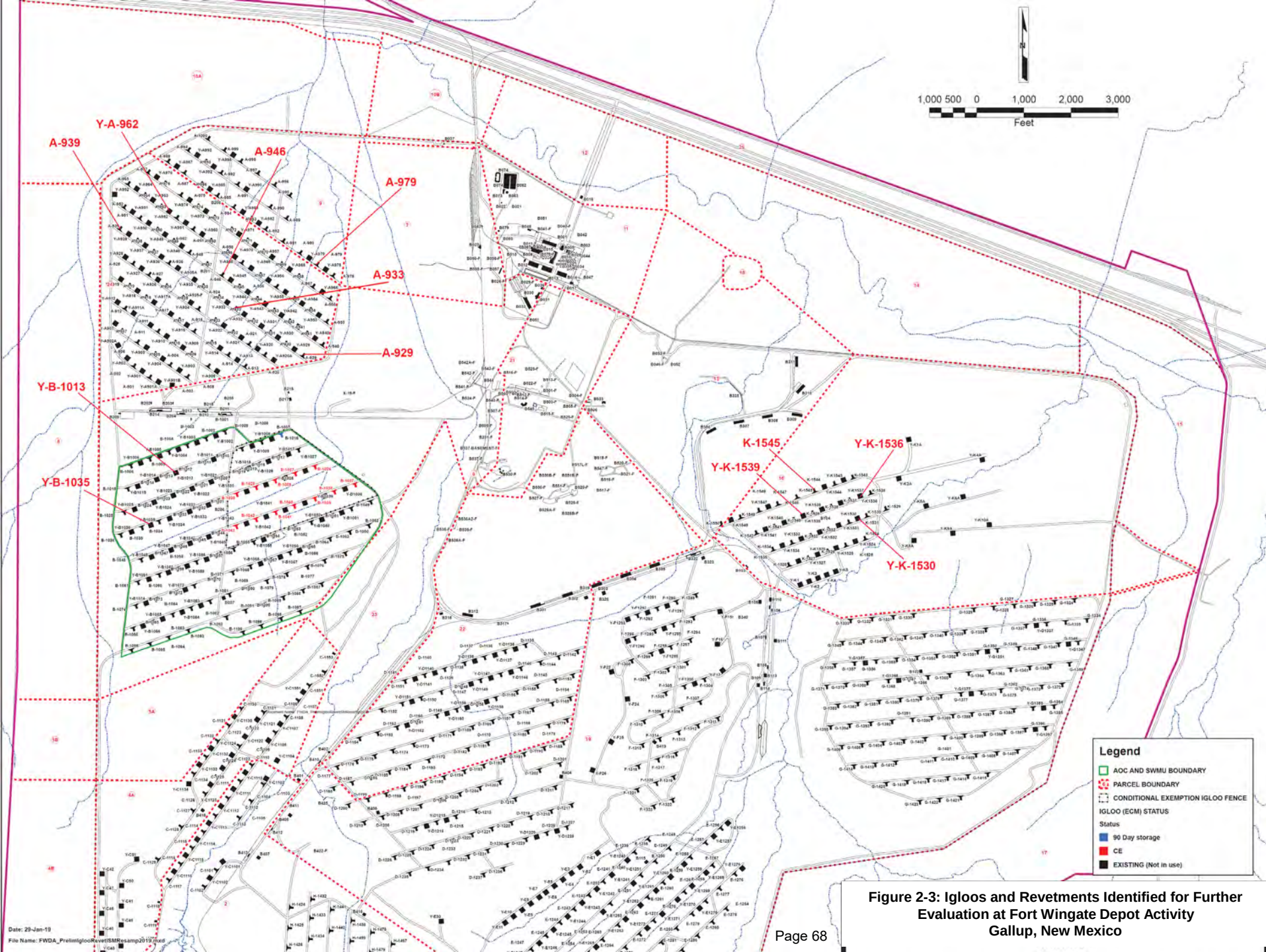


Figure 2-3: Igloos and Revetments Identified for Further Evaluation at Fort Wingate Depot Activity Gallup, New Mexico

Figure 2-4: Igloos Identified for Further Evaluation in Parcel 4A

*indicated with green circles

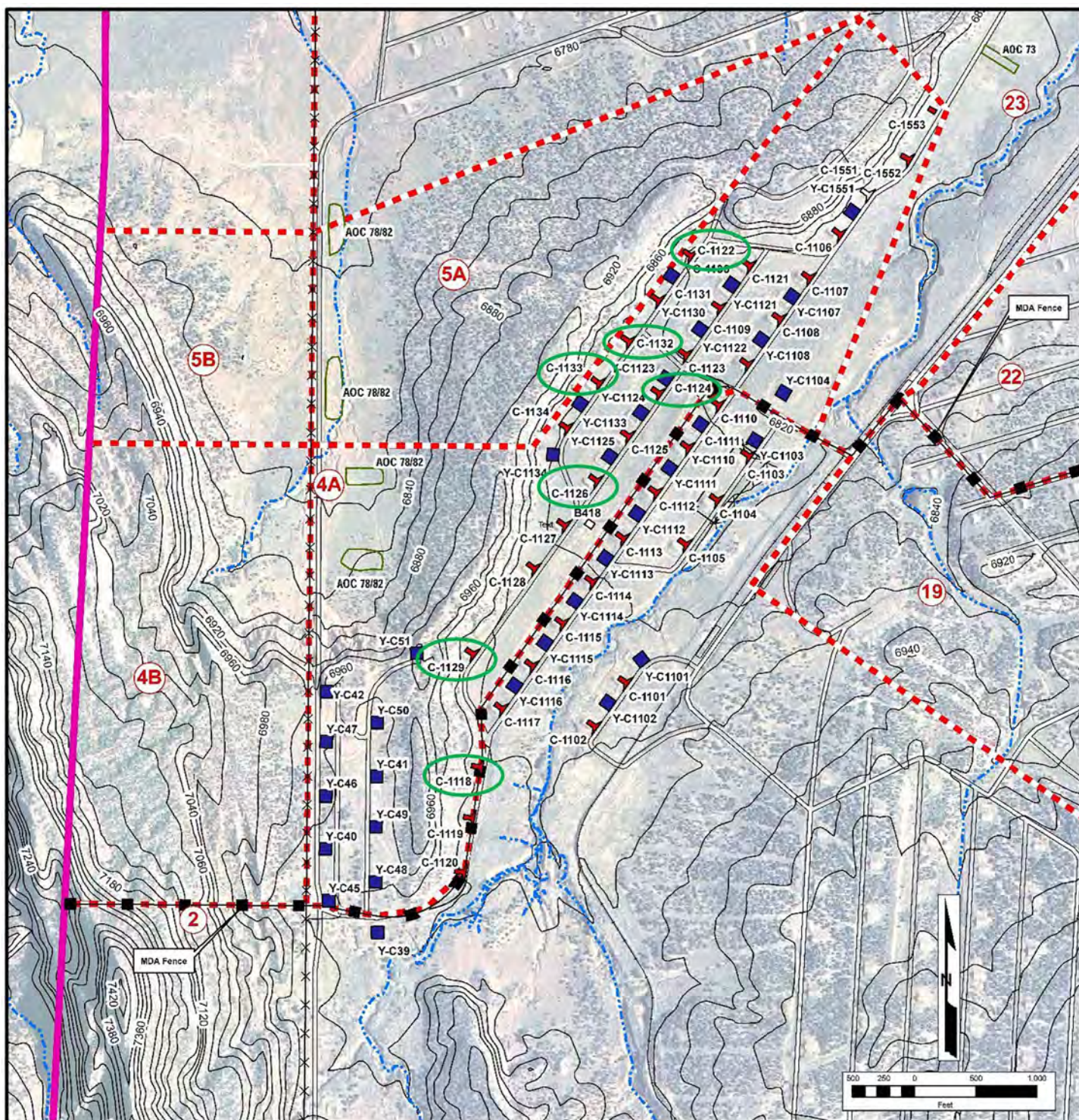
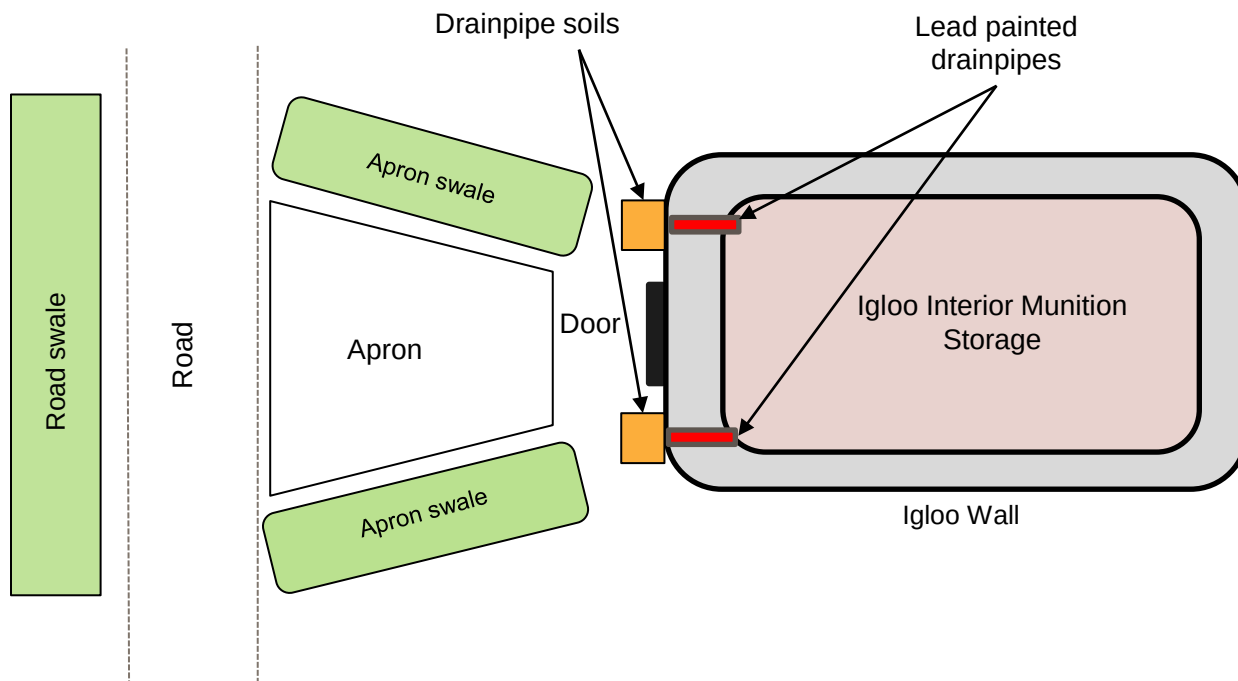
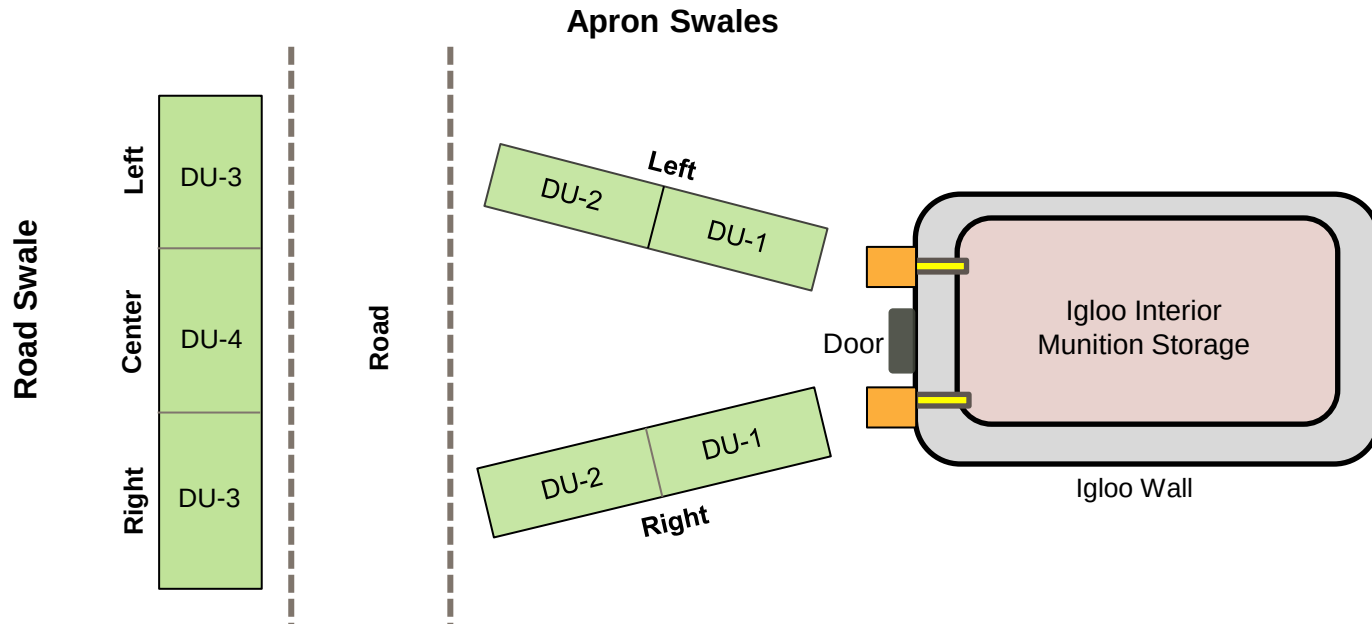


Figure 3-1: Igloo Schematic - Key Features



* drawing not to scale

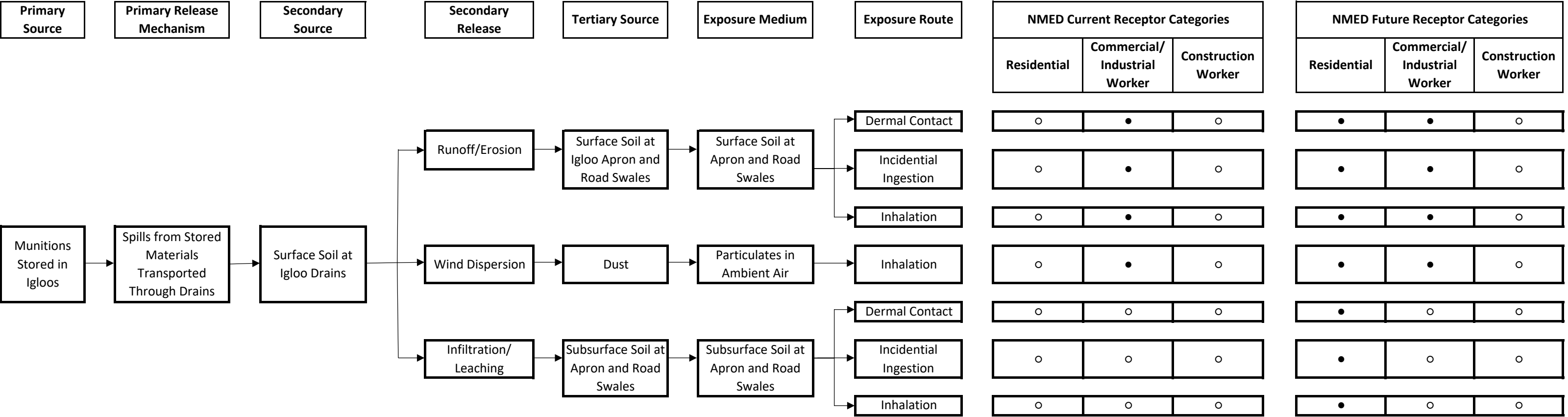
Figure 3-2: Igloo Schematic¹ Showing Decision Units (DUs) for Evaluating Nature and Extent²



Footnotes:

- 1) drawing not to scale
- 2) swale across the road only sampled when lead exceeds 200 mg/kg in Phase 2 samples AND road elevation is topographically lower than the apron

Figure 3-3: Conceptual Site Model (CSM) - Human Health

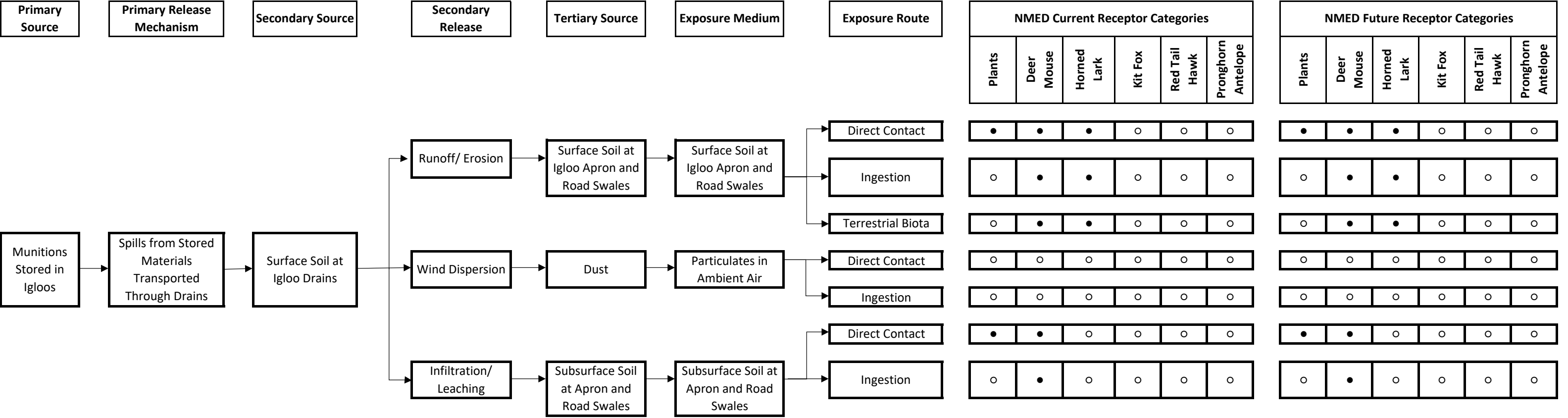


Footnotes:

- Indicates complete/potentially complete pathway
- Indicates incomplete or insignificant pathway

NMED Risk Assessment Guidance (RAG) for Site Investigations and Remediation, Volume 1 Soil Screening Guidance for Human Health Risk Assessments (November 2022)

Figure 3-4: Conceptual Site Model (CSM) - Ecological

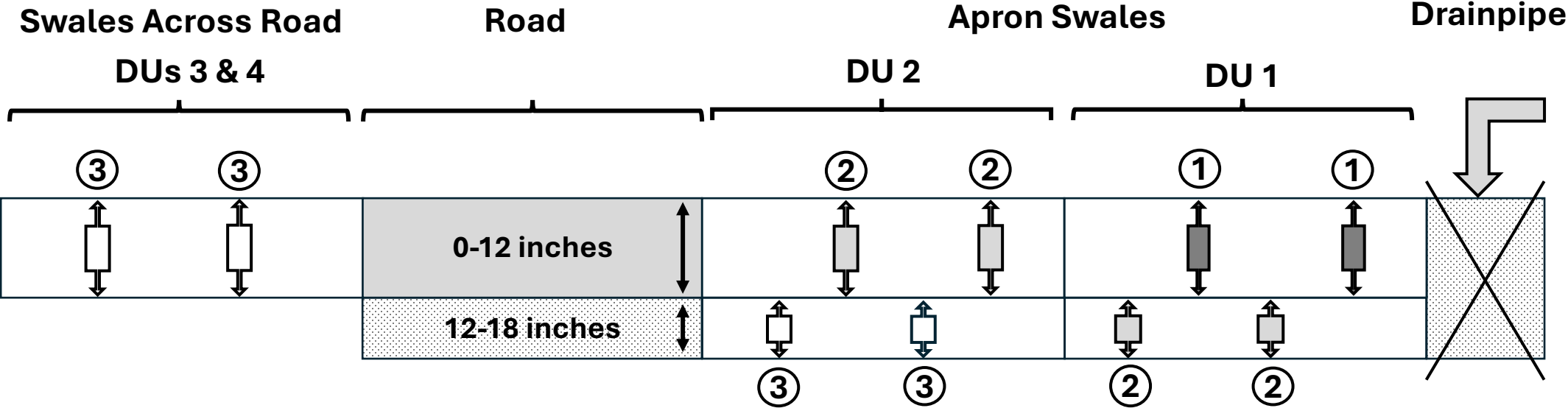


Footnotes:

- Indicates complete/potentially complete pathway
- Indicates incomplete or insignificant pathway

NMED RAG for Site Investigations and Remediation, Volume 2 Soil Screening Guidance for Ecological Risk Assessments (March 2017)

Figure 3-5: Phased Sample Collection Demonstrated in a Single Swale Cross Section^{1,2}

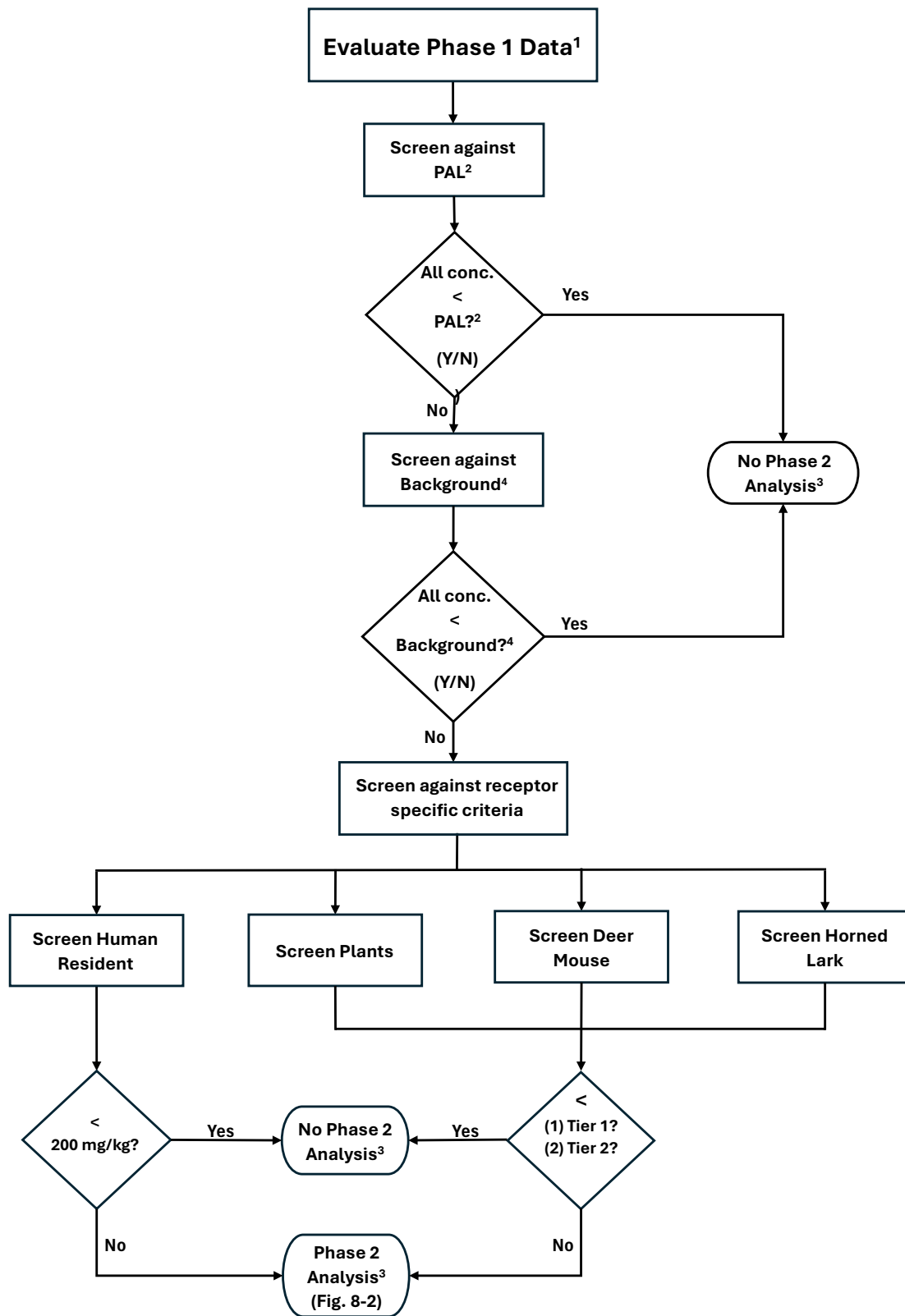


Footnotes:

- 1) drawing not to scale
- 2) swales across the road only sampled when lead exceeds 200 mg/kg in Phase 2 samples AND road elevation is topographically lower than the apron

○ Phase #

Figure 8-1: Decision Logic for Phase 1 Risk Screening
Igloo Exterior Work Plan
Fort Wingate Depot Activity, Gallup, NM



Footnotes:

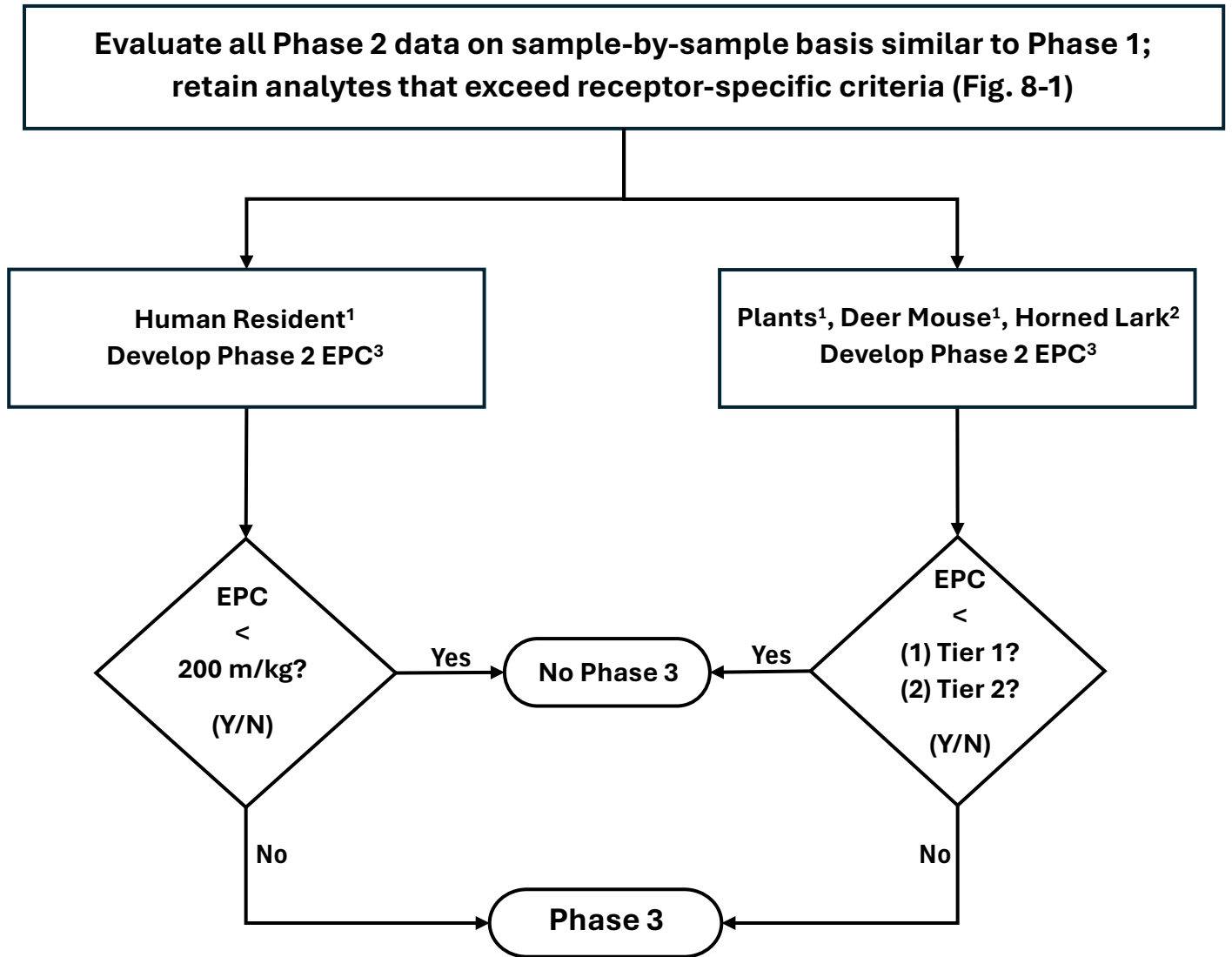
1) Phase 1 - two discrete samples collected from 0-12 in. from DU1

2) PAL - project action limit = 120 mg/kg for lead, determined by selecting the lowest of the human health and ecological screening levels for applicable receptors

3) Phase 2 - two discrete samples collected from 12-18 in. from DU1 and two discrete samples collected from 0-12 in. from DU2

4) Background - FWDA site-specific background value for lead, 12.4 mg/kg (Shaw, 2010)

Figure 8-2: Decision Logic for Phase 2 Risk Screening
Igloo Exterior Work Plan
Fort Wingate Depot Activity, Gallup, NM



Footnotes:

- 1) EPC for residents, plants, deer mice = Depth weighted (2 samples in DU1 at 0-12 in., 2 samples in DU1 at 12-18 in., 2 samples in DU2 at 0-12 in.)
- 2) EPC for horned lark = Depth weighted (2 samples in DU1 at 0-12 in., 2 samples in DU2 at 0-12 in.)
- 3) EPC = measure of central tendency; when N < 8, EPC is arithmetic mean; when N > 8, EPC is 95UCL

Tables

**Table 2-1: Explosives Concentrations Under Igloo Drains in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1106	C-1107	C-1108	C-1109	C-1118	C-1119	C-1120	C-1121
				4029C-1106SS- 001C-SO	4029C-1107SS- 001C-SO	4029C-1108SS- 001C-SO	4029C-1109SS- 001C-SO	4029C-1118SS- 001C-SO	4029C-1119SS- 001C-SO	4029C-1120SS- 001C-SO	4029C-1121SS- 001C-SO
				6/3/2008	6/3/2008	6/4/2008	6/4/2008	6/5/2008	6/5/2008	6/5/2008	6/4/2008
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
4-Nitrotoluene	99-99-0	mg/kg	247	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08
HMX	2691-41-0	mg/kg	3850	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08
Nitrobenzene	98-95-3	mg/kg	60.4	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04
Nitroglycerin	55-63-0	mg/kg	6.16	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4
PETN	78-11-5	mg/kg	570	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08

Footnotes:

1) Data sources: Final Release Assessment Report Parcel 4A - Rev 2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

**Table 2-1 (cont.): Explosives Concentrations Under Igloo Drains in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential S-SSL ²		C-1122	C-1123	C-1124	C-1125	C-1126	C-1127	C-1128	
					4029C-1122SS-001C-SO	4029C-1123SS-001C-SO	4029C-1124SS-001C-SO	4029C-1125SS-001C-SO	4029C-1126SS-001C-SO	4029C-1127SS-001C-SO	4029C-1128SS-001C-SO	
					6/4/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008	
Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data sources: Final Release Assessment Report Parcel 4A - Rev 2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

**Table 2-1 (cont.): Explosives Concentrations Under Igloo Drains in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1129	C-1130	C-1131	C-1132	C-1133	C-1134	C-1
				4029C-1129SS- 001C-SO	4029C-1130SS- 001C-SO	4029C-1131SS- 001C-SO	4029C-1132SS- 001C-SO	4029C-1133SS- 001C-SO	4029C-1134SS- 001C-SO	04A29-C-1551L-EC- 0.0-0.5-D-SO
				6/4/2008	6/5/2008	6/5/2008	6/5/2008	6/5/2008	6/5/2008	11/16/2013
Explosives										
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.2 U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.2 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.2 U
HMX	2691-41-0	mg/kg	3850	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.2 U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.2 U
Nitroglycerin	55-63-0	mg/kg	6.16	4 U	4 U	4 U	4 U	4 U	4 U	0.5 U
PETN	78-11-5	mg/kg	570	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.097 =	0.08 U	0.08 U	0.08 U	0.2 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.2 U

Footnotes:

1) Data sources: Final Release Assessment Report Parcel 4A - Rev
2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

**Table 2-1 (cont.): Explosives Concentrations Under Igloo Drains in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	551	C-1552	
				04A29-C-1551R-EC-	04A29-C-1552L-EC-	04A29-C-1552R-EC-
				0.0-0.5-D-SO	0.0-0.5-D-SO	0.0-0.5-D-SO
				11/16/2013	11/16/2013	11/16/2013
Explosives						
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.2 U	0.2 U	0.2 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.2 U	0.2 U	0.2 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.2 U	0.2 U	0.2 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.2 U	0.2 U	0.2 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.2 U	0.2 U	0.2 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.2 U	0.2 U	0.2 U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.2 U	0.2 U	0.2 U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	NA	NA	NA
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.2 U	0.2 U	0.2 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.2 U	0.2 U	0.2 U
4-Nitrotoluene	99-99-0	mg/kg	247	0.2 U	0.2 U	0.2 U
HMX	2691-41-0	mg/kg	3850	0.2 U	0.2 U	0.2 U
Nitrobenzene	98-95-3	mg/kg	60.4	0.2 U	0.2 U	0.2 U
Nitroglycerin	55-63-0	mg/kg	6.16	0.5 U	0.5 U	0.5 U
PETN	78-11-5	mg/kg	570	0.5 U	0.5 U	0.5 U
RDX	121-82-4	mg/kg	83.1	0.2 U	0.2 U	0.2 U
Tetryl	479-45-8	mg/kg	156	0.2 U	0.2 U	0.2 U

Footnotes:

1) Data sources: Final Release Assessment Report Parcel 4A - Rev
2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

**Table 2-2: RCRA 8 Metals Concentrations Under Igloo Drains in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1122		C-1129		C-1132		C-1133	
				4029C-1122SS-R- XRFC-SO		4029C-1129SS-R- XRFC-SO		4029C-1132SS-R- XRFC-SO		4029C-1133SS-L- XRFC-SO	
				10/2/2010		10/2/2010		10/2/2010		10/2/2010	
Metals											
Arsenic	7440-38-2	mg/kg	7.1	2.7	=	2.9	=	2.2	=	2.1	=
Barium	7440-39-3	mg/kg	15,558	150	=	290	=	300	=	230	=
Cadmium	7440-43-9	mg/kg	70.5	0.43	J	0.21	J	0.49	U	0.25	J
Chromium	7440-47-3	mg/kg	96.6	7.7	=	10	=	12	=	13	=
Lead ³	7439-92-1	mg/kg	200	220	=	150	=	360	=	90	=
Mercury	7439-97-6	mg/kg	23.7	0.018	=	0.018	U	0.0073	J	0.0089	J
Selenium	7782-49-2	mg/kg	391	3.1	U	2.7	U	2.9	U	3.5	U
Silver	7440-22-4	mg/kg	391	1	U	0.91	U	0.98	U	1.2	U

Footnotes:

- 1) Data sources: Final Release Assessment Report Parcel 4A - Rev 2.0 (October 2012)
- 2) NMED RAG (November 2022, revised)
- 3) See Table 2-3 for additional Pb results collected at the drains

*Sample type: XRFC = discrete confirmation

Exceeds criteria of 200 mg/kg

XRFC Data not screened for this work plan

**Table 2-3: Lead Concentrations Under Igloo Drains in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Igloo	Sample Name	Sample Date	Lead (mg/kg)
C-1106	4029C-1106SS-001C-SO	06/03/2008	84.1
C-1107	4029C-1107SS-001C-SO	06/03/2008	21.6
C-1108	4029C-1108SS-001C-SO	06/04/2008	145
C-1109	4029C-1109SS-001C-SO	06/04/2008	405
C-1118	4029C-1118SS-001C-SO	06/05/2008	201
C-1119	4029C-1119SS-001C-SO	06/05/2008	65.7
C-1120	4029C-1120SS-001C-SO	06/05/2008	50.9
C-1121	4029C-1121SS-001C-SO	06/04/2008	189
C-1122	4029C-1122SS-001C-SO	06/04/2008	252
	4029C-1122SS-R-XRFC-SO	10/02/2010	220
C-1123	4029C-1123SS-001C-SO	06/04/2008	157
C-1124	4029C-1124SS-001C-SO	06/04/2008	273
C-1125	4029C-1125SS-001C-SO	06/04/2008	164
C-1126	4029C-1126SS-001C-SO	06/04/2008	233
C-1127	4029C-1127SS-001C-SO	06/04/2008	78.6
C-1128	4029C-1128SS-001C-SO	06/04/2008	474
C-1129	4029C-1129SS-001C-SO	06/04/2008	232
	4029C-1129SS-R-XRFC-SO	10/02/2010	150
C-1130	4029C-1130SS-001C-SO	06/05/2008	82.2
C-1131	4029C-1131SS-001C-SO	06/05/2008	117
C-1132	4029C-1132SS-001C-SO	06/05/2008	241
	4029C-1132SS-R-XRFC-SO	10/02/2010	360
C-1133	4029C-1133SS-001C-SO	06/05/2008	256
	4029C-1133SS-L-XRFC-SO	10/02/2010	90
C-1134	4029C-1134SS-001C-SO	06/05/2008	184
C-1551	4029C-1551SS-001C-SO	not sampled in 2008 - drains encased in concrete	
C-1552	4029C-1552SS-001C-SO	06/02/2008	212

Footnotes:

1) Data sources: a) Release Assessment Report Parcel 4A Igloo Block C, Final (March 2009); b) Final Release Assessment Report Parcel 4A - Rev 2.0 (October 2012)

*Sample type: C = composite, XRFC = discrete confirmation

Composite sample exceeds 1/2 criteria (100 mg/kg)

Discrete sample exceed criteria (200 mg/kg)

XRF Data not screened for this work plan

Table 2-4: Lead and Explosives Concentrations at Apron Swales in Parcel 4A, Igloo Block C¹ Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	C-1101	C-1102	C-1103	C-1104	C-1105	C-1106	C-1107	C-1108
				4029C-1101SS- M-SO	4029C-1102SS- M-SO	4029C-1103SS- M-SO	4029C-1104SS- M-SO	4029C-1105SS- M-SO	4029C-1106SS- M-SO	4029C-1107SS- M-SO	4029C-1108SS- M-SO
				6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/3/2008	6/3/2008	6/4/2008
Metals											
Lead	7439-92-1	mg/kg	200	12.1 =	10.3 =	8.7 J	9 J	8.4 J	8.4 =	12.5 =	8.1 =
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
HMX	2691-41-0	mg/kg	3850	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerin	55-63-0	mg/kg	6.16	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
PETN	78-11-5	mg/kg	570	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C,
Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table 2-4 (cont.): Lead and Explosives Concentrations at Apron Swales in Parcel 4A, Igloo Block
C¹ Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1109	C-1110	C-1111	C-1112	C-1113	C-1114	C-1115	C-1116
				4029C-1109SS- M-SO	4029C-1110SS- M-SO	4029C-1111SS- M-SO	4029C-1112SS- M-SO	4029C-1113SS- M-SO	4029C-1114SS- M-SO	4029C-1115SS- M-SO	4029C-1116SS- M-SO
				6/4/2008	6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/5/2008	6/5/2008	6/5/2008
Metals											
Lead	7439-92-1	mg/kg	200	10.1 =	5.9 J	7.9 J	9.4 J	5.3 J	6.3 =	9.2 =	5.3 =
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
HMX	2691-41-0	mg/kg	3850	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerin	55-63-0	mg/kg	6.16	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
PETN	78-11-5	mg/kg	570	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C,
Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table 2-4 (cont.): Lead and Explosives Concentrations at Apron Swales in Parcel 4A, Igloo Block
C¹ Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1117	C-1118	C-1119	C-1120	C-1121	C-1122	C-1123	C-1124
				4029C-1117SS- M-SO	4029C-1118SS- M-SO	4029C-1119SS- M-SO	4029C-1120SS- M-SO	4029C-1121SS- M-SO	4029C-1122SS- M-SO	4029C-1123SS- M-SO	4029C-1124SS- M-SO
				6/5/2008	6/5/2008	6/5/2008	6/5/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008
Metals											
Lead	7439-92-1	mg/kg	200	6.1 =	7.5 =	11.6 =	9.3 =	12.6 =	9.4 =	9.1 =	8.5 =
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
HMX	2691-41-0	mg/kg	3850	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerin	55-63-0	mg/kg	6.16	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
PETN	78-11-5	mg/kg	570	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C,
Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table 2-4 (cont.): Lead and Explosives Concentrations at Apron Swales in Parcel 4A, Igloo Block
C¹ Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1125	C-1126	C-1127	C-1128	C-1129	C-1130	C-1131	C-1132
				4029C-1125SS- M-SO	4029C-1126SS- M-SO	4029C-1127SS- M-SO	4029C-1128SS- M-SO	4029C-1129SS- M-SO	4029C-1130SS- M-SO	4029C-1131SS- M-SO	4029C-1132SS- M-SO
				6/4/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008	6/5/2008	6/5/2008	6/5/2008
Metals											
Lead	7439-92-1	mg/kg	200	11.8 =	10.5 =	13 =	11.7 =	11.3 =	11.2 =	12.5 =	10 =
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
HMX	2691-41-0	mg/kg	3850	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerin	55-63-0	mg/kg	6.16	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
PETN	78-11-5	mg/kg	570	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C,
Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table 2-4 (cont.): Lead and Explosives Concentrations at Apron Swales in Parcel 4A, Igloo Block
C¹ Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1133	C-1134	C-1551	C-1552
				4029C-1133SS- M-SO	4029C-1134SS- M-SO	4029C-1551SS- M-SO	4029C-1552SS- M-SO
				6/5/2008	6/5/2008	6/3/2008	6/2/2008
Metals							
Lead	7439-92-1	mg/kg	200	11.9 =	10.3 =	9.6 =	12 =
Explosives							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08 U	0.08 U	0.08 U	0.08 U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04 U	0.04 U	0.04 U	0.04 U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08 U	0.08 U	0.08 U	0.08 U
HMX	2691-41-0	mg/kg	3850	0.08 U	0.08 U	0.08 U	0.08 U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerin	55-63-0	mg/kg	6.16	4 U	4 U	4 U	4 U
PETN	78-11-5	mg/kg	570	0.2 U	0.28 =	0.2 U	0.2 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C,
Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table 2-5: Lead and Explosives Concentrations at Revetments in Parcel 4A, Igloo Block C¹ Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-C1104	Y-C1107	Y-C1108	Y-C1121	Y-C1122	Y-C1123	Y-C1124	Y-C1125
				4029Y-C1104SS- M-SO	4029Y-C1107SS- M-SO	4029Y-C1108SS- M-SO	4029Y-C1121SS- M-SO	4029Y-C1122SS- M-SO	4029Y-C1123SS- M-SO	4029Y-C1124SS- M-SO	4029Y-C1125SS- M-SO
				6/4/2008	6/3/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008	6/4/2008
Metals											
Lead	7439-92-1	mg/kg	200	8.8	7.3	5.7	8.7	9.7	7.3	7.1	9.5
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 UN	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 UN	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 UN	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
3,5Dinitroaniline	618-87-1	mg/kg	31.6	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	25.0	0.04 U	0.04 UN	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
HMX	2691-41-0	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
m-Nitrototluene	99-08-1	mg/kg	7.64	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Nitrobenzene	98-95-3	mg/kg	247	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerine	55-63-0	mg/kg	3850	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
o-Nitrotoluene	88-72-2	mg/kg	60.4	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Pentaerythrilol Telranitrate	78-11-5	mg/kg	6.16	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
p-Nitrotoluene	99-99-0	mg/kg	570	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C, Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table 2-5 (cont.): Lead and Explosives Concentrations at Revetments in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	Y-C1130	Y-C1133	Y-C1134	Y-C1551	Y-C40	Y-C41	Y-C42	Y-C45
				4029Y-C1130SS-M-SO	4029Y-C1133SS-M-SO	4029Y-C1134SS-M-SO	4029Y-C1551SS-M-SO	4029Y-C40SS-M-SO	4029Y-C41SS-M-SO	4029Y-C42SS-M-SO	4029Y-C45SS-M-SO
				6/5/2008	6/5/2008	6/5/2008	6/3/2008	6/3/2008	6/3/2008	6/3/2008	6/3/2008
Metals											
Lead	7439-92-1	mg/kg	200	9	11.3	9.2	8.5	4.6	9.4	5.4	4.1
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 UN	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
3,5Dinitroaniline	618-87-1	mg/kg	31.6	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
HMX	2691-41-0	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
m-Nitrototluene	99-08-1	mg/kg	7.64	0.08 U	0.08 U	0.08 UN	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Nitrobenzene	98-95-3	mg/kg	247	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerine	55-63-0	mg/kg	3850	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
o-Nitrotoluene	88-72-2	mg/kg	60.4	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Pentaerythrilol Telranitrals	78-11-5	mg/kg	6.16	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
p-Nitrotoluene	99-99-0	mg/kg	570	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C, Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table 2-5 (cont.): Lead and Explosives Concentrations at Revetments in Parcel 4A, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	Y-C46	Y-C47	Y-C48	Y-C49	Y-C50	Y-C51
				4029Y-C46SS-M- SO	4029Y-C47SS-M- SO	4029Y-C48SS-M- SO	4029Y-C49SS-M- SO	4029Y-C50SS-M- SO	4029Y-C51SS-M- SO
				6/3/2008	6/3/2008	6/3/2008	6/3/2008	6/3/2008	6/3/2008
Metals									
Lead	7439-92-1	mg/kg	200	4	6.3	4.3	10.2	8.9	7.3
Explosives									
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
3,5Dinitroaniline	618-87-1	mg/kg	31.6	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	25.0	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
HMX	2691-41-0	mg/kg	6.16	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.079 U
m-Nitrototluene	99-08-1	mg/kg	7.64	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.079 U
Nitrobenzene	98-95-3	mg/kg	247	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitroglycerine	55-63-0	mg/kg	3850	4 U	4 U	4 U	4 U	4 U	4 U
o-Nitrotoluene	88-72-2	mg/kg	60.4	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.079 U
Pentaerythrilol Telranitrals	78-11-5	mg/kg	6.16	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
p-Nitrotoluene	99-99-0	mg/kg	570	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.079 U
RDX	121-82-4	mg/kg	83.1	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.079 U
Tetryl	479-45-8	mg/kg	156	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.079 U

Footnotes:

1) Data sources: Release Assessment Report Parcel 4A Igloo Block C, Final (March 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table 3-1: Area Calculations for Decision Unit (DUs) at Igloo Swales
Fort Wingate Depot Activity, New Mexico**

Igloo Area ^{1,2}					
DU		L	W	Area	
Side	number	ft	ft	acres	sq. ft
Left	1	15	4	0.0014	60
	2	15	4	0.0014	60
	3	15	4	0.0028	120
Right	1	15	4	0.0014	60
	2	15	4	0.0014	60
	3	15	4	0.0028	120
Center	4	15	4	0.0028	120
Total - per igloo (7 DUs)				0.014	600
Total - Igloo Block C, Parcel 4A				0.322	13,800

Assumptions:

- 1) Each side of the igloo apron, approx. 30 ft L by 4 ft W, is divided into 2 DUs
- 2) The swale across the road is 90 ft L by 4 ft W to account for drainage coming from the apron. This area is divided into 3 DUs (see Figure 3-2)

**Table 3-2: Area Use Factor Calculations for Ecological Receptors at Igloo Swales
Fort Wingate Depot Activity, New Mexico**

Receptor	Home Range ¹		Area Use Factor (AUF) (%)		AUF > 10% Home Range ² (Y/N)	
			Igloo Swales (7 DUs)	Igloo Block C Parcel 4A	Igloo Swale (2 DUs)	Igloo Swale (4 DUs)
Plants	NA	NA	NA	NA	Evaluated at all sites (NMED RAG V.2, 2017, revised)	
Deer Mouse	0.3	1.31E+04	0.47	107.33		
Horned Lark	4	1.74E+05	0.035	8.05		
Kit Fox	2767	1.21E+08	0.000051	0.0116	N	N
Red-Tailed Hawk	1770	7.71E+07	0.000079	0.0182	N	N
Pronghorn Antelope	3422	1.49E+08	0.000041	0.00941	N	N

Footnotes

NA - not applicable

Example calculation: Igloo AUF = (0.0084 acres/Home Range acres) X 100

(1) Home Range values obtained from NMED Risk Assessment Guidance for Investigations and Remediation, Volume II (2017 Revised).

(2) As indicated in the NMED Risk Assessment Guidance for Investigations and Remediation, Volume II (2017 Revised) Section 3.1 it is assumed that risks are negligible from exposure to COPECs at sites that are less than 10% of the receptors home range.

**Table 5-1: Quality Control Samples and Acceptance Criteria
Fort Wingate Depot Activity, New Mexico**

Quality Control Type	Sample Type	Minimum Frequency	Acceptance Criteria
Field	Field Duplicate	Frequency of 5% or one per 20 samples	Relative Percent Difference (RPD) Goal of $\leq 20\%$
	Field Blank	One per batch of laboratory water used	Results < LOQ
	Equipment Blank	One per day or one per 20 samples; none if disposable equipment is used.	Results < LOQ
Laboratory	Method Blank	One per batch, at least one every 20 samples (rounded up) (5%)	Results < LOQ
	Laboratory Control Sample		No analytes detected $> 1/2$ LOQ
	Matrix Spike/Matrix Spike Duplicate		RPD $\leq 20\%$ between MS and MSD. RPD does not apply if both results are below the LOQ

**Table 5-2: Discrete Samples to be Collected at Select Swales in Parcel 4A, Igloo Block C
Fort Wingate Depot Activity, New Mexico**

Igloo	Swale Side	Phase	Sample Depth (in.)	Sample ID	Analysis
C-1108	Left	1	0-12	4029C-1108LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1108LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1108LS0-12D-02	
	Right	1	0-12	4029C-1108RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1108RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1108RS0-12D-02	
C-1109	Left	1	0-12	4029C-1109LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1109LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1109LS0-12D-02	
	Right	1	0-12	4029C-1109RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1109RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1109RS0-12D-02	
C-1118	Left	1	0-12	4029C-1118LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1118LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1118LS0-12D-02	
	Right	1	0-12	4029C-1118RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1118RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1118RS0-12D-02	
C-1121	Left	1	0-12	4029C-1121LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1121LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1121LS0-12D-02	
	Right	1	0-12	4029C-1121RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1121RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1121RS0-12D-02	
C-1122	Left	1	0-12	4029C-1122LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1122LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1122LS0-12D-02	
	Right	1	0-12	4029C-1122RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1122RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1122RS0-12D-02	
C-1123	Left	1	0-12	4029C-1123LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1123LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1123LS0-12D-02	
	Right	1	0-12	4029C-1123RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1123RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1123RS0-12D-02	

**Table 5-2: Discrete Samples to be Collected at Select Swales in Parcel 4A, Igloo Block C
Fort Wingate Depot Activity, New Mexico**

Igloo	Swale Side	Phase	Sample Depth (in.)	Sample ID	Analysis
C-1124	Left	1	0-12	4029C-1124LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1124LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1124LS0-12D-02	
	Right	1	0-12	4029C-1124RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1124RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1124RS0-12D-02	
C-1125	Left	1	0-12	4029C-1125LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1125LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1125LS0-12D-02	
	Right	1	0-12	4029C-1125RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1125RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1125RS0-12D-02	
C-1126	Left	1	0-12	4029C-1126LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1126LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1126LS0-12D-02	
	Right	1	0-12	4029C-1126RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1126RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1126RS0-12D-02	
C-1128	Left	1	0-12	4029C-1128LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1128LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1128LS0-12D-02	
	Right	1	0-12	4029C-1128RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1128RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1128RS0-12D-02	
C-1129	Left	1	0-12	4029C-1129LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1129LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1129LS0-12D-02	
	Right	1	0-12	4029C-1129RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1129RS12-18D-02	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1129RS0-12D-02	
C-1131	Left	1	0-12	4029C-1131LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1131LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1131LS0-12D-02	
	Right	1	0-12	4029C-1131RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1131RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1131RS0-12D-02	

**Table 5-2: Discrete Samples to be Collected at Select Swales in Parcel 4A, Igloo Block C
Fort Wingate Depot Activity, New Mexico**

Igloo	Swale Side	Phase	Sample Depth (in.)	Sample ID	Analysis
C-1132	Left	1	0-12	4029C-1132LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1132LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1132LS0-12D-02	
	Right	1	0-12	4029C-1132RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1132RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1132RS0-12D-02	
C-1133	Left	1	0-12	4029C-1133LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1133LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1133LS0-12D-02	
	Right	1	0-12	4029C-1133RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1133RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1133RS0-12D-02	
C-1134	Left	1	0-12	4029C-1134LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1134LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1134LS0-12D-02	
	Right	1	0-12	4029C-1134RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1134RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1134RS0-12D-02	
C-1552	Left	1	0-12	4029C-1552LS0-12D-01	Analyze for Pb
		2	12-18	4029C-1552LS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1552LS0-12D-02	
	Right	1	0-12	4029C-1552RS0-12D-01	Analyze for Pb
		2	12-18	4029C-1552RS12-18D-01	Collect with Phase 1; analysis dependent on Phase 1 results
			0-12	4029C-1552RS0-12D-02	

**Table 6-1: Summary of Soil Screening Values and Project Action Limit (PAL) Selection
Fort Wingate Depot Activity, McKinley County, New Mexico**

Receptor		NMED SSLs	Units	Notes
Human (1)	Residential	200	mg/kg	USEPA RSL 2024
	Commercial/ Industrial	NA	mg/kg	
Ecological (2)	Plants	120	mg/kg	Tier 1 Effect Concentration NOAEL
	Plants	576	mg/kg	Tier 2 Effect Concentration LOAEL
	Deer Mouse	4.7	mg/kg/day	Tier 1 TRV NOAEL
	Deer Mouse	8.9	mg/kg/day	Tier 2 TRV LOAEL
	Horned Lark	1.63	mg/kg/day	Tier 1 TRV NOAEL
	Horned Lark	3.26	mg/kg/day	Tier 2 TRV LOAEL
FWDA Site Background (3)		12.4		95 UTL

Footnotes:

1) NMED RAG for Site Investigations and Remediation, Vol 1 Soil Screening Guidance for Human Health Risk Assessments, Nov 2022

2) NMED RAG for Site Investigations and Remediation, Vol 2 Soil Screening Guidance for Ecological Risk Assessments (2017 revised)

3) Soil Background Study and Data Evaluation Report, Fort Wingate Depot Activity, Gallup, New Mexico (October 2010)

Selected PAL - lowest SSL

Appendices

Appendix A1: NMED correspondence in regard to igloo exteriors from initial work plan (July 2023)

(ARMY Presentaton to NMED:Fort Wingate Depot Activity Igloo Apron & Revetment Soil Samples, 08 November 2018; ARMY/NMED email correspondence ISM sampling at igloo exteriors and revetments, 01 July 2020 – 04March 2021; ARMY/NMED email correspondence on lines-of-eviedence (December 2021 through 13 April 2022)/NMED letter correspondence Risk Evaluation Approach (Comment 7) (November 07, 2018)

FORT WINGATE DEPOT ACTIVITY IGLOO APRON & REVETMENT SOIL SAMPLES

Prepared by USACE Albuquerque
Environmental Engineering
Pate, Daisy
For Army BRAC/NMED HWB
08 November 2018



"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."



**US Army Corps
of Engineers**



PURPOSE

- Evaluate historical data at apron & revetments to determine the probability that similar features which have not been sampled would contain contamination
- Mr. Cobrain suggested review of igloo aprons & revetments analytical data
- Samples analyzed to date:
 - 308 aprons (out of 732)
 - 198 revetments (out of 285)

Bottom Line Up Front

- The government proposes no further soil sampling at the igloo apron & revetment sites because of the lack of screening level exceedances at the sites that have been sampled and the negligible probability of screening level exceedances at unsampled sites.



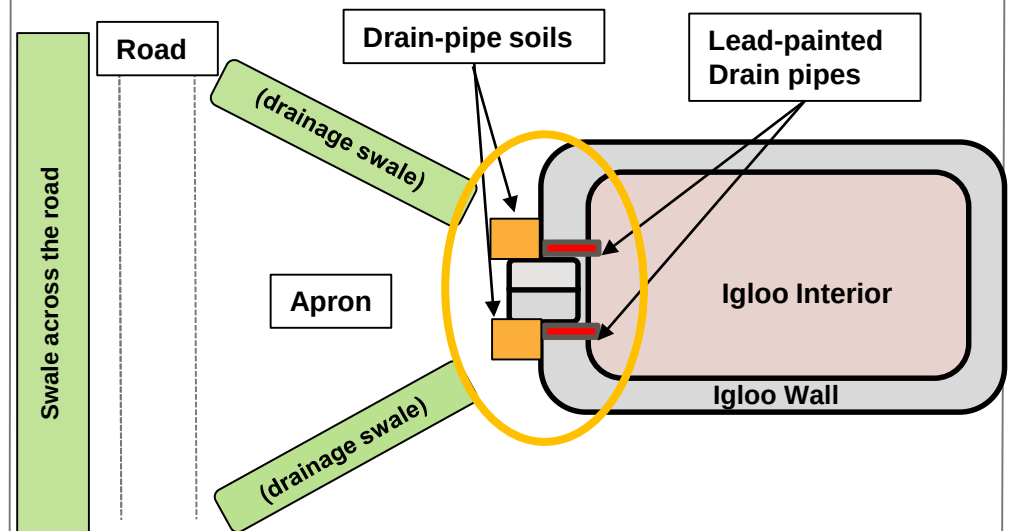
Revetment

Temporary Ordnance Storage



Igloo

Long-term Ordnance Storage



* drawing not to scale



= SOIL SAMPLE AREAS



HISTORY

4

- FWDA Land use is dominated by structures historically used for storage of high-explosive munitions and bulk explosives in the Magazine Areas (Igloo Blocks) and the protection and buffer zones that surround them.
- Surficial geology is Chinle formation remnants and alluvial deposits known to contain levels of metals higher than other surficial deposits.
 - Background soil data – Lead 12.4 mg/kg (95% upper tolerance limit) (Shaw 2010)
- Igloo Block Samples analyzed for RCRA 8 & Explosives
- Lead (Pb) is the COPC based on analytical results
- SL for discrete samples NMED residential = 400 mg/kg
- SL for composites = $0.5 \times \text{NMED residential} = 200 \text{ mg/kg}$



PREVIOUS INVESTIGATION HISTORY

1997 RI Feasibility Study

- 8% of sites were sampled at random
 - 61 Igloos
 - 22 Revetments
- 3 samples at each site
 - Igloos
 - 1 in Apron
 - 2 at drain locations
 - Revetments
 - 3 samples equally spaced

Since 2008 by Parcel & AOC

- Aprons
- Revetments
- NMED Accepted data
 - RAR's
 - RFI's
 - PIIM's
 - Investigation Reports



PREVIOUS INVESTIGATION HISTORY

Summary of Sampling Events Since 2008

Block	AOC	Date (year)	# Aprons in study area	# Aprons Sampled	Total # Revet	# Revet Sampled	COPC
A	18	2008	100	100	71	70	Expl., RCRA 8
B	28	2011	100	92	55	55	Expl., RCRA 8
C	29	2008	36	36	36	33	Expl., RCRA 8
D	30	2009	53	53	13	13	Pb, Expl.
K	41	2012	27	27	27	27	Pb, As, Expl.
SUM TOTAL			316	308	202	198	



STATISTICAL APPROACH- ASSUMPTIONS

- There are 2 independent data sets:
 - 1) Aprons
 - 2) Revetments
- All igloo blocks have historical use of storing High Explosives Munitions
- All igloo blocks have used the same sampling method
- Data represent soil from the same relative location e.g. apron or revetment
- Decision can be made with complete certainty of “clean or dirty”
 - Clean – soil concentration < NMED residential SSL of 400 mg/kg
 - Dirty – soil concentration > NMED residential SSL of 400 mg/kg



APRON DATA - 308 SAMPLES

- **Zero Exceedances** of NMED SSL's for Lead
- Lead at some drain-pipe soil locations exceeded NMED Residential SSL's
- Source of lead from paint on drain pipe
- Drain-pipe soils could have transported to aprons so
- COC limited to lead



APRON ANALYSIS FOR LEAD

STATISTICAL INPUT & CONCLUSIONS

9

N = Total # of igloo aprons = **732**

n = # of igloo aprons sampled = **308**

k = # of failures for igloos aprons = **0**

- Soil samples were collected from **308** (n) of **732** (N) aprons
- All soil samples were demonstrated to be “clean” ($k = 0$)
- k = “failures” means apron samples that exceed background concentrations and risk-based screening limits
- 95% confidence that at least 99% (**99.32%**) of all aprons are “clean”
- **Conclusion:** Extremely likely that all remaining aprons are clean



REVETMENT DATA - 198 SAMPLES

- Same analytical suite collected as in aprons (RCRA 8, Exp.)
- **Zero Exceedances** of NMED SSL's
- Statistical analysis was confined to lead only



REVETMENT ANALYSIS FOR LEAD

STATISTICAL INPUT & CONCLUSIONS

11

N = Total # of revetments = **285**

n = # of revetments sampled = **198**

k = # of failures* for revetments = **0**

- Soil samples were collected from **198** (n) of the **285** (N) revetments
- All soil samples were demonstrated to be “clean” ($k = 0$)
- 95% confidence that at least 99% (**99.30%**) of all revetments are “clean”
- **Conclusion:** Extremely likely that all remaining revetments are clean

* k = “failures” means revetments that exceed background concentrations and risk-based screening limits



US Army Corps
of Engineers.



Question from NMED:

“Is there a correlation between detections in drain data with data from the aprons?”

Approach:

Drain-pipe soil samples with lead (Pb) detections above 200 mg/kg were compared to the same igloos' apron samples with lead (Pb) detections.

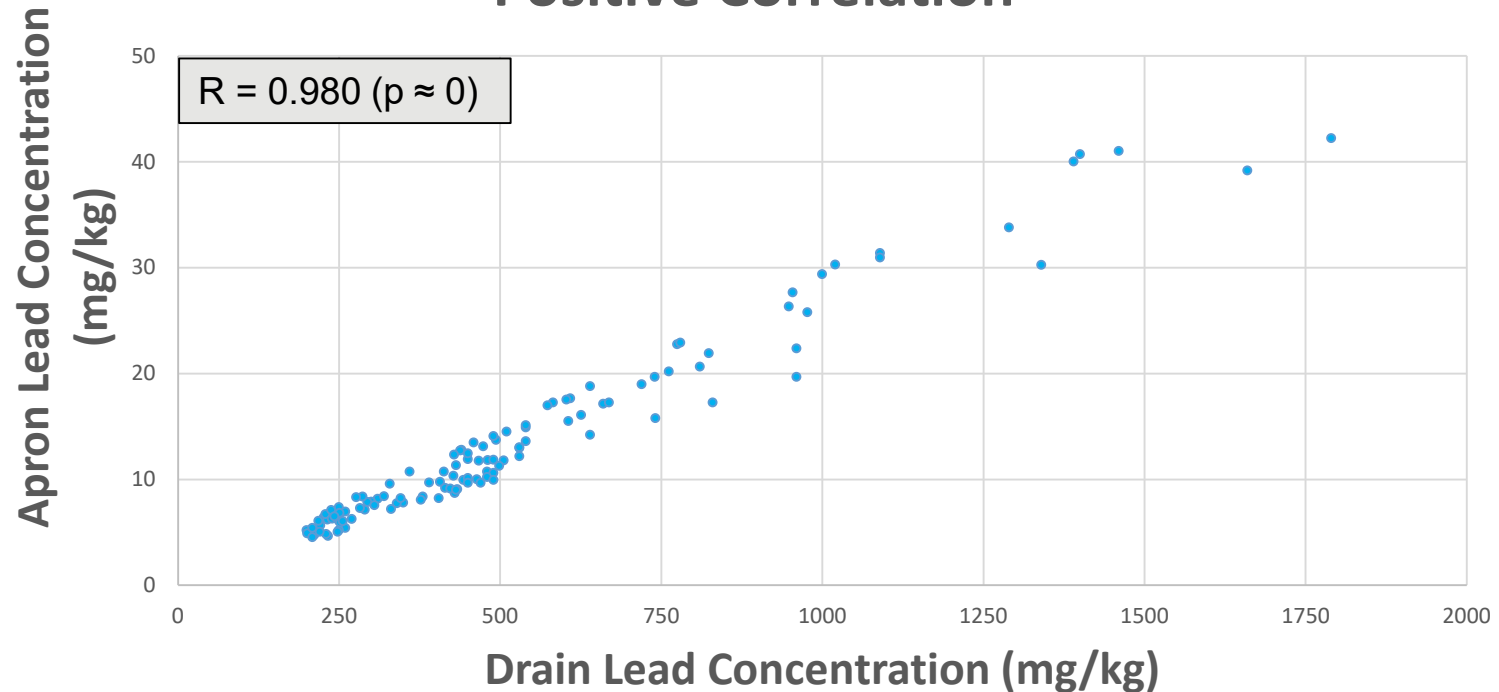


RESULTS

- Detections in drain data with data from the aprons were graphed
- Graphical representations of the concentrations of lead in the aprons versus the concentrations of lead in the drains include:
 - Hypothetical Positive Correlation Graph
 - Hypothetical No Correlation Graph
 - FWDA data sets (complete)



Hypothetical Pb in Apron vs Drain Positive Correlation

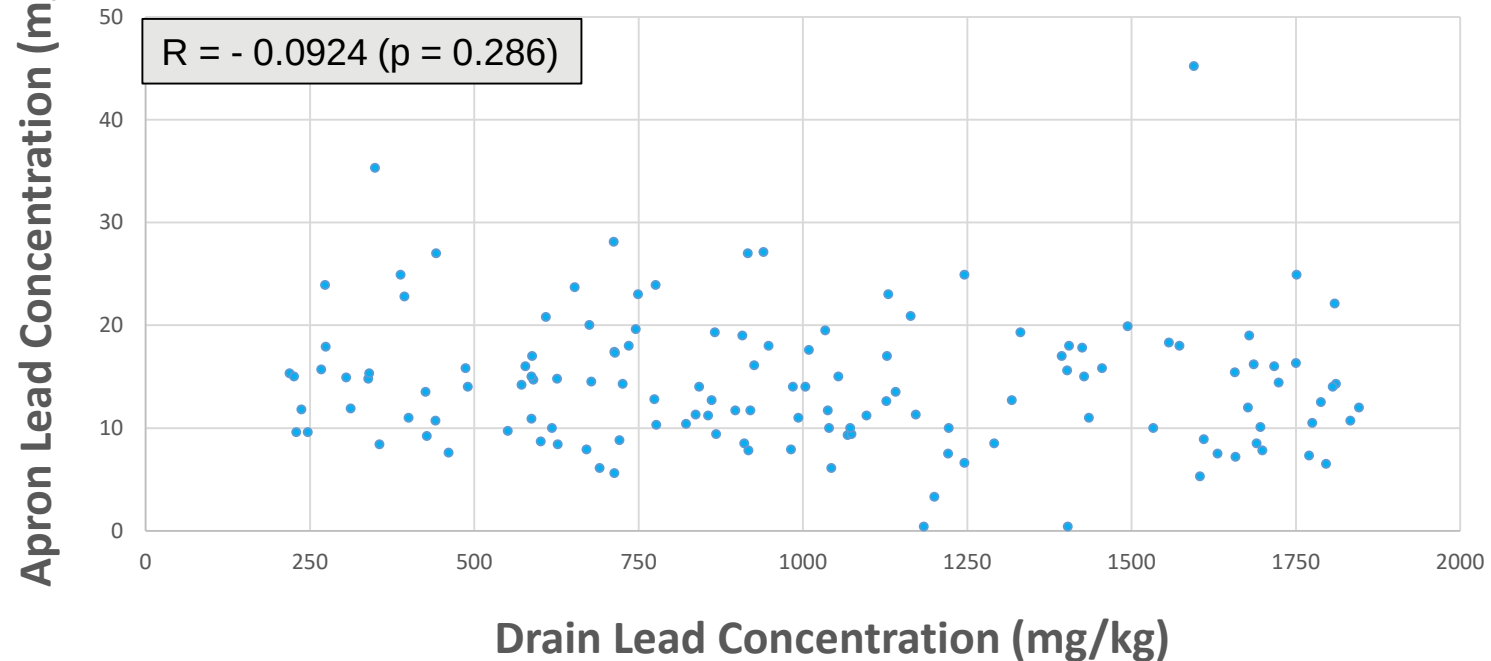


- If a relationship between Pb in drain-pipe soil and lead in aprons exists → expect similar graph
- Conclude → lead is migrating to aprons



Hypothetical Pb in Apron vs Drain

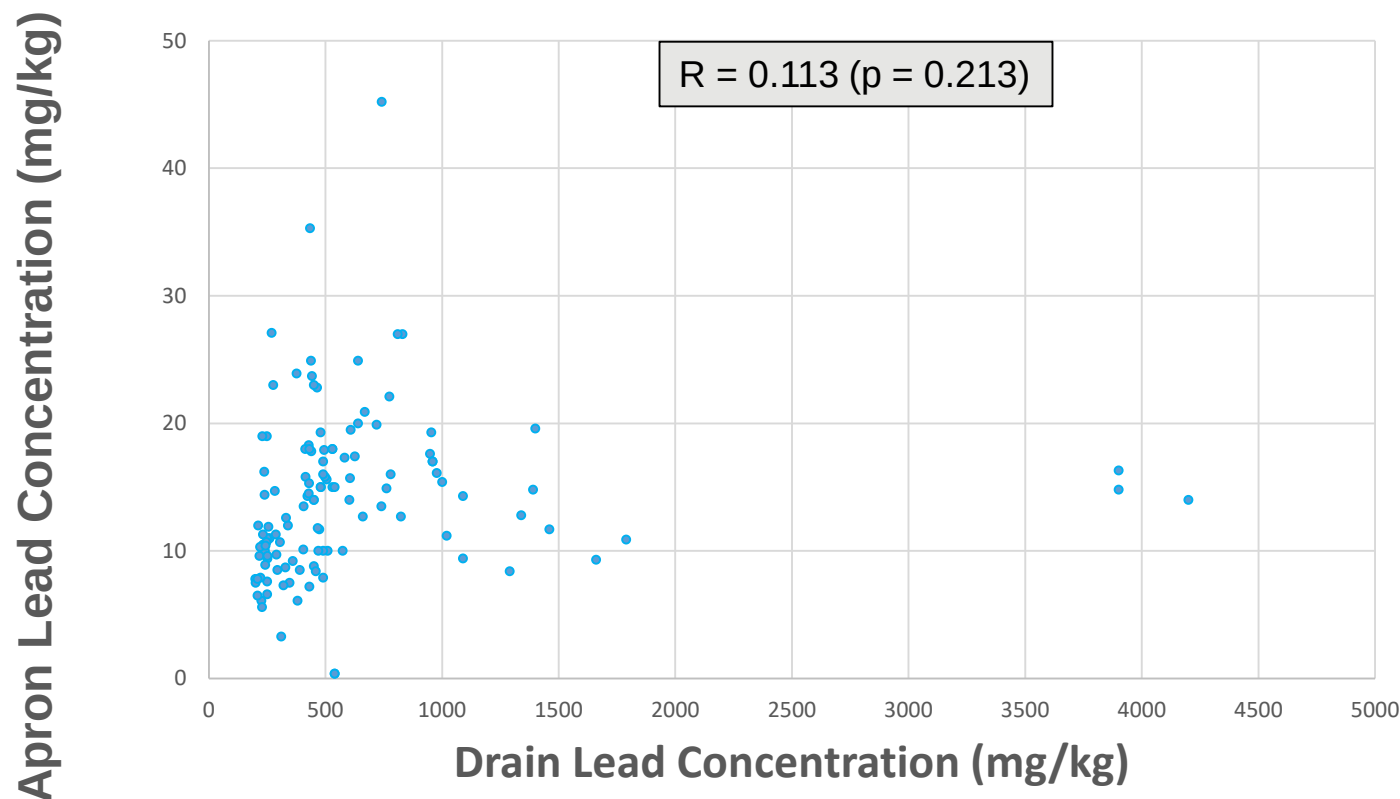
No Correlation



- If no relationship between drain-pipe soil lead and lead in aprons exists → expect similar graph
- Conclude → lead is NOT migrating to aprons



Apron vs Drain Lead (Pb) Sample Results Drain Sample >200 ppm – Entire Data Set



- No relationship between lead in drain-pipe soil and aprons exists,
- Therefore, lead is not migrating to aprons



ARMY CONCLUSIONS

- Extremely likely that all unsampled aprons and revetments are clean
- Does “dirty” soil at drain = higher Pb concentrations in the apron drainage? → **NO**
 - There is no relationship (significant correlation) between apron & drain Pb concentrations
 - Previous removals have shown Pb contamination is limited to within a 1 ft³ soil volume directly under each drain outlet and is not migrating to the aprons
- **Overall conclusion → No further testing at igloo aprons and revetments**



ARMY RECOMMENDATIONS

18

- Prepare a formal recommendation requesting no further sampling at igloo apron & revetment sites



Questions?



REFERENCE DOCUMENTS FOR DATA REVIEW

<u>References</u>		
1	P24 RAR	Final Release Assessment Report Parcel 24, Jan 2014.
2	P6 RFI	Final RCRA Facility Investigation Report Parcel 6, Sept 2012.
3	P4 RAR	Final Release Assessment Report Parcel 4A,Igloo Block C, Mar 2009
4	P22 RFI	Final RCRA Facility Investigation Report Parcel 22 Revision 2, May 2015.
5	P16 RFI	Final RCRA Facility Investigation Parcel 16, Aug 2013.
6	RI/FS	Remedial Invest./Feasibility Study & RCRA Corrective Action Program, 1997
7	P22 PIIM	Final Permittee-Initiated Interim Measures Report Parcel 22, Feb 2015.pdf
8	P6 PIIM	Final Permittee-Initiated Interim Measures Report Parcel 6 AOC 28 ...2016
9	FWDA	FWDA Historical Data
10	P16 PIIM	Final Permittee-Initiated Interim Measures Report Parcel 22, Dec 2017
11	P9 IR	Investigation Report, Igloo Block A, Parcel 9, Aug 2018.
12	P4 PIIM	Final Permittee-Initiated Interim Measures Report P4A April 15, 2014



Aprons and Revetments - NMED Email Communication Table

<u>Parcel</u>	<u>Topic</u>	<u>PM</u>	<u>Contractor(s)</u>	<u>NMED Deadline (if any)</u>	<u>Status</u>
Igloos	Igloo Aprons and Revetments - DU's, Igloo Block A reference, 6-hottest areas sampling approach	Smith	In-house	N/A	NMED Response received 3/04/21
Army Email	NMED Response Date	Notes			
	3/4/2021	NMED responded each of the ARMY's 8 points from 1/26/2021. 1. NMED Response: Yes. Please realize that, while I don't have the exact number with me now, this exception allowed FWDA to eliminate over 95% of the locations sampled in Igloo Block A from further investigation. NMED is concerned that FWDA appears unable to follow up on the less than 5% of sampling locations that did not meet the screening criteria. 2. NMED Response: Yes. 3. NMED Response: NMED has acknowledged this fact in the past and will continue to do so. The Permittee can provide photographic evidence of the topography and natural drainage paths along the roads for these igloos. 4. NMED Response: NMED will accept discrete sampling, but without a scale on the provided figure, it is difficult to estimate how many discrete samples will be required. 5. NMED Response: Yes, the reference is to unsampled igloo blocks. This approach is directly related to the completion of the resampling of the six hottest igloo aprons/revetments in Igloo Block A. If this sampling effort indicates that there are no identifiable hot spots in these sampling locations, then the two-step approach indicated above would be acceptable. 6. NMED Response: Noted. NMED assumes this is in reference to work plans for unsampled igloo blocks. 7. NMED Response: While NMED agrees that this approach may be acceptable, it is dependent upon the six hottest apron/revetment resampling investigation results. Drain sampling should be discrete vs the composites used in past sampling efforts. Note: For clarification of your statement above in parenthesis, the samples were multi-incremental samples used for screening purposes only and cannot be used for confirmation purposes unless they meet the criteria established regarding multiplication of the results by the number of subsamples. These data cannot be evaluated for exceedances directly against screening levels. The Permittee must discontinue the misrepresentation of this data in their reports and responses. 8. NMED Response: Noted. NMED acknowledges that the statement should have only related to aprons.			
	2/10/2021	NMED provided a response that Management has directed Ben to other priorities and that a response would be delayed.			
1/26/2021		8 points of clarification needed. 1. Will NMED require the results of the ISM samples be multiplied by the number of sample increments before comparison to the screening levels and decision making? 2. Does this exception, and the data evaluation regarding multiplication of ISM results by the number of discrete samples, apply to the revetments? 3. Does NMED acknowledge there are many cases, where the road is higher than the apron, the rectangular part of the original DU is likely not impacted and should not require sampling? 4. Will NMED accept discrete sampling in lieu of ISM at igloos and revetments? 5. September 21, 2020 email, Sample below the drains. If the results exceed SLs then, Sampling in the swale leading away from the drain is needed (triangular area in the sketch)? Can you clarify this? 6. Depending on NMED's responses to item 5 above, the Army may re-evaluate our approach at igloo blocks that received disapprovals as a potential cost saving measure. 7. The Army may also consider an alternative approach by 1) Sampling below the drains and 2) Performing a dig and haul if soil under the drain exceeds the SLs. 8. The revetments are not impacted by soils below the drainpipes and thus the Army plans to sample each revetment separately. The Army will consider either ISM or discrete sampling pending clarifications stemming from our email conversation.			

<u>Parcel</u>	<u>Topic</u>	<u>PM</u>	<u>Contractor(s)</u>	<u>NMED Deadline (if any)</u>	<u>Status</u>
Igloos	Igloo Aprons and Revetments - DU's, Igloo Block A reference, 6-hottest areas sampling approach	Smith	In-house	N/A	NMED Response received 3/04/21
Army Email	NMED Response Date	Notes			
	9/21/2020	NMED response from Ben Wear. Site investigation per area, DU's (reference 7/7/20 email), "If the Army has a different approach that is logical, scientifically-based, technically acceptable, and designed to identify hot spots, if present, within the previously sampled DUs, then the Army can present that in their Work Plan and NMED will review it."			
9/18/2020		Email requesting a response to the 7/21/20 email			
7/21/2020		Lengthy email out lining the clarification of two topics. 1 - 6 hotests aprons and revetments, 2 - Decision Units			
7/13/2020		Thank you for reply, the Army will prepare an email to enumerate the need for clarification.			
	7/13/2020	NMED requests everything in writing so that all parties are on the same page.			
7/10/2020		Thank you for exception to ISM policy, presentation from 1/10/19 attached, request for a telephone call.			
	7/7/2020	NMED Response from Ben Wear. Focus on Igloo Block A.			
7/1/2020		Army approach to 6-hottest aprons/revetments per discussion on 1/10/2019. Sent from George Cushman to Dave Cobrain.			

From: [Wear, Benjamin. NMENV](#)
To: [Cushman, George H IV CIV USARMY HQDA DCS G-9 \(USA\)](#)
Cc: [Cobrain, Dave. NMENV](#); [Thomas, Ian M CIV USARMY HQDA DCS G-9 \(USA\)](#); [Smith, Steven W CIV USARMY CESWF \(USA\)](#); [Christy Esler](#); [Angela Makin](#); [Pierard, Kevin. NMENV](#); [Suzuki, Michiya. NMENV](#); [Khan, Mohammad Sagib \(Sagib\) CIV USARMY CESWF \(USA\)](#); [STEVENS, BROOKE N CIV USARMY CEERD \(US\)](#); [Theel, Heather J CIV USARMY CEERD-EL \(USA\)](#); [Montgomery, Cheryl R CIV USARMY CEERD-EL \(USA\)](#)
Subject: RE: Fort Wingate Igloo Apron and Revetment Sampling Approach
Date: Thursday, March 4, 2021 10:25:27 AM
Attachments: [image001.png](#)

Hello George,

Again, I apologize for the delay in NMED's response. Please see below where we have responded each of your comments.

- 1. In your July 7, 2020 e-mail, you mention NMED agrees to make an exception to its ISM policy as stated in its December 17, 2019 letter. This exception allows the Army to conduct ISM sampling at a site where contaminants were not distributed to the surface by detonation or airborne distribution. Under this exception, will NMED require the results of the ISM samples be multiplied by the number of sample increments before comparison to the screening levels and decision making?*

NMED Response: Yes. Please realize that, while I don't have the exact number with me now, this exception allowed FWDA to eliminate over 95% of the locations sampled in Igloo Block A from further investigation. NMED is concerned that FWDA appears unable to follow up on the less than 5% of sampling locations that did not meet the screening criteria.

- 2. Does this exception, and the data evaluation regarding multiplication of ISM results by the number of discrete samples, apply to the revetments? Please refer to the attached figure from aerial photography.*

NMED Response: Yes.

- 3. Regarding the drawing on the July 7, 2020 e-mail, Does NMED acknowledge there are many cases, where the road is higher than the apron, the rectangular part of the original DU is likely not impacted and should not require sampling? See the attached figure. We request NMED input on documenting locations where the road is higher than the apron.*

NMED Response: NMED has acknowledged this fact in the past and will continue to do so. The Permittee can provide photographic evidence of the topography and natural drainage paths along the roads for these igloos.

- 4. Will NMED accept discrete sampling in lieu of ISM at igloos and revetments? We will evaluate costs between the two approaches and may follow up with you.*

NMED Response: NMED will accept discrete sampling, but without a scale on the provided figure, it is difficult to estimate how many discrete samples will be required.

- 5. The third paragraph of Topic 1 in your September 21, 2020 email states: "The Army must make their case for each area as it is investigated. Should higher contaminant levels or other types of contaminants be found during sampling below the drainpipes of*

igloos in another area, sampling of the aprons/revetments may be required.” Is this statement pertaining to unsampled igloos when you mention igloos in another area? Is NMED thinking of a two-step approach here? 1) Sample below the drains. If the results exceed SLs then, 2) Sampling in the swale leading away from the drain is needed (triangular area in the sketch)? Can you clarify this?

NMED Response: Yes, the reference is to unsampled igloo blocks. This approach is directly related to the completion of the resampling of the six hottest igloo aprons/revetments in Igloo Block A. If this sampling effort indicates that there are no identifiable hot spots in these sampling locations, then the two-step approach indicated above would be acceptable.

6. *Depending on NMED’s responses to item 5 above, the Army may re-evaluate our approach at igloo blocks that received disapprovals as a potential cost saving measure.*

NMED Response: Noted. NMED assumes this is in reference to work plans for unsampled igloo blocks.

7. *If NMED confirms the two-step approach we outline in #5, the Army may consider this approach. The Army may also consider an alternative approach by 1) Sampling below the drains and 2) Performing a dig and haul if soil under the drain exceeds the SLs. We would also include taking confirmation samples under the excavation and in the swale downstream of the drain. Additional excavation will follow if the SLs are not met. If soil under the drains are below the SLs (using cumulative risk comparison) we would propose no further action at that igloo. We think this approach could be accomplished under one work plan and field effort. This approach would not include any initial investigative sampling in the swales. (There were no exceedances in apron samples from the 308 igloos previously tested and submitted to NMED.) We believe this approach could potentially conclude corrective action on igloo exteriors (assuming cleanup standards are met), eliminate further mobilizations to a large number of igloos and expedite the schedule.*

NMED Response: While NMED agrees that this approach may be acceptable, it is dependent upon the six hottest apron/revetment resampling investigation results. Drain sampling should be discrete vs the composites used in past sampling efforts.

Note: For clarification of your statement above in parenthesis, the samples were multi-incremental samples used for screening purposes only and cannot be used for confirmation purposes unless they meet the criteria established regarding multiplication of the results by the number of subsamples. These data cannot be evaluated for exceedances directly against screening levels. The Permittee must discontinue the misrepresentation of this data in their reports and responses.

8. *Regarding the same quote in #5 “... sampling of the aprons/revetments may be required.” This statement could be understood to mean the drainpipes are a potential source or release point to the revetments. This is not the case. The revetments are not impacted by soils below the drainpipes and thus the Army plans to sample each revetment separately. The Army will consider either ISM or discrete sampling pending clarifications stemming from our email conversation.*

NMED Response: Noted. NMED acknowledges that the statement should have only related to aprons.

Thanks,

Ben Wear
Environmental Scientist Supervisor
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313
(505) 690-6662

From: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>
Sent: Wednesday, February 10, 2021 10:35 AM
To: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA) <george.h.cushman.civ@mail.mil>
Cc: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>
Subject: [Non-DoD Source] RE: Fort Wingate Igloo Apron and Revetment Sampling Approach

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Hi George,

I just wanted to let you know that I haven't forgotten about your email below.

I have been directed by my management to focus on other NMED priorities at the moment, but I will get to this when I have some time.

I apologize for the delay.

Thanks,

Ben Wear
Environmental Scientist Supervisor
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313
(505) 476-6041

From: [Cushman, George H IV CIV USARMY HODA DCS G-9 \(USA\)](#)
To: [Wear, Benjamin, NMENV](#)
Cc: [Cobrain, Dave, NMENV](#); [Thomas, Ian M CIV USARMY HODA DCS G-9 \(USA\)](#); [Smith, Steven W CIV USARMY CESWF \(USA\)](#); [Christy Esler](#); [Angela Makin](#); kevin.pierard@state.nm.us; [Suzuki, Michiya, NMENV](#); [Khan, Mohammad Saqib \(Saqib\) CIV USARMY CESWF \(USA\)](#); [STEVENS, BROOKE N CIV USARMY CEERD \(US\)](#); [Theel, Heather J CIV USARMY CEERD-EL \(USA\)](#); [Montgomery, Cheryl R CIV USARMY CEERD-EL \(USA\)](#)
Subject: Fort Wingate Igloo Apron and Revetment Sampling Approach
Date: Tuesday, January 26, 2021 11:19:30 AM
Attachments: [image001.png](#)
[FWDA_IglooRevetDrainage.pdf](#)

Ben,

My team has had several discussions since your last e-mail dated September 21, 2020, and I would like to clarify a few things with you to assist in our efforts in planning, scheduling, and budgeting upcoming projects. I numbered the points below.

1. In your July 7, 2020 e-mail, you mention NMED agrees to make an exception to its ISM policy as stated in its December 17, 2019 letter. This exception allows the Army to conduct ISM sampling at a site where contaminants were not distributed to the surface by detonation or airborne distribution. Under this exception, will NMED require the results of the ISM samples be multiplied by the number of sample increments before comparison to the screening levels and decision making?
2. Does this exception, and the data evaluation regarding multiplication of ISM results by the number of discrete samples, apply to the revetments? Please refer to the attached figure from aerial photography.
3. Regarding the drawing on the July 7, 2020 e-mail, Does NMED acknowledge there are many cases, where the road is higher than the apron, the rectangular part of the original DU is likely not impacted and should not require sampling? See the attached figure. We request NMED input on documenting locations where the road is higher than the apron.
4. Will NMED accept discrete sampling in lieu of ISM at igloos and revetments? We will evaluate costs between the two approaches and may follow up with you.
5. The third paragraph of Topic 1 in your September 21, 2020 email states: *"The Army must make their case for each area as it is investigated. Should higher contaminant levels or other types of contaminants be found during sampling below the drainpipes of igloos in another area, sampling of the aprons/revetments may be required."* Is this statement pertaining to unsampled igloos when you mention *igloos in another area*? Is NMED thinking of a two-step approach here? 1) Sample below the drains. If the results exceed SLs then, 2) Sampling in the swale leading away from the drain is needed (triangular area in the sketch)? Can you clarify this?
6. Depending on NMED's responses to item 5 above, the Army may re-evaluate our approach at igloo blocks that received disapprovals as a potential cost saving measure.
7. If NMED confirms the two-step approach we outline in #5, the Army may consider this approach. The Army may also consider an alternative approach by 1) Sampling below the drains and 2) Performing a dig and haul if soil under the drain exceeds the SLs. We would also include taking confirmation samples under the excavation and in

the swale downstream of the drain. Additional excavation will follow if the SLs are not met. If soil under the drains are below the SLs (using cumulative risk comparison) we would propose no further action at that igloo. We think this approach could be accomplished under one work plan and field effort. This approach would not include any initial investigative sampling in the swales. (There were no exceedances in apron samples from the 308 igloos previously tested and submitted to NMED.) We believe this approach could potentially conclude corrective action on igloo exteriors (assuming cleanup standards are met), eliminate further mobilizations to a large number of igloos and expedite the schedule.

8. Regarding the same quote in #5 “... *sampling of the aprons/revetments may be required.*” This statement could be understood to mean the drainpipes are a potential source or release point to the revetments. This is not the case. The revetments are not impacted by soils below the drainpipes and thus the Army plans to sample each revetment separately. The Army will consider either ISM or discrete sampling pending clarifications stemming from our email conversation.

Thank you for your consideration of our questions above. The e-mail chain for this issue follows. As always, please feel free to contact me via e-mail or phone (703-455-3234) if you have any questions.

v/r,

George

From: [Wear, Benjamin, NMENV](#)
To: [Cushman, George H IV CIV USARMY HQDA DCS G-9 \(USA\)](#)
Cc: [Cobrain, Dave, NMENV](#); [Thomas, Ian M CIV USARMY HQDA DCS G-9 \(USA\)](#); [Smith, Steven W CIV USARMY CESWF \(USA\)](#); [Christy Esler](#); [Angela Makin](#)
Subject: RE: Fort Wingate Igloo Apron and Revetment Sampling Approach
Date: Monday, September 21, 2020 11:06:40 AM
Attachments: [image001.png](#)

Mr. Cushman,

NMED has reviewed your email from July 21, 2020 and provides the following responses to your inquiries. Your comments are in italics with NMED responses to follow.

Topic 1

It is the Army's understanding from discussions on the January 9, 2019 call with NMED that the DUs of the six hottest aprons/revetments would be split in half and re-sampled using ISM (to include triplicate sampling at each DU).

This is an example of different interpretations of what was discussed in a meeting. In an attempt to resolve the issue and minimize the Army's efforts, NMED suggested that the DUs could be divided and resampled, but there was no agreement on the "in half" portion of the discussion. NMED's July 7, 2020 email clarifies NMED's stance on using a logical approach to dividing the DUs and resampling. If the Army has a different approach that is logical, scientifically-based, technically acceptable, and designed to identify hot spots, if present, within the previously sampled DUs, then the Army can present that in their Work Plan and NMED will review it.

As NMED has continually relayed to FWDA, site investigation is not a "one size fits all" proposal. While the Army may use this data in a logical manner as a line of evidence that further sampling of aprons/revetments in other areas is not required, it is not clear to NMED that these other areas were not utilized in different manners for different operations that may have resulted in contamination by different compounds or at different levels. The Army must make their case for each area as it is investigated. Should higher contaminant levels or other types of contaminants be found during sampling below the drainpipes of igloos in another area, sampling of the aprons/revetments may be required.

Topic 2

The Army would like to discuss the division of the decision units around the apron.

As stated above, NMED has presented a logical approach for division of the DUs. The Army can present their approach in a work plan and NMED will review it.

Thanks,

Ben Wear
Environmental Scientist Supervisor
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313
(505) 476-6041

From: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA) <george.h.cushman.civ@mail.mil>
Sent: Friday, September 18, 2020 12:43 PM
To: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>

Cc: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Thomas, Ian M CIV USARMY HQDA DCS G-9 (USA) <ian.m.thomas2.civ@mail.mil>; Smith, Steven W CIV USARMY CESWF (USA) <Steve.W.Smith@usace.army.mil>; Christy Esler <cesler@sundance-inc.net>; Angela Makin <amakin@sundance-inc.net>

Subject: [EXT] Fort Wingate Igloo Apron and Revetment Sampling Approach

Ben: A quick note to inquire as to whether NMED has had the opportunity to review our request for clarification on the two topics in the e-mail below? We have delayed further work in this area pending NMED's reply, and are anxious to re-start our sampling efforts. Thank you for a quick response to this e-mail.

v/r,

George

From: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA)

Sent: Tuesday, July 21, 2020 10:23 AM

To: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>

Cc: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; 'Smith, Steven W CIV USARMY CESWF (USA)' <Steve.W.Smith@usace.army.mil>; Christy Esler (<cesler@sundance-inc.net> <cesler@sundance-inc.net>); Angela Makin <amakin@sundance-inc.net>

Subject: Igloo Apron and Revetment Sampling Approach

Ben,

I conferred with my Army team, and we developed the two clarification topics listed below to discuss.

Topic 1. The Army wants to discuss the purpose and ramifications of the further sampling on the 6 hottest aprons/revetments. The Army gave the attached presentation to NMED on January 9, 2019, with the purpose of evaluating historical data from all previously sampled aprons (308) and revetments (198) to determine the probability that the un-sampled aprons and revetments (throughout FWDA) would contain contamination. The Army proposed no further sampling at the un-sampled aprons and revetments, based on the statistics run on the sampled sites. The evaluation indicated negligible probability of exceeding SSLs at the un-sampled sites. It is our understanding that the Army and NMED are in agreement that the conceptual site exposure/release model for any igloo and revetment at FWDA is the same for all igloos and revetments at FWDA. This assertion is based on all the work and communication between NMED and the Army to date.

It is the Army's understanding from discussions on the January 9, 2019 call with NMED that the DUs of the six hottest aprons/revetments would be split in half and re-sampled using ISM (to include triplicate sampling at each DU). We would use this as a line of evidence approach to demonstrate our ISM screening is not overlooking any hotspots. If results are similar, this makes a good case for the Army to show that all other non-sampled sites are not a problem. This approach is consistent with the conceptual model for aprons and revetments.

NMED's July 7, 2020 email appears to narrow the focus and ramifications/impact of the study to A-Block as opposed to all of the other igloos blocks (both sampled and un-sampled). The Army would like to have the effects and results of the study to be applicable to all igloos and revetments at FWDA.

Topic 2. The Army would like to discuss the division of the decision units around the apron. The rectangular portion of the DU across the road only applies if the drainage from the apron flows across the road. Thus, during previous sampling events, the Army combined both swales as a single DU. If terrain dictated, the Army included the area across the road into the single DU along with both swales. It is our understanding the Army and NMED were in agreement with this approach. With this site model in mind, the Army proposes to create a single DU at each of the two swales. If terrain dictates, a third DU will be added across the road. If any revetments make the top six hottest sites, then the Army proposes to divide the single original DU into three separate DUs and sample per ISM methods.

Please let me know if you have any questions or wish further discussion concerning the two topics listed above.

The Army agrees that most of our discussion take place through e-mails, so as to provide a written record of what was discussed and agreed upon. However, in some instances, it would make sense to discuss these topics on a telephone call, to prevent protracted e-mail chains stretching over several days or even weeks. We can follow up these calls with call notes to solidify the discussion and which would be submitted to NMED for your review and approval. If you are willing to discuss these topics through a telephone call, we are willing to adjust our schedules to accommodate yours.

Thank you for your willingness to engage us on these topics. I and the Army team look forward to further discussions.

v/r,

George

From: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA)

[<mailto:george.h.cushman.civ@mail.mil>]

Sent: Monday, July 13, 2020 9:41 AM

To: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>

Cc: Smith, Steven W CIV USARMY CESWF (USA) <Steve.W.Smith@usace.army.mil>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>

Subject: RE: Igloo Apron and Revetment Sampling Approach

Ben: Thank you for your reply. Your proposal makes sense, so we will prepare an e-mail reply that will enumerate our needed clarifications concerning your response. I will confer with my Army team and develop a list of clarification topics. I hope to send you a reply by late week or early next week.

v/r,

George

From: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>
Sent: Monday, July 13, 2020 10:01 AM
To: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA) <george.h.cushman.civ@mail.mil>
Cc: Smith, Steven W CIV USARMY CESWF (USA) <Steve.W.Smith@usace.army.mil>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>
Subject: [Non-DoD Source] RE: Igloo Apron and Revetment Sampling Approach

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Mr. Cushman,

Scheduling conference calls is somewhat difficult during the ongoing Covid issues. In addition, it is preferable to have any needed clarifications in writing so that we are all on the same page. NMED has had particular difficulty in the past with the parties walking away from a meeting with completely different interpretations of what was said and/or agreed to.

Therefore, NMED is requesting that you present your questions about our response through email so that we can sort things out in writing and there is no confusion down the line.

Thank you,

Ben Wear
Environmental Scientist Supervisor
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313
(505) 476-6041

From: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA) <george.h.cushman.civ@mail.mil>
Sent: Monday, July 13, 2020 6:13 AM
To: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>
Cc: Smith, Steven W CIV USARMY CESWF (USA) <Steve.W.Smith@usace.army.mil>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>
Subject: [EXT] Igloo Apron and Revetment Sampling Approach

Ben: Sorry – I forgot to attach the presentation.....

v/r,

George

From: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA)
Sent: Friday, July 10, 2020 10:43 AM
To: 'Benjamin.Wear@state.nm.us' <Benjamin.Wear@state.nm.us < Caution-mailto:Benjamin.Wear@state.nm.us > >
Cc: 'Smith, Steven W CIV USARMY CESWF (USA)' <Steve.W.Smith@usace.army.mil < Caution-mailto:Steve.W.Smith@usace.army.mil > >; 'dave.cobrain@state.nm.us' <dave.cobrain@state.nm.us < Caution-mailto:dave.cobrain@state.nm.us > >
Subject: Igloo Apron and Revetment Sampling Approach

Ben,

Thank you for your reply to our request and your agreement to make an exception to NMED's policy concerning ISM as you have outlined below. We would like to have a telephone call with NMED to clarify a few things in your e-mail response as compared with our notes from the NMED/Army call on January 9, 2019. I've attached the presentation for reference. We will e-mail talking points we would like to clarify prior to the call. What is NMED's availability for a call in the next 2-3 weeks?

I apologize for omitting you on the original e-mail. I am still new to this and do not have all the protocols down pat yet. I shall be sure to include you on all future correspondence concerning Fort Wingate Depot Activity.

v/r,

George

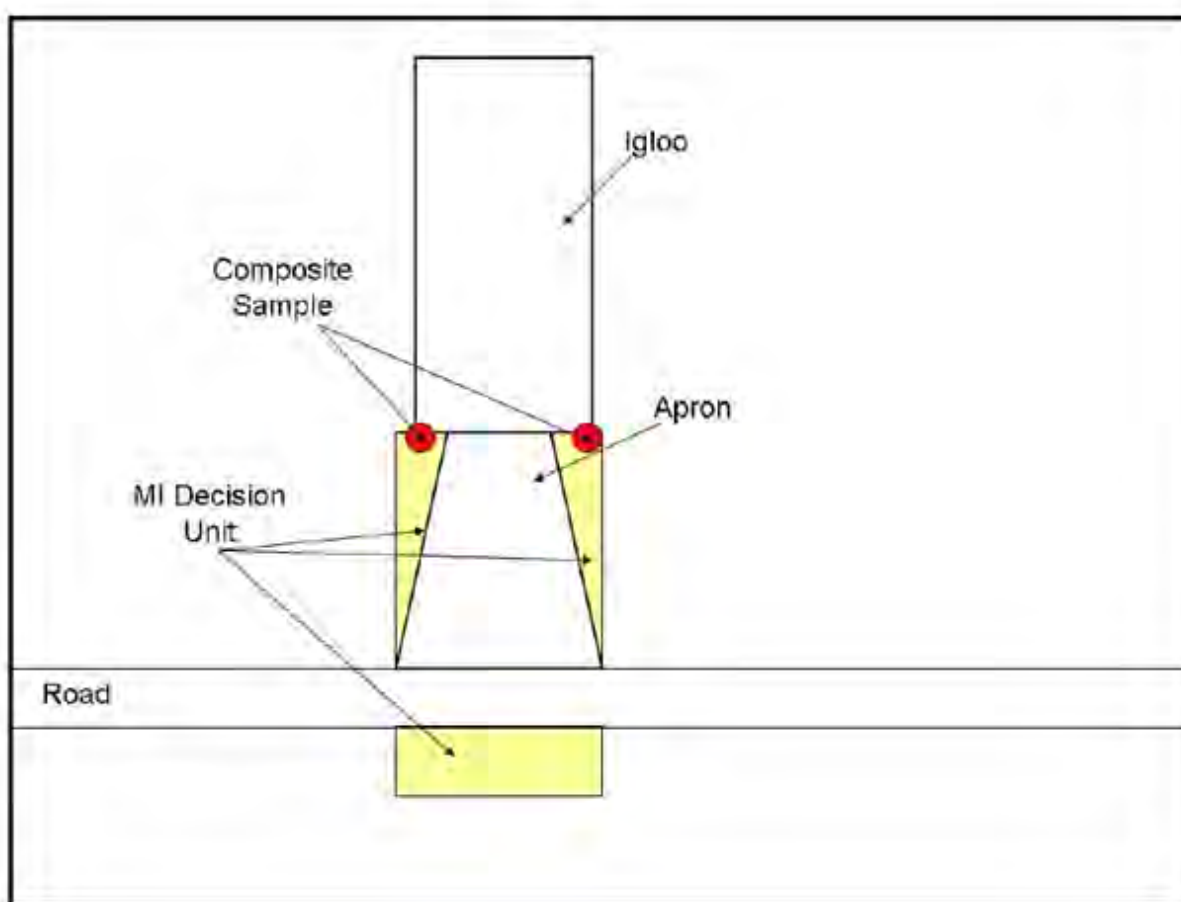
From: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us < Caution-mailto:Benjamin.Wear@state.nm.us > >
Sent: Tuesday, July 7, 2020 4:10 PM
To: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA) <george.h.cushman.civ@mail.mil < Caution-mailto:george.h.cushman.civ@mail.mil > >
Cc: Steven Smith (<steve.w.smith@usace.army.mil < Caution-mailto:steve.w.smith@usace.army.mil > >) <steve.w.smith@usace.army.mil < Caution-mailto:steve.w.smith@usace.army.mil > >; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us < Caution-mailto:dave.cobrain@state.nm.us > >
Subject: [Non-DoD Source] [EXT] Igloo Apron and Revetment Sampling Approach

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Mr. Cushman,

Thanks for your email. Please include myself, Ben Wear, on any future correspondence related to Fort Wingate Depot Activity.

NMED proposed further sampling of subdivisions of the six hottest apron/revetment ISM decision units (DUs) in order for the Army to demonstrate the unlikelihood of hotspots in Igloo Block A. Based on the layout of the DUs around the igloo aprons in the Permittee provided figure below, a subdivision of two is not appropriate. A logical division for the purpose of identifying hotspots would seem to be a subdivision of four, with each triangular side of the aprons becoming a DU and dividing the rectangular portion of the original DU into two.



NMED agrees to make an exception to its ISM policy as stated in its December 17, 2019 letter regarding programmatic issues at FWDA in the case of the Igloo Block A ISM hotspot demonstration. This exception allows the Army to conduct ISM sampling at a site where contaminants were not distributed to the surface by detonation or airborne distribution. However, this exception does not relieve the Army of the requirement to follow the methods and procedures outlined in EPA Method 8330B and the ITRC *Incremental Sampling Methodology*, including triplicate sampling.

The Army must submit a work plan detailing the work to be completed, including descriptions of all

methods and procedures, for review and approval by NMED. Do you have a timeframe for submittal of the work plan?

Thanks,

Ben Wear
Environmental Scientist Supervisor
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313
(505) 476-6041

-----Original Message-----

From: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA)

<george.h.cushman.civ@mail.mil < Caution-Caution-mailto:george.h.cushman.civ@mail.mil < Caution-mailto:george.h.cushman.civ@mail.mil %3c Caution-Caution-mailto:george.h.cushman.civ@mail.mil > > >

Sent: Wednesday, July 1, 2020 10:43 AM

To: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us < Caution-Caution-mailto:dave.cobrain@state.nm.us < Caution-mailto:dave.cobrain@state.nm.us %3c Caution-Caution-mailto:dave.cobrain@state.nm.us > > >

Cc: Smith, Steven W CIV USARMY CESWF (USA) <Steve.W.Smith@usace.army.mil < Caution-Caution-mailto:Steve.W.Smith@usace.army.mil < Caution-mailto:Steve.W.Smith@usace.army.mil %3c Caution-Caution-mailto:Steve.W.Smith@usace.army.mil > > >

Subject: [EXT] Igloo Apron and Revetment Sampling Approach

Dave,

I wanted to contact you about the sampling approach for igloo aprons and revetments we discussed via a presentation with NMED on a phone call back on January 10, 2019.

The Army is considering the approach you proposed to sample the 6 hottest apron or revetment ISM decision units (DUs) of the 300 or so igloos and 200 or so revetments we sampled already and split them in half and re-sample using ISM. We would use this as a line of evidence approach to demonstrate our ISM screening is not overlooking any hotspots. If results are similar this makes a good case for the Army to show that all other non-sampled sites are not a problem. The Army believes this is a viable approach due to the small areas within the DUs and that we are sampling at the bottom of the swales (a conservative approach).

This approach however, seems to conflict with NMED's December 17, 2019, response to our 'Programmatic Issues' letter relating to Issue #3. In part, NMED's response stated: "The Permittee

must review all planned work and revise any plans that propose ISM sampling to propose an alternate sampling approach. NMED hereby rescinds approval of all proposed ISM or MI sampling that was previously approved, but has not yet been conducted at the Facility."

We are seeking clarification as to whether NMED will make an exception to the above statement in the case of igloo aprons and revetments. If so, the Army is prepared to generate a work plan for this effort for submission to NMED. The Army would also like to seek NMED's input on the planning stage of the work plan.

Thank you for your consideration of this request.

v/r,

George

george.h.cushman.civ@mail.mil < Caution-mailto:george.h.cushman.civ@mail.mil > < Caution-Caution-mailto:george.h.cushman.civ@mail.mil >
703-455-3234

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

From: [Wear, Benjamin, ENV](#)
To: [Cushman, George H IV CIV USARMY HQDA DCS G-9 \(USA\)](#); [Cobrain, Dave, ENV](#); [Suzuki, Michiya, ENV](#)
Cc: [Thomas, Ian M CIV USARMY HQDA DCS G-9 \(USA\)](#); [Soicher, Alan J CIV USARMY CESPA \(USA\)](#); [Khan, Mohammad Sagib \(Sagib\) CIV USARMY CESWF \(USA\)](#); [Christy Esler](#); [Angela Makin](#)
Subject: RE: [EXTERNAL] Response to NMED's "Four Questions" Regarding Analytical Performance vs. GW SLs
Date: Wednesday, April 13, 2022 10:34:26 AM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

George,

NMED appreciates the FWDA's diligence in pursuing analytical laboratories that can provide analytical detection limits below NMED screening levels for FWDA's chemicals of potential concern (COPCs). NMED has reviewed the data provided by FWDA and provides the following direction.

"Analytical detection limits", for the purpose of this discussion, are defined as the reporting limit (RL), limit of detection (LOD), practical quantitation limit (PQL), or limit of quantitation (LOQ); the designation for reported detection limits will vary by analytical laboratory and/or facility. Note that the method detection limit (MDL) does not satisfy the requirement that the analytical detection limits are below the screening level. Data whose analytical detection limits are not below the NMED screening levels are considered data quality exceptions, must be identified as such wherever presented, and cannot be used for decision-making purposes, including compliance determinations.

NMED is unable to fully evaluate the information provided because FWDA did not include the responses from each analytical laboratory, as requested. Without this information, NMED is unable to verify that there is no analytical laboratory and method that can meet the requirements of analytical detection limits below the NMED screening levels. In addition, it appears that FWDA only requested information from analytical laboratories about specific listed methods and did not make inquiries related to alternative methods or method modifications that may provide better analytical detection limits.

NMED is unaware of any proprietary or disclosure requirements related to any information provided to FWDA by the analytical laboratories. The information that was provided by FWDA is not sufficient to proceed. FWDA must provide the full laboratory responses to NMED. If FWDA believes confidentiality is a concern, they may submit the responses and assert a claim of business confidentiality in accordance with Section I.I.9.i of the FWDA RCRA Permit, which states, "[t]he Permittee may claim confidentiality for any information required pursuant to this Permit, pursuant to the provisions of Section 74-4-4.3.D and F of the HWA, 20.4.1.100 NMAC (incorporating 40 CFR 260.2), and 20.4.1.900 NMAC (incorporating 40 CFR 270.12)". NMED stores all confidential information in a secure location that is not accessible to the

public.

If a facility can contract the services of an analytical laboratory for chemical analyses whose analytical detection limits are below the NMED screening levels, which is a requirement of the facility permit, the facility must do so for all data used to establish compliance with NMED screening levels. FWDA's response to NMED's Question #4 states that the information is provided in the tables; however, FWDA did not explore "all available analytical methods", as directed, so the question has not been fully addressed. FWDA must inquire about, and submit to NMED, documentation from the analytical laboratories stating that no other methods are available that could achieve better analytical detection limits for problem compounds.

For highly contaminated sites where compliance determinations will not be conducted for the foreseeable future, NMED will work with the facility to approve the use of less costly and less accurate methods for tracking purposes until compliance determination becomes an issue. For compliance, the facility is typically required to provide a minimum of eight quarterly sampling events for groundwater where the analytical detection limits are below the screening level and the compound in question is non-detect at that level.

A facility always has the option to petition for removal of specific compounds from the site's COPC list; removal depends upon successful demonstration to NMED that the compound was never present or is not present at the site at concentrations that would pose a risk to human health or the environment. For instance, if a compound is found to be below, or non-detect at, the screening level for eight consecutive groundwater sampling events, the compound would likely be eligible for removal from the COPC list, depending upon the potential for future contaminant migration or parent chemical degradation.

In the situation where a facility is unable to locate an analytical laboratory that can provide analytical detection limits which meet the screening levels for specific compounds, a facility may provide multiple detailed and documented lines of evidence (LOEs) to support a claim that the compound is unlikely to be found at a particular site, accounting for future migration and parent chemical degradation. The inability of a laboratory to meet the analytical detection limits below the screening level criteria is not considered a LOE. If the facility can successfully demonstrate to NMED that the compound is unlikely to be found at a site, NMED will approve removal of that compound from the site's COPC list required for sample analyses. These LOEs may include, but are not limited to:

1. The physical and chemical properties of the compound;
2. The lack of any historical use of the compound, products containing the compound, or products containing parent compounds which may degrade into the compound in question;
3. The physical characteristics of the site, such as depth to groundwater; and
4. Historical analytical data.

Based on the information provided, it appears that the analytical laboratories were not asked whether alternative methods are available that were not included in FWDA's list which may be able to provide analytical detection limits at or below NMED screening levels. This issue must be pursued and the laboratory responses must be provided to NMED for review, as previously requested.

Once FWDA provides all of the information requested, NMED can fully evaluate the analytical detection limit issue at FWDA and provide final direction. Please submit a formal report, which details the data you have collected and includes all information provided by the analytical laboratories, to NMED for review no later than **July 29, 2022**.

Thanks,

Ben Wear
Environmental Scientist Supervisor
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313
(505) 690-6662

From: Cushman, George H IV CIV USARMY HQDA DCS G-9 (USA) <george.h.cushman.civ@army.mil>

Sent: Wednesday, December 22, 2021 3:24 PM

To: Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>

Cc: Thomas, Ian M CIV USARMY HQDA DCS G-9 (USA) <ian.m.thomas2.civ@army.mil>; Soicher, Alan J CIV USARMY CESPA (USA) <Alan.J.Soicher@usace.army.mil>; Khan, Mohammad Saqib (Saqib) CIV USARMY CESWF (USA) <Mohammad.S.Khan@usace.army.mil>; Christy Esler <cesler@sundance-inc.net>; Angela Makin <amakin@sundance-inc.net>

Subject: [EXTERNAL] Response to NMED's "Four Questions" Regarding Analytical Performance vs. GW SLs

Ben: I apologize for the delay in getting this e-mail to you, but the FWDA Team has spent considerable time discussing and refining an appropriate reply to your e-mail requesting information concerning four items posed on 19 October 2021 (initially from 01 February 2021) regarding Analytical Performance versus Groundwater (GW) Screening Levels (SLs). We anticipate that after receiving and reviewing this e-mail and its attachments, you will agree to a MS TEAMS or WEBEX conference between your team and ours so that we may discuss your questions in detail and answer any additional follow-up questions you may have. Based on the results of our query of the DoD approved laboratory capabilities, we can then begin to discuss how to address analytes where the laboratories are unable to achieve results below the NMED SLs. In this case, I do not feel e-mail correspondence would be appropriate or in the best interests of either team, as it would not provide the collaboration this issue requires. We are prepared to format the discussion in any manner you wish, and would be amenable to have either your team

or ours provide someone to take notes and provide a summary of the discussion, which would then be reviewed and approved by both parties. I hope the above attachments provide the initial responses you are looking for. Please take all the time your team needs to review the information we have provided, and let us know when you are ready for follow-up discussions. What follows below are the four information requests from your 01 February 2021 e-mail, and the Army's responses.

Thank you in advance for your consideration of this correspondence and forthcoming collaboration between our teams so that we may proceed to find an appropriate solution to this issue.

May you and your family have a very Merry Christmas and a wonderful holiday period.

v/r,

George

For NMED to evaluate this information, the Permittee must provide:

- 1. The specific information that was requested from each individual laboratory (e.g., were all available analytical methods evaluated?). Please provide correspondence samples.***

The Army contacted all DoD ELAP-certified laboratories (68 in total) in the United States and Canada. Of the 68 laboratories contacted, 29 laboratories responded. Each laboratory was asked for the following information:

- a. Summary of their analytical performance for SW-846 methods used at FWDA
- b. LODs/LOQs for the following analytical methods and analyses:
 1. 8260 VOCs
 2. 8270 SVOCs (including PAHs by GC/MS in SIM mode)
 3. 8081 Pesticides (or 8270)
 4. 8082 PCBs
 5. 8330B Explosives/Nitroaromatics and Nitramines
 6. 8290 Dioxins
 7. 1613 Dioxins
 8. 6010 Metals
 9. 6020 Metals
 10. 7470 Mercury (water)
 11. 7471 Mercury (soil)
 12. 6860 Perchlorate
 13. 9012 Cyanide
 14. 9056 Nitrate
 15. 8015 GRO
 16. 8015 DRO
- c. Information for both solid (soil) and aqueous matrices

An example of the correspondence sent to each laboratory is appended (Attachment 1).

2. The specific information provided by each laboratory (e.g., what analytical methods were evaluated for each set of compounds?). Please provide full laboratory responses.

The information provided by each laboratory is described above in (1). The information provided by the laboratories has been organized into tables as described in (3) and (4) below. Since there may be proprietary and disclosure requirements related to the information provided by the laboratories, we are unable to provide full laboratory responses without further consultation. However, please consider the information provided in (3) and (4) below to see whether this provides sufficient information on which to proceed.

3. The specific COPCs at FWDA for which there exist no analytical laboratory/method that can provide LOQs that meet the respective screening levels. Please provide a complete list.

The Army generated the list of specific COPCs at FWDA for which there exist no analytical laboratory/method that can provide LOQs below SLs, using the following compilation/evaluation steps (results shown in Attachment 2):

- a) The initial compound analyte list was taken from the Facility-Wide Groundwater Monitoring Plan (2022).
- b) The hierarchy in Attachment 7 of the FWDA RCRA Permit was used to develop a list of human health screening levels (SLs) and the lowest selected for the screening exercise.
- c) The LOQ result from each lab was compared to the SL, and analytes for which at least 1 of the 29 responding laboratories reported an LOQ > SL were identified and included in Attachment 2.

The results for the aqueous matrix are shown in Attachment 2, including the number of responding labs that reported an LOQ for that analyte, and the percent of those responding labs that have an LOQ above the SL. The percentages are color graded, with dark orange representing 100% of the labs with an LOQ>SL, to pale yellow where 1-49% of the responding labs exceeded the criteria. The next two columns show the range of the exceedances, and the magnitude of the exceedances, respectively. As shown in Attachment 2, there are seven (7) analytes for which all responding laboratories have LOQ>SL for the aqueous matrix.

For purposes of comparing this table to earlier correspondence with NMED regarding analytes for which LOQs could not meet SLs, analytes in this first column that appear in **RED FONT** correspond to 42 constituents for which EMAX (the laboratory for the current Periodic Groundwater Monitoring contract) has been unable to meet the SL (i.e., LOQ > SL). These analytes in **RED FONT** correspond to the 42 compounds mentioned in previous correspondence between Army and NMED.

If the approach above is acceptable to NMED, the Army will perform a similar evaluation for the soil matrix.

4. The specific LOQs provided for each COPC on the list required by #3 for all available analytical

methods for each analytical laboratory. Please provide a table compiling and detailing this information.

The requested information is compiled in Attachment 3, which is the expanded version of Attachment 2. The laboratories are identified as A-AC to address the disclosure concerns described in (2) above.



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

2905 Rodeo Park Drive East, Building 1
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www.env.nm.gov



BUTCH TONGATE
Acting Cabinet Secretary
J. C. BORREGO
Acting Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

October 28, 2016

Mark Patterson
FWDA, BRAC Coordinator
P.O. Box 93
Ravenna, OH 44266

Steve Smith
USACE FWDA Program Manager
CESWF-PEC-EF
819 Taylor Street, Room 3A12
Fort Worth, TX 76102

**RE: DISAPPROVAL
FINAL RCRA FACILITY INVESTIGATION PARCEL 6
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-12-008**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) received the *Final RCRA Facility Investigation Parcel 6* (Report), dated September 30, 2012, on September 25, 2012 for Fort Wingate Depot Activity (Permittee). NMED has reviewed the Report and hereby issues this Disapproval with the following comments.

1. Groundwater

NMED Comment: While there is a short discussion of groundwater in the background section, the issue of groundwater contamination at each of the solid waste management units (SWMUs) and Areas of Concern (AOCs) is not addressed in 12 of the 14 sections related to specific sites. While there may be no requirement to conduct further work to characterize groundwater at specific SWMUs/AOCs, the subject of potential groundwater contamination must be discussed for each site. Revise the Report to provide a discussion of groundwater issues for each SWMU and AOC.

In addition, the Permittees recommend in various locations within the Report that groundwater issues be detached from the SWMU or AOC and no further action be required. In cases where the Permittee can demonstrate that the SWMU or AOC did not contribute to groundwater contamination, the Permittee may request a Corrective Action Complete with Controls status, with the controls being long-term monitoring of contaminated groundwater and restrictions on use of the groundwater. NMED is unable to issue Corrective Action Complete without Controls status for any SWMU or AOC where groundwater contamination is present below the site.

2. Section 3, SWMU 4 - Building 600 (Former Building 539)

NMED Comment: Results from analyses of collected soil samples indicate no exceedances of soil screening levels (SSLs) for the residential scenario for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), explosives, or metals with the exception of arsenic, at SWMU 4, Building 600 (Former Building 539). Eight soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 8.8 mg/kg. Per NMED's December 18, 2013 letter titled *Evaluation of Background Levels for Arsenic in Soil, Fort Wingate Depot Activity, New Mexico* (Arsenic Background Letter), the arsenic level exceeds the background reference for arsenic of 5.6 mg/kg; however, it is within the range of background (0.2 to 11.2 mg/kg). Include a discussion regarding the potential for the site being a source of arsenic.

3. Section 4, SWMU 8 - Building 537

NMED Comment: Previous sampling events indicated that large areas within SWMU 8 had PCB and pesticide contamination. Although some contaminated soil was removed, elevated PCB and pesticide contaminated soils remain. Soil samples collected in 2011 at former discharge areas (drain or septic lines) did not exceed SSLs for VOCs, SVOCs, pesticides, perchlorate, PCBs, explosives, or metals with the exception of arsenic. Five soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 4.7 mg/kg. Per the Arsenic Background Letter, the arsenic levels do not exceed the background reference for arsenic of 5.6 mg/kg and are within the range of background data (0.2 to 11.2 mg/kg). Additional soil sampling for PCBs and PAHs following soil excavation per the NMED approved *Final Permittee-Initiated Interim Measures Work Plan Parcel 6 Revision 1.0* (IMWP), dated May 4, 2015, is required.

4. Section 5, SWMU 11 - Buildings 541 and 542

NMED Comment: A previous sampling event in 2000 indicated that one sample contained PAHs (benzo(a)pyrene and benzo(a)anthracene) above their respective 2012 SSLs. During the 2011 sampling event, soil samples collected from a location approximately 5 feet away from the previous sample had no detections of benzo(a)pyrene and benzo(a)anthracene. All soil samples in the 2011 sampling event did not exceed SSLs for VOCs, SVOCs, perchlorate, explosives, or metals with the exception of arsenic. Eight soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 9.0 mg/kg. Per the

Arsenic Background Letter, the arsenic level exceeds the background reference for arsenic of 5.6 mg/kg; however, it is within the range of background data (0.2 to 11.2 mg/kg). Include a discussion regarding the potential for the site being a source of arsenic.

5. Figure 6-5, Airborne Geophysical Survey of SWMU 20, p 6-40

NMED Comment: Figure 6-5 shows the airborne geophysical survey of SWMU 20, which serves as a proxy for location of metallic debris on the land surface. The IMWP indicates two areas of debris removal in Feature 4, leaving large areas of debris untouched. Provide an explanation for why the remaining debris evident in Feature 4 will not be removed.

6. Section 7, AOC 28 - Igloo Block B, p 7-1

NMED Comment: The wipe sample analysis was reviewed by the Agency for Toxic Substance and Disease Registry (ATSDR), Health Consultation for FWDA. The review recommended additional sampling in the igloo interiors after concluding that the existing data appeared inadequate to characterize the extent of contamination. ATSDR issued a report on April 1, 2009 detailing their concerns regarding the inadequacy of the wipe sampling data, along with a suggested sampling approach to resolve the issue. NMED also clarified its position with regard to the igloo interiors in letters dated July 22, 2009 and October 1, 2010. This issue may be addressed with a proposal for an alternative approach (e.g., encapsulation of the igloo interiors) that may be applied facility-wide.

7. Section 7, AOC 28 - Igloo Block B, p 7-14

NMED Comment: Soil samples did not exceed SSLs for explosives or metals, with the exception of arsenic and lead. In the igloo aprons, three soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 4.5 mg/kg; in the igloo revetments, fifteen soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 5.0 mg/kg; and in the igloo drains, nineteen soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 8.7 mg/kg. Per the Arsenic Background Letter, the arsenic level exceeds the background reference for arsenic of 5.6 mg/kg; however, it is within the range of background data (0.2 to 11.2 mg/kg). Four soil samples contained lead exceeding the SSL of 400 mg/kg in the igloo drains, with the highest concentration of 540 mg/kg. Additional soil sampling for lead following soil excavation per the IMWP is required. Igloo Block B is currently operational and munitions are being stored within some of the igloos.

8. AOC 80, Feature 9

NMED Comment: Soil samples did not exceed SSLs for explosives or metals, with the exception of arsenic, in AOC 80, Feature 9. Nine soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 4.9 mg/kg. Per the Arsenic Background Letter, the arsenic levels do not exceed the background reference for arsenic of 5.6 mg/kg and are within the range of background data (0.2 to 11.2 mg/kg).

Messrs. Patterson and Smith

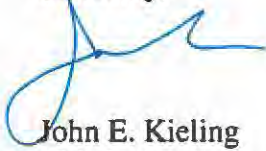
October 28, 2016

Page 4 of 4

The Permittee must submit a revised Work Plan that addresses all comments contained in this Disapproval. In addition, the Permittee must include a response letter that cross-references where NMEDs numbered comments were addressed. The Permittee must also submit an electronic redline-strikeout version of the revised Work Plan showing where all changes have been made to the Work Plan. The revised Work Plan must be submitted on or before **March 31, 2017**.

If you have any questions regarding this matter, please contact Ben Wear of my staff at (505) 476-6041.

Sincerely,



John E. Kielling
Chief

Hazardous Waste Bureau

cc: D. Cobrain, NMED, HWB
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N. Davidson, NMED, HWB
C. Hendrickson, EPA-6PD-N
T. Perry, Navajo Nation
M. Harrington, Pueblo of Zuni
C. Seoutewa, Southwest Region BIA
S. Begay-Platero, Navajo Nation
R. Duwyenie, Navajo BIA
J. Wilson, BIA
E. Stevens, BIA
R. White, BIA
C. Esler, Sundance Consulting, Inc.

File: FWDA 2016 and Reading, Parcel 6, FWDA-12-008



State of New Mexico
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BUTCH TONGATE
Cabinet Secretary
J. C. BORREGO
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

August 21, 2017

Mark Patterson
FWDA, BRAC Coordinator
P.O. Box 93
Ravenna, OH 44266

Steve Smith
USACE
CESWF-PER-DD
819 Taylor Street, Room 3B06
Fort Worth, TX 76102

**RE: DISAPPROVAL
PERMITTEE-INITIATED INTERIM MEASURES REPORT PARCEL 6
AREA OF CONCERN 28, SWMU 8 – FORMER BUILDING 537, SWMU 20 –
FEATURE 4 (AREAS A AND B), AND LOCOMOTIVE
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-16-011**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity's (Permittee) *Permittee-Initiated Interim Measure Report, Parcel 6, Area of Concern 28, SWMU 8 – Former Building 537, SWMU 20 – Feature 4 (Areas A and B), and Locomotive* (Report), dated October 26, 2016. NMED has reviewed the Report and hereby issues this Disapproval. The Permittee must address the following comments.

1. Section 4.6, Waste Profile and Disposal, lines 17-18 and 21-22, page 4-2

Permittee Statements: "The sample was also analyzed for lead using TCLP."
"Waste characterization results and disposal documentation is included as Appendix D."

NMED Comment: The result of TCLP analysis for lead was not included in Appendix D. Provide the laboratory analytical results and documentation to show the waste was

characterized as nonhazardous in the revised Report.

2. Section 5-3, Waste Profile Sampling and Disposal, lines 4-6, page 5-2, and Section 5.7, Waste Volume Determination, lines 36-38, page 5-10

Permittee Statements: "Waste profile sampling of the impacted soil of SWMU 8 - Former Building 537 included collection of two samples from the stockpiled excavated soil to meet the landfill requirement of one profile sample for each 100 cubic yards of waste."

"Based on the comparison of the site elevation surveys, plus the additional material excavated, the volume of waste material removed from SWMU 8 - Former Building 537 was 429 cubic yards."

NMED Comment: Four samples were required to meet the landfill requirement although only two samples were collected for waste characterization. Provide an explanation for this discrepancy. In addition, the waste manifests in Appendix G indicate only 306 cubic yards of soil were transported to the landfill. Account for the remaining 123 cubic yards of excavated soil in the revised Report.

3. Section 5.4, Confirmation Sampling, lines 22-34, page 5-2

Permittee Statement: "One discrete sample was collected from each excavation area bottom in Areas A, B, and F. Two discrete samples were collected from the excavation area bottom in Areas C and E. Five discrete samples were collected from the excavation area bottom in Area D. All excavation area bottom samples were analyzed for PCBs using USEPA Method 8082A. The excavation area bottom sample collected from Area F was also analyzed for PAHs using USEPA Method 8270 SIM and SVOCs using USEPA Method 8270D. One discrete sample was collected from the sidewalls of each excavated area every 50 feet along the entire perimeter or sidewall of each removal area. Four discrete sidewall samples were collected from Areas A, B, E, and F. Six discrete sidewall samples were collected from Area C. Eleven discrete sidewall samples were collected from Area D. All sidewall samples were analyzed for PCBs using USEPA Method 8082A. The sidewall sample collected from Area F was also analyzed for PAHs using USEPA Method 8270 SIM and SVOCs using USEPA Method 8270D."

NMED Comment: The samples collected from Areas A through E were analyzed for PCBs, but not for SVOCs. Analysis for SVOCs using EPA Method 8270D was directed by the *NMED Approval with Modifications* letter, dated May 29, 2015. Since the excavated areas have already been backfilled, the Permittee must collect sidewall samples from the native soil adjacent to the original sampling locations (one foot or less laterally from the backfill perimeter, and at the same depth where original sidewall samples were collected). Soil samples must also be collected from the same bottom sample locations; from native soil directly below the backfill. All of the samples must be analyzed for SVOCs using EPA Method 8270D. Include the analytical results and discussion in the revised Report. Revise the Report to reevaluate the risk and propose additional corrective action, as necessary. In addition, the Permittee was directed to collect sidewall samples in Areas A, B, E and F at ten

feet intervals, and in Areas C and D at fifteen feet intervals along the excavation perimeter according to the May 29, 2015 letter. It appears that the sidewall samples were collected every fifteen feet in Areas A and E and every twenty feet in Area D. The number of samples must be increased in Areas A, D, and E to meet the requirements specified in NMED's *Approval with Modifications* (May 29, 2015). Revise Figure 5-2 and 5-3 to include additional sidewall sampling locations. The additional sidewall samples must be collected at depths corresponding to the previous samples and must be analyzed for PCBs using EPA Method 8082A and SVOCs using EPA Method 8270D. Revise the Report to reevaluate the risk and propose additional corrective action, as necessary.

4. Section 5.6.1, Data Quality Objectives, lines 33-38, page 5-4, and Section 5.6.9, Uncertainty Discussion, line 28, page 5-10

Permittee Statements: "The comparison indicated that all laboratory reporting limits would be less than the cleanup levels, except for two analytes being analyzed using USEPA Method 8270D (benzidine and n-nitrosodimethylamine). Table 5-1 of this report demonstrates that the actual reporting limit achieved for each analyte was less than its corresponding cleanup level, except for benzidine and n-nitrosodimethylamine, as expected based on the comparison provided in the work plan."

"The Army proposes no further action relating to these compounds."

NMED Comment: NMED concurs that these compounds are not associated with any facility activity; thus, no further action relating to these compounds is necessary. However, the Permittee must use an analytical method capable of providing lower detection limits for these compounds in the future. No revision to the Report is necessary.

5. Section 6.4, Confirmation Sampling, lines 20-26, page 6-2, and Section 6.6.3, Data Used in the Evaluation & Identification of COPCs, lines 30-39, page 6-5 & lines 1-5, page 6-6

Permittee Statements: "Following the removal of surface debris from Feature 4, nine discrete excavation confirmation samples were collected from Area A and 13 discrete confirmation samples from Area B. Each sample was analyzed for RCRA 8 metals using USEPA Method 6010C and Method 7471B; PCBs using USEPA Method 8082A; PAHs using USEPA Method 8270 SIM; SVOCs using USEPA Method 8270D; VOCs using USEPA Method 8260C; pesticides using USEPA Method 8081B and asbestos using USEPA Method 600/R-93/166. A total of 22 discrete samples and five field duplicate sample were collected from Feature 4."

"Area A – The debris in this area occurred in mounds that were several feet thick in the center, tapering off to a few inches along the edges of the mounds. During the initial excavation, nine samples and three duplicates were collected from below the base of the excavation at depths up to 2.0 feet bgs (4AEC01-0.0-0.5D-SO through 4AEC09-0.0-0.5D-33 SO). During a subsequent excavation to address cleanup level exceedances in two locations (4AEC05-0.0-0.5D-SO and 4AEC08-0.0-0.5D-SO), two additional samples were collected below the base of the excavation at approximately 3.5 feet bgs and 3.0 feet bgs (4AEC05-1.0-1.5D-SO and 4AEC08-1.0-1.5D-SO).

Area B – The debris in this area was thickest to the north at just over a foot, tapering to less than 6 inches thick on the south. During the initial excavation, thirteen samples and two duplicates were collected from below the base of the excavation at depths up to 1.0 feet bgs (4BEC01-0.0-0.5D-SO through 4BEC013-0.0-0.5D-SO). During a subsequent excavation to address cleanup level exceedances at one location (4BEC03-0.0-0.5D-SO), one additional sample was collected below the base of the excavation at approximately 2.0 feet bgs (4BEC03-1.0-1.5D-SO)."

NMED Comment: The Permittee is required to collect discrete samples every 20 ft from the sidewalls of the excavation when debris is removed from depths greater than one foot bgs according to the May 29, 2015 letter. It appears that no sidewall samples were collected even though the excavation depth exceeded one foot bgs in several areas. The Permittee should have collected sidewall samples from areas where the excavation depths exceeded one foot bgs. Collect sidewall samples from the native soils at the limits of excavation and analyze them for all analytical parameters specified above. In addition, the Permittee is required to collect discrete samples at the base of the excavation using a 20-ft by 20-ft sampling grid according to the letter. The number of base samples collected by the Permittee appears to be less than the number of base samples required by the NMED (i.e., one sample per 400 ft²). Explain the variance in the revised Report; otherwise, additional base samples must be also collected and analyzed. Any additional base samples must be collected from native soils directly beneath the backfill. Include the analytical results and discussion in the revised Report. If the base of the excavation is sloped such that sidewall sampling is not possible, clarify the conditions in the revised Report. Provide photographs of the Area A excavation. Revise the Report to reevaluate the risk and propose additional corrective action, as necessary.

6. Section 6.6.1, Data Quality Objectives, lines 23-30, page 6-4

Permittee Statement: "The comparison indicated that all anticipated laboratory reporting limits would be less than the cleanup levels, except for two analytes being analyzed by USEPA Method 8270D (benzidine and n-nitrosodimethylamine) and two analytes being analyzed by USEPA Method 8260C (1,2,3-trichloropropane and 1,2-dibromo-3-chloropropane). The actual reporting limits achieved for each analyte tested were below the corresponding cleanup levels, except for the four analytes identified above, as expected based on the comparison provided in the work plan."

NMED Comment: The Permittee must use an analytical method capable of providing lower detection limits for these compounds in the future. No revision to the Report is necessary. See Comment 4.

7. Section 6.6.8, Risk Evaluation Results, lines 1-2, page 6-10

Permittee Statements: "The results of the initial cumulative risk evaluation for all other COPCs indicate that the estimated cancer risk of 1×10^{-5} does not exceed the NMED target

Messrs. Patterson and Smith
August 21, 2017
Page 5

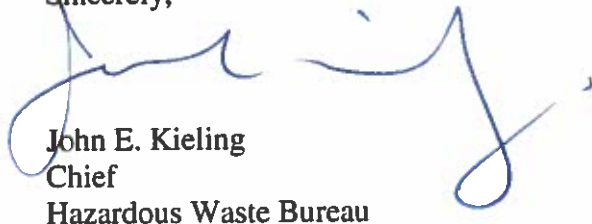
level of 1×10^{-5} ."

NMED Comment: Provide the estimated cancer risk with appropriate significant figures to show that the value does not exceed 1×10^{-5} .

The Permittee must submit a revised Report that addresses all comments contained in this Disapproval. In addition, the Permittee must include a response letter that cross-references where NMED's numbered comments were addressed. The Permittee must also submit an electronic redline-strikeout version of the revised Report showing all changes that have been made to the Report. The revised Report must be submitted no later than **March 31, 2018**.

Should you have any questions, please contact Ben Wear of my staff at (505) 476-6041.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
B. Wear, NMED HWB
C. Hendrickson, U.S. EPA Region 6
L. Rodgers, Navajo Nation
S. Begay-Platero, Navajo Nation
M. Harrington, Pueblo of Zuni
C. Seoutewa, Southwest Region BIA
G. Padilla, Navajo BIA
J. Wilson, BIA
B. Howerton, BIA
R. White, BIA
C. Esler, Sundance Consulting, Inc.

File: FWDA 2017 and Reading, Parcel 6, FWDA-16-011



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Cabinet Secretary
BRUCE YURDIN
Acting Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

November 7, 2018

Mark Patterson
BRAC Environmental Coordinator
Fort Wingate Depot Activity
13497 Elton Road
North Lima, OH 44452

Steve Smith
USACE
CESWF-PER-DD
819 Taylor Street, Room 3B06
Fort Worth, TX 76102

**RE: DISAPPROVAL
FINAL PERMITTEE-INITIATED INTERIM MEASURES REPORT
PARCEL 6, REVISION 1
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-16-011**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) *Final Permittee-Initiated Interim Measures Report Parcel 6, Revision 1* (Report), dated July 27, 2018. NMED has reviewed the Report and hereby issues this Disapproval. The Permittee must address the following comments.

1. Response to NMED's August 21, 2017 Disapproval Comment 2

Permittee Statements: "The removal action at SWMU 8 occurred in 4 separate phases. One waste profile sample was collected following the initial removal on 10/20/15; 2 samples were collected on 12/08/15; a 4th sample was collected on 5/12/16; and a fifth sample was collected on January 18, 2018."

and,

"The text was revised to reflect that 5 waste profile samples were collected [in Section 5.3]."

NMED Comment: In Section 5.3, *Waste Profile Sampling and Disposal*, lines 22-24, page 5-2, the Permittee states, “[c]opies of waste profile laboratory report summary and waste manifests and landfill weigh tickets are included in Appendix G.” Appendix G notes, “[d]ue to the excessive number of scanned pages, this appendix has not been tagged for accessibility.” The information presented in Appendix G is not organized in a reviewable manner. Provide a table summarizing the analytical results for all waste profile samples collected for Solid Waste Management Unit (SWMU) 8 in the revised Report. In addition, all appendices must be organized reviewable manner for readers (e.g., table of contents) and include bookmarks in the electronic version.

2. Responses to NMED’s August 21, 2017 Disapproval Comments 4 and 6

Permittee Statements: “In cases where it is not possible to meet sensitivity criteria the laboratory will be instructed to inform the Army prior to completing a work plan.”

NMED Comment: Comment 2 in NMED’s *Approval with Modifications for Final 2017 Interim Facility-wide Groundwater Monitoring Plan, Version 10 Revision 1*, dated October 22, 2018, provides further instruction regarding the issue. No response is required.

3. Sampling Result Tables

NMED Comment: Tables 5-1A, 5-1B, 6-1A, 6-1B, and others list all analytes for all analytical methods applied to the samples. This is a departure from the standard practice of presenting data in tables based on the analytical group (e.g., a table for VOCs, a table for SVOCs, a table for metals, etc.). Presenting data for all analytes in one table increases review time for a document based on the difficulty of finding a specific analyte for a specific sample in a single 320-page table that spans two volumes (Table 6-1B). Revise the Report to present data in tables specific to analyte groups as has been performed in the past. This applies to all tables where data is presented in this and all future documents.

4. Electronic Database

NMED Comment: The Permittee failed to submit an electronic database that includes all historical data for Parcel 6 in the Report, which has been provided historically. The document cannot be fully reviewed without the electronic database. For all documents that include analytical data, the Permittee must include a searchable electronic file with all historical data included in a format acceptable to NMED. Provide the searchable electronic data in the revised Report.

5. Analytical Laboratory Reports

NMED Comment: The Report includes Level IV reports from the analytical laboratories. This has resulted in over 18,000 pages of laboratory reports for this Report. This level of reporting is rarely needed and cumbersome. NMED requests that only Level II analytical laboratory reports be included with all submittals. Revise the Report by substituting the Level

II reports for the Level IV analytical reports. In addition, for large appendices such as the 12,228-page Appendix J where multiple analytical and quality assurance/quality control reports are included, the Permittee must include descriptive bookmarks indicating where each new report begins.

6. Sample to Analytical Laboratory Report Link

NMED Comment: The Permittee provided large quantities of data with no indication where to locate a specific sample within a specific analytical laboratory report. For this document alone, the Permittee provided over 18,000 pages of analytical laboratory reports with no indication of where a specific sample can be located. For every document that includes analytical data, provide a link for each specific sample to a specific lab report filename (if multiple files are provided) or to a page number in the appendix where the specific lab report can be found (if multiple lab reports are combined into one large file). For Appendices C and F, the lab reports are indexed by lab report number. The Permittee must provide a link to the lab report number for each analyte. For Appendix J, no indexing is provided and multiple laboratory reports are combined. The Permittee must either provide indexing for each report and indicate which particular report contains a particular sample, or provide specific page numbers for each sample ID that indicates where the sample can be found in the lab reports. This information can be provided either in a new table or in the analytical data electronic database.

7. Section 2.2, Remediation Goals, lines 7-13, and Section 2.2.1, Human Health Screening Levels and Risk Evaluation Approach, lines 30-33, page 2-2

Permittee Statements: “The risk evaluation initially [sic] presented in the October 2016 PIIM Report used the July 2015 NMED risk guidance because the risk evaluation started in 2016 prior to NMED issuing the March 2017 (Revised) edition of the its risk guidance. This PIIM report retains use of the 2015 NMED SSLs and 2015 USEPA RSLs, as allowed by NMED consistent with Comment 4 on the Final RCRA Facility Investigation Report for Parcel 7 (NMED, 2017a) that states, “If the risk assessment is already in progress (e.g., started or being revised through comments), NMED allows the older version of the guidance to be followed.”, and

“The screening levels used in the human health risk evaluation were those appropriate for evaluating residential receptors exposed to COPCs in soil through the direct contact pathway and the soil to groundwater pathway, and that were in effect at the time the original risk evaluation was submitted to NMED (October 2016).

NMED Comment: The Permittee used a statement taken out of context from NMED comments on another Parcel’s investigation report to justify use of the 2015 risk guidance. The Permittee failed to include that field work continued to be conducted through 2018 for this investigation. In addition, while the initial risk evaluation was submitted in 2016, the Permittee had not completed the scope of the investigation as approved by NMED; therefore, risk evaluation at that time was not appropriate. NMED’s policy is that the risk assessment guidance that is in effect when the field work is completed is the appropriate guidance to

follow. Therefore, the Permittee must reevaluate the risk related to Parcel 6 based on NMED's March 2017 *Risk Assessment Guidance for Site Investigations and Remediations* (Guidance). Revise the Report to include risk assessment based on the appropriate guidance.

8. Section 4.5, Confirmation Sampling Results, lines 14-15, page 4-2

Permittee Statement: "Based on the confirmation sampling, soil removal for lead in AOC 28 -Igloo Block B is considered complete."

NMED Comment: NMED does not agree with this statement. The Permittee has been directed through comments in multiple documents that direct comparison of multi-incremental (MI) samples to SSLs is not appropriate for compliance purposes. Disregarding NMED's comments without adequate justification constitutes non-compliance. Further characterization is required at multiple apron sites where MI sample concentrations exceeded the background concentration for lead and multiplication of the sample concentration by the number of subsamples results in exceedance of the SSL. A preliminary review of the data indicates that 55 MI samples from decision units in Igloo Block B fit the criteria above and require further characterization. Review the data for the aprons and propose to submit a Phase 2 interim measures work plan that proposes to further subdivide the decision units for collection of MI samples or collect discrete samples where further characterization is warranted in the revised Report.

9. Section 4.8.3, Background Threshold Values, lines 32-33, page 4-7

Permittee Statement: "However, an evaluation of metals background may not be conducted if a cumulative risk evaluation is not required because only one analyte is detected."

NMED Comment: The statement is not correct. Regardless of the number of contaminants of potential concern (COPCs), it is acceptable to screen out site concentrations as being within background levels. If the site metal concentrations were within background levels, eliminating all COPCs, no risk assessment would be required. For Area of Concern (AOC) 28, because the background reference value for lead (12.4 milligrams per kilogram, mg/kg) is significantly below the direct contact residential soil screening levels (SSLs) (400 mg/kg residential and 800 mg/kg industrial/construction), retention and/or elimination of lead as a COPC through site attribution analysis does not impact the conclusions for this site. Revise the Report accordingly.

10. Section 4.8.9, Risk Evaluation Results – Human Health, lines 17-18, page 4-9

Permittee Statement: "The results of the risk screening are illustrated in Table 4-1. All lead results were below the screening level."

NMED Comment: The evaluation of the data for AOC 28 does not include an evaluation of the soil-to-groundwater pathway. All of the data provided in Table 4-1 that are not reflective of background levels exceed the lead soil-to-groundwater screening level based on a dilution

attenuation factor (DAF) of 20. However, given the site history, small areas of impact and comparison to background levels, it is unlikely that impact to groundwater has occurred. Revise the Report to address the soil-to-groundwater pathway and provide lines of evidence to demonstrate why it is incomplete in the revised Report.

11. Section 5.1, Previous Investigations, lines 8-9, page 5-1

Permittee Statement: “Former Building 537 was also used to store containers of pesticides and was demolished in 2010.”

NMED Comment: An inspection for asbestos-containing materials (ACM) must be conducted during the investigation in accordance with Permit Section VIII.A.1.e. If ACM is found, the soil must be analyzed for the presence of asbestos. Propose to submit a phase 2 interim measures work plan to evaluate for the presence of ACM in SWMU 8 in the revised Report.

12. Section 5.4, Confirmation Sampling, lines 8-9 and 14-15, page 5-4

Permittee Statements: “[The analytical results indicated that COPC concentrations exceeded the screening levels in] one sample from Area B (0608B537BEC-0.0-0.5D-SO) [in SWMU 8],”

and,

“One discrete bottom sample (0608B537BEC-1.0-1.5D-SO) was collected from Area B.”

NMED Comment: The second confirmation sample was designated as 0608B537BEC-2.0-2.5D-SO in Table 5-1B, *SWMU 8 – Former Building 537 Excavation Confirmation Sampling Results (all results)*. Correct the discrepancy in the revised Report.

13. Section 5.6.2.8.2, Initial Cumulative Risk Evaluation, Residential Receptors (Area A through E), lines 10-12, page 5-15

Permittee Statement: “The results of the cumulative evaluation for the direct contact pathway are presented in Table 5-3A, and indicate the estimated cancer risk of 1.5×10^{-5} is greater than the NMED target risk threshold of 1×10^{-5} .”

NMED Comment: The 2015 NMED Soil Screening Levels were applied. If the 2017 NMED Soil Screening Levels had been applied, it is likely the initial screen would have met target risk levels. Although the refined risk assessment, using the 95% upper confidence level of the mean, resulted in acceptable risk levels, use of the current screening levels would have resulted in less cumbersome assessments with less refinement and justification needed to address uncertainties. Revise the Report to use the 2017 SSLs.

14. Table 5-2, Quantitation Limits Compared to Human Health Soil Screening Levels - Direct Contact, p 5-T137 and Table 5-5, SWMU 9 - POL Discharge Area - Quantitation Limits Compared to Ecological Screening, p 5-T145, etc.

NMED Comment: According to Tables 5-2 and 5-5, there were multiple analytes with quantitation limits that exceeded the residential and ecological soil screening levels. Quantitation limits that exceed screening levels make it impossible for the Permittee to demonstrate, or for NMED to defend, that contamination is not present at unacceptable concentrations at the facility. The Permittee must make a concerted effort to identify analytical laboratories that can achieve appropriate quantitation limits that are below the screening levels. Revise the Report to discuss efforts to achieve appropriate quantitation limits as detailed above.

15. Section 6.4, Confirmation Sampling, lines 33-38, page 6-2 and line 1, page 6-3

Permittee Statement: “The analytical results indicated that COPC concentrations exceeded the NMED direct contact [soil screening levels] SSLs in two samples from Area A (4AEC05-0.0-0.5D-SO and 4AEC08-0.0-0.5D-SO) and in one sample from Area B (4BEC03-0.0-0.5D-SO). Additional soil was removed from Areas A and B and three new confirmation samples were collected on March 7, 2016 (4AEC05-1.0-1.5D-SO, 4AEC08-1.0-1.5D-SO, and 4BEC03-1.0-1.5D-SO). The analytical results from the three new confirmation samples indicated that COPC concentrations were below the NMED direct contact SSL.”

NMED Comment: The Permittee returned to the field during 2017 and 2018 to collect samples required by the NMED-approved work plan that were omitted during the initial field work. Three of the collected samples from SWMU 20, Feature 4 exceeded the SSLs for SVOCs, yet discussion of these results was not provided in the text. Table 6-1A, *Excavation Confirmation Sampling Results (detections only)* and Figure 6-3, *Exceedance Area Map, Human Receptors*, indicate that the concentrations of COPCs exceeded the applicable screening levels in the soil samples collected from 4AEC-05D-SO, 4BEC-03D-SO, and 4BEC-28D-SO. The soils that contain these exceedances are still present. The Permittee must propose to collect step-out and deeper samples to define the extent of contamination, remove the soils where the exceedances are detected, and conduct confirmation sampling after removal of the contaminated soils. Use of the 2017 Guidance, which increased the direct contact SSL concentration for benzo(a)pyrene, results in only one exceedance versus three. Propose to submit a phase 2 interim measures work plan to define and remediate the SVOC contamination at this location in the revised Report.

16. Section 6.6.2.5, Screening Levels, lines 30-33, page 6-9

Permittee Statement: “Direct contact pathway – SSLs for residential receptors and construction workers identified in NMED risk guidance (NMED, 2015b) were considered in the human health risk evaluation, with the exception of arsenic in soil where NMED is allowing use of the site-specific background level of 5.6 mg/kg in lieu of the NMED screening level.”

NMED Comment: The site-specific background level of 5.6 mg/kg was used to screen arsenic as a potential COPC and for assessing site risk. The agreement with NMED to use 5.6 mg/kg for screening purposes was based on the fact that at the time of this agreement, the SSL for arsenic was below the background level. However, the 2017 SSL for arsenic is 7.07 mg/kg (residential). The current SSL for arsenic must be used for estimating risk, to avoid an overly conservative evaluation for arsenic. Revise the Report to include risk assessment evaluation based on the March 2017 Guidance.

17. Section 6.6.2.7, Risk Evaluation Approach, Step 1, lines 17-22, page 6-11

Permittee Statement: “Metals with maximum concentrations greater than the site-specific background level were further evaluated by comparing the maximum detected concentration in the sample set to the maximum detected concentration in the background data set. Metals with maximum concentrations from the sample set that are at or below the maximum concentration from the background data set are not considered site-related and are eliminated from further evaluation.”

NMED Comment: The comparison of site data to a background range is only applicable for arsenic. According to Section 2.7.3 of the 2015 NMED Guidance, if the maximum detected concentration is greater than the background reference value, a statistical evaluation is required to determine if the data are statistically different. Further, as noted in Section 2.8.3.3 of the 2017 NMED Guidance, a “simple comparison to a range of data or quartiles are not acceptable lines of evidence” to drop a constituent from the risk assessment. Remove the statement from the Report and revise the risk assessment tables and discussions accordingly.

18. Section 6.6.2.8.3, Initial Cumulative Risk Evaluation, lines 26-28, page 6-13

Permittee Statement: “The initial cumulative risk evaluation considered six metals, two pesticides (4,4’-DDE and 4,4’-DDT), three PCBs (Aroclors 1254, 1260, and 1268), five VOCs, and 14 PAHs.”

NMED Comment: Five volatile organic compounds (VOCs) were retained as COPCs for the human health risk assessments. However, an evaluation of the vapor intrusion pathway has not been provided. Section 2.5.2 of the 2015 NMED Guidance (and Section 2.5.2 of the 2017 NMED Guidance) outlines the tiered approach for the evaluation of the vapor intrusion pathway. Since VOCs were detected, the vapor intrusion pathway is at least potentially complete and requires a qualitative discussion. If the pathway is complete according to the guidance, a quantitative assessment conducted in accordance with the methodology outlined in Section 2.5.2 of the 2017 NMED Guidance, is required. Revise the Report to address vapor intrusion.

19. Section 6.6.2.8.3, Initial Cumulative Risk Evaluation, Soil to Groundwater Pathway, lines 24-29, page 6-14

Permittee Statement: “The results of the initial cumulative risk evaluation for the soil to groundwater pathway are presented in Table 6-4C and indicate that the estimated total cancer risk of 1×10^{-4} is greater than the NMED target risk threshold of 1×10^{-5} . PAHs contribute the majority of the risk with benzo(a)pyrene contributing the greatest percent of risk from PAHs. Further evaluation of potential cancer risks was warranted and a refined cumulative risk evaluation was conducted.”

NMED Comment: For the soil-to-groundwater screening analyses, risks were calculated using constituent-specific concentrations in the subsurface and the generic soil-to-groundwater SSLs for a dilution attenuation factor DAF of 20 taken from the 2015 NMED Soil Screening Guidance. The generic soil-to-groundwater SSLs address the potential leaching of contaminants from the vadose zone to groundwater and incorporate chemical and physical properties of the constituents. The soil-to-groundwater SSLs are not truly risk-based numbers and as such, estimations of risk should not be conducted nor be included in cumulative risk/hazard estimates; therefore, comparison to target risk levels is not applicable to the soil-to-groundwater pathway. Rather than estimating risk, soil contaminant concentrations must be compared directly to the soil-to-groundwater screening levels to determine if the subsurface soil contamination has the potential to act as a source of contamination for groundwater. If the site concentration is greater than the appropriate soil-to-groundwater SSL, additional investigation is necessary to evaluate potential leaching and migration to groundwater in excess of NMED groundwater protection criteria. Refinements of the soil-to-groundwater pathway do not include evaluation on a target organ-specific basis; again, the soil-to-groundwater SSLs are not evaluated as risk-based numbers and comparison of risk by target organ is inappropriate. Section 4.3 of the 2017 NMED Guidance allows the use of the least conservative SSL for the initial SSL evaluation (this may be based on a water quality parameter, a contaminant limit or drinking water standard). Revise all text and associated tables in the Report, removing all estimates of risk/hazard for the soil-to-groundwater pathway. In addition, revise the discussion of the soil-to-groundwater screening in terms of point comparisons and the identification of constituents that exceed the corresponding SSLs. Where soil-to-groundwater SSLs are exceeded, additional evaluation following Section 4.3 of the 2017 NMED Guidance is required.

20. Table 6-3, Metals Background Evaluation, page 1 of 1

NMED Comment: Barium was detected above the background reference value. As such, it should have been retained as a COPC. The only metal where comparison to a range of background is acceptable is arsenic. Revise the table (and the risk in Table 6-4A) to include barium as a COPC in the revised Report. It is noted that inclusion of barium will not significantly change the estimated hazard index.

21. Table 6-5A, Cumulative Risk/Hazards Calculations for Detected Analytes, page 1 of 1

NMED Comment: The total cancer risk ($1.3\text{E-}05$) when using the refined exposure point concentrations (95% upper confidence level of the mean) slightly exceeds the target risk level of $1\text{E-}05$. The primary driver is polycyclic aromatic hydrocarbons (PAHs). Note that PAH risks are based on outdated toxicity. The three PAHs with the highest level of contribution to total risk are benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene. Based on the 2015 SSLs, the risk resulting from these three PAHs is $1.11\text{E-}05$. However, if the 2017 SSLs are applied, the cumulative risk due to these three PAHs drops to $6.8\text{E-}06$. It is likely that use of the 2017 NMED SSLs will show acceptable cancer risk for the residential receptor at SWMU 20. Reevaluate the cancer risk using the 2017 NMED SSLs in the revised Report.

The Permittee must submit a revised Report that addresses all comments contained in this Disapproval. In addition, the Permittee must include a response letter that cross-references where NMED's numbered comments were addressed. The Permittee must also submit an electronic redline-strikeout version of the revised Report showing all changes that have been made. The revised Report must be submitted no later than **January 31, 2019**. The revised Report must include a schedule for submittal of a phase 2 interim measures work plan as directed in the comments.

Messrs. Patterson and Smith
November 7, 2018
Page 10

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 476-6059.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
B. Wear, NMED HWB
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File: FWDA 2018 and Reading, Parcel 6, FWDA-16-011



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James C. Kenney
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Jennifer J. Pruett
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

June 4, 2019

Mark Patterson
BRAC Environmental Coordinator
Fort Wingate Depot Activity
13497 Elton Road
North Lima, OH 44452

Steve Smith
USACE
CESWF-PER-DD
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**RE: DISAPPROVAL
FINAL RCRA FACILITY INVESTIGATION REPORT
PARCEL 6, REVISION 1.0
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-12-008**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) *Final RCRA Facility Investigation Report Parcel 6 Revision 1.0* (Report), dated March 29, 2019. NMED has reviewed the Report and hereby issues this Disapproval. The Permittee must address the following comments.

GENERAL COMMENTS

1. Overarching Issues with the Report

NMED Comment: The Permittee has again provided a document that appears not to have been reviewed for quality, accuracy, or completeness prior to submittal. The Permittee has repeatedly been directed to ensure that the documents they submit are accurate and complete. The Permittee is required to submit a redline-strikeout version of the Report that shows where all changes have been made. The redline-strikeout version provided by the Permittee

does not show all changes that were made to the Report. The Permittee is also required to provide a response-to-comment table (RTCs) indicating where changes were made to the Report based on NMED's previous comments. Every page number/line reference in the table that the Permittee provided is inaccurate. Review time for this document was significantly increased by both issues because the reviewer was forced to re-review the entire document versus being able to review just where changes were made based on the redline-strikeout version and the response-to-comment table. In addition, the Report is missing figures and tables referenced in the text and contains multiple inaccuracies. The Report also contains many other issues that have previously been commented on by NMED, including the inclusion of inappropriate appendices, the inclusion of other reports in appendices, and inappropriate appendix designations within an appendix. The Permittee's submittal of inaccurate documents constitutes noncompliance [see 40 CFR 270.11(d)(1)]. All documents submitted by the Permittee to the NMED subsequent to receipt of this letter shall include the certification included in 40 CFR 270.11(d)(1) in its entirety and without any modification above the signature line(s) on each document.

2. Electronic Media Provided

NMED Comment: The Permittee provided three media discs with the formal submittal of the Report. Each disc is labeled "Disk 1 of 1". This is misleading. Each disc should have been labeled "Disk 1 of 3", "Disk 2 of 3" or "Disk 3 of 3" for continuity and organization. In addition, one of the discs contained the revised Report and four of the Appendices, one disc contained only the same four Appendices included with the first disc, and the third disc contained only the inaccurate redline-strikeout version of the Report. It is redundant and unnecessary to include the same appendices on more than one disc. Again, this illustrates a lack of review for quality, accuracy, and completeness. For all future submittals, ensure that labels on media are accurate and that the submitted media contains the appropriate information.

3. Incremental Sampling Methodology

NMED Comment: As stated in comments issued by the NMED to the Permittee spanning more than a decade, Incremental Sampling Methodology or Multi-Incremental (ISM or MI) samples in this application are only appropriate for screening-level decisions. NMED's September 5, 2007 *Notice of Disapproval Parcel 21 RCRA Facility Investigation Work Plan and Release Assessment Report for Parcel 21* states:

The Permittee proposes to perform multi-incremental (MI) sampling at various SWMUs and AOCs. NMED views multi-incremental sampling for the applications proposed in this Work Plan as a screening tool only. If contamination is identified in soils using MI procedures, the Permittee may be required to conduct additional sampling at selected sites.

NMED's December 12, 2008 *Approval with Modification RCRA Facility Investigation Work Plan Parcel 21* states:

NMED considers MI sampling to be acceptable as a screening tool in some situations but is appropriate for compliance only for surface releases with detonations as the contaminant release source and then only for explosive compounds and some metals.

The Permittee's repeated attempts to use the ISM sampling data for compliance purposes rather than screening purposes make it appear that the Permittees do not understand the function of a screening tool. Therefore, in NMED's February 2, 2018 *Disapproval Final RCRA Facility Investigation Work Plan Parcel 2 Revision 1*, the Permittee was provided with the following comment:

The reported constituent concentrations for incremental samples must be multiplied by the number of subsamples in each decision unit for comparison to screening levels. If any exceedances are found during the screening process, the Permittee is also required to conduct additional soil sampling by further dividing the sampling grid in the decision unit to identify whether there is a local area of contamination. This comment applies to all AOCs and SWMUs where a multi-incremental soil sampling approach is utilized.

While three examples of previous comments are provided above, a limited review has identified at least 16 different documents containing similar comments. In this Report, the Permittee has again ignored NMED direction and attempted to utilize ISM sample results for compliance purposes. This is not acceptable. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action.

The NMED does not accept the inappropriate use of the incremental sampling method. NMED will only accept multi-incremental or ISM samples for explosives and metals in large-area surface releases with detonation or airborne distribution as the contaminant release source. The Permittee must review all planned work and revise any plans that propose ISM sampling to propose an alternate sampling approach. NMED hereby rescinds approval of all proposed ISM or MI sampling that was previously approved, but has not yet been conducted at the Facility.

4. Electronic Version of the Response-to-Comment Table

NMED Comment: Although an electronic version of the response to comments (RTCs) was submitted to the NMED as an email attachment, it was not included in the formal submittal. The RTCs must be included as a part of the formal submittal so that it is available for review in the Administrative Record. The Permittee has repeatedly been directed to include the RTCs in their formal submittals. NMED's March 8, 2018 *Disapproval Final RCRA Facility*

Investigation Work Plan Parcel 9 Revision 1 (March 8, 2018 Disapproval) states:

The Permittee did not provide an electronic version of their response to NMED's Disapproval comments on the included CD.

For all future revised document submittals, provide an electronic version of the Permittee's response to comments with the electronic version of the submittal. [emphasis added]

For all future submittals, the Permittee must include the RTCs in the electronic version on the CDs. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action.

5. Redline-Strikeout Version of the Report

NMED Comment: There are section numbers in the final and redline-strikeout (RLSO) versions of the Report that are not consistent. For example, Section 4.3.1, Soil Investigation, in the final version is numbered as Section 4.2.4 in the RLSO version. Correct the errors in the RLSO version to be consistent with the final version of the Report. In addition, all revisions were not identified in the RLSO version, as required. For example, Section 6.3.1 of the final version uses the terminology "ISM samples"; however, the same section of the RLSO version uses different terminology "Multi-Incremental". The difference is not identified in the RLSO version. The RLSO version must identify all revisions made to the previous version of the Report. Failure to provide an accurate RLSO version slows review by creating the potential for changes to be overlooked. The inability to identify changes to a document can be misleading and implies, at best, poor quality control and, at worst, a deliberately misleading submittal on the part of the Permittee. Comment 2 of NMED's October 29, 2018 *Disapproval Final RCRA Facility Investigation Report Parcel 7 Revision 1* (October 29, 2018 Disapproval) states:

The Report was revised extensively; however, all revisions were not identified in the RLSO version. For example, although many new sections, tables and figures were added to the revised Report, these changes were not identified in the RLSO version. Similarly, new acronyms and abbreviations were added to the List of Acronyms and Abbreviations; however, most of the new acronyms and abbreviations were not identified in the RLSO version. The RLSO version must identify all revisions made to the previous version of the Report. Failure to provide an accurate RLSO version slows review, creates the potential for changes to be overlooked, and the inability to identify changes to a document can be misleading.

The Permittee must provide accurate and complete RLSO versions that show where all changes were made for all revisions of documents. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action. For future submittals,

failure to provide an accurate RLSO version may result in a second fee assessment based on a rejection due to the need for NMED to review the entire document as if it were a new submittal.

6. Response-to-Comment Table

NMED Comment: The RTCs provide references for the lines and pages where changes were made to the Report based on each response. However, none of the references are accurate.

The Permittee has repeatedly been directed to ensure accuracy in the documents they submit to NMED and have not followed that direction. For example, NMED's October 29, 2018 Disapproval states:

Not all revised sections, tables, and/or figures are referenced in the RTC letter. The RTC letter must identify all revised parts of the Report required by the NMED comments. Ensure that the RTC letter is accurate and complete for all future submittals.

Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action. The Permittee must provide an accurate RTC table for this Disapproval that also includes the changes made for the current version based on the comments provided by NMED in the November 7, 2018 *Disapproval Final Permittee-Initiated Interim Measures Report Parcel 6, Revision 1* (November 7, 2018 Disapproval).

7. Appendices

NMED Comment: The Permittee has frequently received comments on the contents of appendices. For example, NMED's March 9, 2016 *Disapproval Final RCRA Facility Investigation Work Plan Parcel 20* states [original comment and table reduced to issues included in this Report]:

The Permittee has provided a document that is difficult to review. The Work Plan includes appendices that are not needed or required. Inclusion of these appendices requires NMED to review and provide comments on each of them, thereby significantly slowing the review process. Removal of these types of appendices will allow NMED to provide more rapid review of documents. The extraneous appendices and suggestions include:

Appendix and Title	Suggestion
Appendix D: Uniform Federal Policy for Quality Assurance Project Plan/SOPs – not project specific	QAPPs are not typically project specific. Detailed methods and procedures to be used at Parcel 20 must be provided in the "Investigation Methods" section of the text.

Also, many of the appendices contain internal appendices that are labeled similarly to the Plan appendices. For instance, Appendix A contains an Appendix A, Appendix B, and Appendix C. This is confusing for the reviewer, as well as for cross-referencing comments. Revise the Plan to provide a logical naming system for appendices within the Plan appendices, e.g., Appendix A.1, Appendix A.2, etc.

NMED's November 1, 2016 *Disapproval Final Interim Measures Work Plan Parcel 21 – Solid Waste Management Unit 1 – TNT Leaching Beds* states:

NMED did not review and does not provide approval for:

- Appendix C, Landfill Disposal Management Plan/Documentation
- Final Installation Spill Contingency Plan included in Appendix D
- Appendix E, NRCS Soil Survey of McKinley County, New Mexico
- Appendix G, Programmatic Agreement
- Appendix H, Asphalt Road Construction Specifications
- Appendix I, Laboratory Quality Control Limits

Previous NMED comments on other documents have requested that the Permittee not include full documents or reports as appendices. These documents or reports must be referenced in the Work Plan, but should be submitted to NMED separately as reference documents. In addition, adding full documents, such as the Spill Contingency Plan into an appendix titled, "Field Analysis Work Plan" is confusing. All appendices must have all pages properly numbered for review. Revise the Work Plan to correct these issues.

Three of the appendices listed in the previous comment above were included in the current Report (Appendices B, C and F). NMED's March 8, 2018 Disapproval states:

NMED did not review and does not provide approval for:

- Appendix A, Summary Report of Historical Information
- Appendix B, Cultural Resources Programmatic Agreement
- Appendix C, NRCS Soil Descriptions for Fort Wingate
- Appendix D, Quality Assurance Project Plan

NMED has repeatedly requested that the Permittee not include full documents or reports as appendices.

Three of the four appendices listed in NMED's previous comment were included in this Report (Appendices B, C and M). Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action. Remove extraneous appendices from the revised Report.

8. Quality Control

NMED Comment: The Permittee provided a Quality Control Summary Report in Appendix F. The report does not identify any samples that were reviewed or qualified. The report must identify all samples that were reviewed, all samples that failed any criteria, and all samples that were qualified based on failed quality criteria.

In addition, a Data Quality Evaluation Report is located in Appendix M behind the Quality Assurance Project Plan (QAPP). Section 3.5 of this report states, "[t]he samples were submitted in a manner that the duplicate association was 'blind' to the laboratory." This is not accurate, as every duplicate sample listed in the report include "-DUP" in its sample ID. Reviewed samples are identified in this data quality report, but while field duplicate precision failed to meet criteria in a field duplicate pair, the only samples that were qualified were the pair. Provide justification for not qualifying all samples associated with the failed field duplicate precision pair. While all of these issues are problematic, this Data Quality Report appears to be specific to samples collected prior to the 2011 investigation. Remove the Data Quality Report in Appendix M along with the QAPP.

The Permittee has previously been directed to ensure that quality assurance/quality control procedures and standard practices are followed. NMED's November 19, 2018 *Disapproval Final Permittee-Initiated Interim Measures Report Parcel 24 – Igloo Block A* states:

The Work Plan also specifically states,
"The identity of field duplicate samples will not be provided to the analysts or laboratory personnel. A log will be kept identifying each field duplicate sample to its parent sample. This procedure ensures that the laboratory will not know which duplicate sample matches the field sample. A table will be provided in the IM report that designates the field duplicate sample to the associated field sample."

This procedure was also not followed, as the four duplicate samples were all submitted with "DUP" in the sample identifier. Provide an explanation as to why the cited work plan was not followed.

In addition, one of the four field duplicates resulted in concentrations of lead and mercury that were 3 to 5 times the

concentrations found in the original sample. According to the Work Plan referenced in Appendix C, the RPD goal for duplicate samples is $\leq 20\%$. Half of the duplicate samples exceed the 20% goal, yet no samples were qualified. The cited work plan specifically states,

“Field duplicates will be evaluated by %RPD or, at low levels (i.e., when one or both results are less than 5 x Limits of Quantitation [LOQ]), the absolute difference in results ($|S-D|$). The specific numeric criteria for field duplicates for this project are as follows:

- When one or both results are less than 5 x LOQ, the extent of variability will be considered acceptable if, for soil samples, $|S-D|$ is less than the magnitude of $LOQ \times 2$ and, for water samples, $|S-D|$ is less than the magnitude of the LOQ.
- When both results are greater than 5 x LOQ, the extent of variability will be considered acceptable if, for soil samples, %RPD is less than 50% and, for water samples, %RPD is less than 35%.”

General QA/QC standards would require all data above the target 20% RPD to be qualified with a J flag for estimated value and all data that exceeds 50% RPD to be rejected and qualified with a R flag. The Permittee provides no discussion of this issue in the Report text. The Permittee must provide a discussion of the issue and justification (other than professional judgement) for not qualifying and/or rejecting all data based on the duplicate sample results with half of the duplicates exceeding the RPD range for acceptability.

Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action. Remove all inaccurate statements from the Report. Remove the Data Quality Report from Appendix M along with the QAPP. In addition, qualify all samples associated with failed field duplicate precision and provide a table indicating which samples were qualified.

9. Extraneous Data

NMED Comment: The Permittee included multiple tables including tables presenting data collected prior to the effective date of the FWDA RCRA Permit. This data was previously presented in the March 30, 2011 *Final – NMED Revised RCRA Facility Investigation Work Plan Parcel 6* (Work Plan) and was used qualitatively to direct the 2011 investigation, but

the data cannot be relied on for any decision-making purposes. The qualitative data is compared in the tables to NMED's 2006 soil screening levels (SSLs). This is not appropriate. Remove all data from the revised Report that was collected prior to the March 30, 2011 NMED-approved Work Plan. In addition, remove all maps depicting sample locations for any data collected prior to the March 30, 2011 NMED-approved Work Plan.

10. Field Method Descriptions

NMED Comment: The Permittee has repeatedly been directed to provide descriptions of activities conducted in the field in the text of the Report. References to work plans or standard operating procedures are not sufficient. For example, Section 3.3 states that soil samples were collected, but there is no indication of how the soil samples were collected. There is no indication of what type of drilling was used to gain access to a sample collection point. NMED's November 19, 2018 Disapproval states,

Soil sampling procedures were not described in the Report. All methods used in the field must be described in the Report. Provide details of the soil sampling procedures, including duplicate sample collection, in the revised Report.

Provide descriptions of all methods utilized in the field in the text of the revised Report. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action.

SPECIFIC COMMENTS

11. Response to NMED's Disapproval Comment 1

Permittee Statement: "Nonetheless, the Army has provided a lines-of-evidence discussion on potential soil to groundwater impact at relevant P6 SWMUs and AOCs."

NMED Comment: Although the Permittee states that a line-of-evidence discussion is provided, the relevant SWMUs and AOCs where the discussion was added are not stated in the RTC table. The RTC table must identify the sections, tables, and figures where changes were made to the Report to reflect the response. Revise the RTC table accordingly. In addition, if the lines-of-evidence discussion is not provided for a particular site (e.g., SWMU 20), explain why the discussion is not provided in the response letter.

12. Response to NMED's Disapproval Comment 1

Permittee Statement: "The field work associated with this RFI report was completed in 2011, and the RFI report was submitted to NMED in 2012. Therefore, Army utilized NMED Risk Guidance 2009 which was the most current guidance available at the time field work was completed."

NMED Comment: The statement is not accurate. Data provided in the Parcel 6 database indicates samples were collected in 2012, and investigation work has continued at Parcel 6 through at least 2018 via interim measures; therefore, field work has not been completed and risk assessment is premature. Following completion of all field work at Parcel 6, conduct a risk assessment using the NMED Risk Assessment Guidance that is in effect at the time of completion.

In addition, while the Permittee states that they utilized NMED's 2009 Risk Guidance, the residential SSLs provided in their tables do not match the 2009 SSLs. For example, Table 4-4 lists the residential SSL for benzo(a)pyrene as 621 µg/kg. NMED's 2009 residential SSL for benzo(a)pyrene was 481 µg/kg. The residential SSL utilized for perchlorate in Table 4-9 is three orders of magnitude higher than NMED's 2009 SSL. This indicates a lack of document quality control. Revise the Report to remove all risk assessment and all inaccurate statements.

13. Response to NMED's Disapproval Comment 2

Permittee Statements: "Army has updated the text accordingly and included a reference to the 2013 Arsenic Background Letter, as well as a discussion on the rationale why the site is not a potential source of arsenic."

and,

"The Army has not included this recent arsenic revision (2017) into this revised P6 RFI Report Rev 1.0 document for the following reasoning:

1. Army relied on NMED's comments in this NOD to revise the document as appropriate which requests Army to include the 2013 Arsenic Background Memo [first argument],
2. The field work was completed in 2011 and Army utilized the NMED Risk Guidance, 2009, which predates the 2017 arsenic SSL revision [second argument]."

NMED Comment: See Comment 12. Remove all risk assessment from the revised Report as it is premature. Following completion of all field work at Parcel 6, risk assessment must be conducted using the NMED Risk Assessment Guidance that is in effect at the time of completion.

14. Executive Summary, ES.3, Investigation Findings, SWMU 4 Building 600 (Former Building 539), lines 16-17, page ES-2

Permittee Statement: "SVOCs (EPA Method 8270C); and explosives (EPA Method 8330B) were not detected in any of the soil samples from SWMU 4."

NMED Comment: According to Table 3-1, *Summary of Reportable Concentrations for Soil Analyses Completed at SWMU 4, Building 600*, several SVOCs were detected at SWMU 4. The constituents were detected during the previous investigation. Revise the statement for accuracy.

15. Executive Summary, ES.4, Conclusions and Recommendations, SWMU 8 Building 537, lines 31-33, page ES-6

Permittee Statement: “Additional soil sampling for PCBs and PAHs following soil excavation per the NMED approved Final Permittee-Initiated Interim Measure Work Plan Parcel 6 Revision 1.0 (IMWP), dated May 4, 2015 is required.”

NMED Comment: Comment 11 in the November 7, 2018 Disapproval states, “[p]ropose to submit a phase 2 interim measures work plan to evaluate for the presence of [asbestos containing material] (ACM) in SWMU 8. This requirement was not included in the Report. Include the requirement in the revised Report.

16. Executive Summary, ES.4, Conclusions and Recommendations, AOC 28, Igloo Block B, lines 13-15, page ES-7

Permittee Statement: “Removal of lead exceedances will be completed per the NMED approved Final Permittee-Initiated Interim Measure Work Plan Parcel 6 Revision 1.0 (IMWP), dated May 4, 2015.”

NMED Comment: Comment 8 in the November 7, 2018 Disapproval states, “propose to submit a Phase 2 interim measures work plan that proposes to further subdivide the decision units for collection of MI samples or collect discrete samples where further characterization is warranted [for the investigation of AOC 28]. This requirement was not addressed in the Report. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action. Include the requirement in the revised Report.

17. Section 2.5, Current Investigation, line 36, page 2-9 and line 1, page 2-10

Permittee Statement: “Copies of original laboratory reports are included in Appendix E.”

NMED Comment: Thirty-seven analytical laboratory level IV reports are included in Appendix E, *Analytical Lab Reports*, totaling approximately 50,000 pages. The Permittee has previously been directed to not submit level IV analytical laboratory reports. NMED’s November 7, 2018 Disapproval states:

The Report includes Level IV reports from the analytical laboratories. This has resulted in over 18,000 pages of laboratory reports for this Report. These reports are unneeded and cumbersome. NMED requests that only Level II analytical laboratory reports be included in all submittals. Revise the Report by removing Level IV analytical reports and including Level II analytical reports.

Remove Level IV analytical reports from the revised Report and replace them with the Level II analytical reports.

18. Section 3.2.2, Sampling Data, lines 25-27, page 3-4

Permittee Statement: “Detected concentrations of explosives are presented in Table 3-2. All concentrations were estimated values less than 1 microgram per liter (µg/L).”

NMED Comment: Table 3-2, *Summary of Reportable Explosive Concentrations in Groundwater*, page 3-15, indicates that the reported concentrations are in milligrams per liter (mg/L). Resolve the discrepancy in the revised Report.

19. Section 3.2.2, Sampling Data, lines 32-34, page 3-4

Permittee Statement: “Nitrate and nitrite were also detected in two wells, TMW 11 and TMW 15, although concentrations were substantially below the New Mexico WQCC standards and EPA MCLs.”

NMED Comment: According to Table 3-2, the nitrate concentrations in groundwater samples collected from these wells ranged from 690 mg/L to 1,800 mg/L. Resolve the discrepancy in the revised Report.

20. Section 3.5.2, Conclusions and Recommendations, lines 17-19, page 3-10

Permittee Statement: “In addition, SWMU 4 did not have any historical uses which may attribute to the site being a source of arsenic contamination, especially since explosives were not detected in SWMU 4 soils.”

NMED Comment: Discuss the correlation between explosive compounds and arsenic detections in the revised Report.

21. Section 3.5.2, Conclusions and Recommendations, lines 25-27, page 3-10

Permittee Statement: “Remedial investigation performed to date, as discussed in Section 3.2.2, indicates that none of the target constituents were detected in the subsurface soil samples.”

NMED Comment: Section 3.2.2 states that low concentrations of several VOCs and SVOCs were detected in some samples. Revise the statement for clarity.

22. Section 3.5.2, Conclusions and recommendations, lines 6-8, page 3-11

Permittee Statement: “Based upon these sampling results and the operational history of SWMU 4, the data does not indicate that groundwater has been directly impacted in any way that is attributable to SWMU 4.”

NMED Comment: The fluoride concentrations in the groundwater samples collected from the relevant wells (e.g., TMW11 and TMW17) exceeded the applicable screening level

according to Table 3-2. However, the discussion regarding the exceedance is not included in the section. Include a discussion regarding the detections and exceedances of fluoride concentrations in groundwater samples collected from the wells. Revise the Report accordingly.

23. Section 4.1.4, Waste Characteristics and Contaminants of Potential Concern, lines 9-10, page 4-3 and Section 4.3, Current Investigation (2011), lines 11-12, page 4-7

Permittee Statement: “The COPCs for SWMU 8 are RCRA metals, VOCs, SVOCs, pesticides, and PCB.”

NMED Comment: Forklift hydraulic oil that contained PCBs may have been released to the environment at SWMU 8. The Permittee included total petroleum hydrocarbon oil range organics (TPH-ORO) analysis in the analytical suite for the soil samples collected from the site. However, TPH-ORO was not included as a COPC. Include TPH-ORO as a COPC in the revised Report.

24. Section 4.2.2, Sampling Data, Environmental Baseline Survey for the Transfer of Lands at Fort Wingate Depot Activity, New Mexico, USACE 2000, lines 19-20, page 4-5

Permittee Statement: “Friable ACM was abated in 1999 and lead-based paint (LBP) was assumed.”

NMED Comment: The statement does not make sense. Provide a clarification in the revised Report.

25. Section 4.3, Current Investigation (2011), lines 32-33, page 4-7, and Section 4.3.1, Soil Investigation, lines 2-3, page 4-8

Permittee Statement: “As directed by the RFI Work Plan for Parcel 6 (CH2M Hill, 2011), and as shown in Figure 4-6, 13 borings were advanced in the areas surrounding Building 537.”

NMED Comment: According to Figure 4-6, *Soil Sample Locations, SWMU 8*, there are 15 boring locations in the vicinity of Building 537. Correct the statement in the revised Report or provide a clarification for the discrepancy.

26. Section 4.3.1, Soil Investigation, lines 4-17, page 4-8

NMED Comment: Surface soil samples at a depth below 0-1-foot ground surface were not collected from borings 0608-SB14 and 0608-SB15. Since both PCBs and pesticides likely remain in the shallow soils, surface soil samples should have been collected. Since further investigation is warranted at SWMU 8, include a proposal to collect surface soil samples at the boring locations in the phase 2 investigation work plan.

27. Section 4.4, Evaluation of Data from Current Investigation (2011), lines 5-7, page 4-9

Permittee Statement: “As summarized in Table 4-8, RCRA total metals (EPA methods 6010B/7471A) were not detected in concentrations exceeding the screening criteria with the exception of arsenic at four soil borings (Figure 4-4) around Building 537.”

NMED Comment: Figure 4-4 depicts the area where PCB contaminated soils remain. It does not depict the area where arsenic exceedances are detected. Reference an appropriate figure in the revised Report.

28. Section 4.5.2, Conclusions and Recommendations, lines 8-10, page 4-11

Permittee Statement: “Additional soil sampling for PCBs and PAHs following soil excavation per the NMED approved Final Permittee-Initiated Interim Measure Work Plan Parcel 6 Revision 1.0 (IMWP), dated May 4, 2015 is required.”

NMED Comment: Comment 7 in NMED’s November 7, 2018 Disapproval must also be addressed in the revised Report.

29. Section 5.2.1, Nonsampling Data, lines 18-20, page 5-3

Permittee Statement: “The location of the cesspool, the arroyo outfall, and the septic tank that had served Building 542 were all verified, and the structures were still intact.”

NMED Comment: The locations of the cesspool and the septic tank are shown on Figure 5-3, *Soil and Sediment Sample Locations*. However, the location of the arroyo outfall is not shown on the figure. Indicate the location of the arroyo outfall in the figure. Also, indicate the depth of arroyo outfall in the figure. The outfall location presumably coincides with the sampling location 0611-SB12. In this case, clarify whether the soil samples were collected from a depth below the outfall in the revised Report.

30. Section 5.2.2.1, Soil Data, lines 33-37, page 5-3

Permittee Statement: “Four wipe samples were collected from stained or discolored areas on the east loading dock and were analyzed for explosives. One explosive, HMX, was detected in one sample. Four surface soil samples were collected adjacent to the stained areas observed on the east loading dock and were tested for TNT and RDX using immunoassay test kits.”

NMED Comment: HMX was detected on the loading dock. Subsequently, the Permittee collected soil samples adjacent to the loading dock and tested them for TNT and RDX. Explain why the samples were not analyzed for HMX and provide a justification in the revised Report. This comment also applies to the text lines 11-15, page 5-4. Propose to collect soil samples adjacent to the loading dock to be analyzed for HMX in the phase 2 investigation work plan.

31. Section 5.2.2.1, Soil Data, lines 38-41, page 5-3

Permittee Statement: “To further investigate this area, a single soil boring was advanced adjacent to the east loading dock to a depth of 10 feet using hollow stem auger (HSA) drilling. Samples were collected from 3 to 5 feet bgs and 10 to 12 feet bgs.”

NMED Comment: The statement indicates that soil samples were collected from a depth greater than the total depth of the boring. Explain the sampling method in the revised Report.

32. Section 5.2.2.1, Soil Data, lines 42-43, page 5-3

Permittee Statement: “Two explosives, HMX and RDX, were detected at low concentrations in the soil samples [collected from the boring].”

NMED Comment: According to Table 5-1, *Summary of Reportable Concentrations for Soil Analyses Completed at SWMU 11, Buildings 541 and 542*, the detection of VOCs, SVOCs and metals is recorded; however, the detection of the explosive compounds is not recorded. Resolve the discrepancy in the revised Report.

33. Section 5.2.2.1, Soil Data, lines 16-17, page 5-4

Permittee Statement: “To investigate the building’s cesspool, four soil borings were advanced adjacent to the cesspool with HSA drilling.”

NMED Comment: Five sampling locations adjacent to the cesspool are shown in Figure 5-3. Provide an explanation or resolve the discrepancy in the revised Report.

34. Section 5.2.2.1, Soil Data, lines 17-22, page 5-4

Permittee Statement: “The borings were advanced to a depth of 20 feet bgs, which was three feet below what was indicated to be the bottom of the cesspool based on original drawings. During the site reconnaissance, the cesspool was measured to be roughly 7 feet deep. Soil samples from each boring were collected from 4 to 6 feet bgs and 18 to 20 feet bgs and were analyzed for explosives, TAL metals, TCL VOCs, and TCL SVOCs.”

NMED Comment: The depth of the cesspool was 7 feet bgs rather than 17 feet bgs. The soil samples were collected above the bottom depth of the cesspool; however, they should have been collected at the depths one to two feet below the bottom of the cesspool (8 – 9 feet bgs). Soil samples must be collected from the depths where contamination is most likely to be detected in future investigations. Provide an explanation for why the sample collection depths were not modified based on the site reconnaissance in the revised Report.

35. Section 5.2.2.1, Soil Data, lines 17-18, page 5-5

Permittee Statement: “The water and sediments in the septic tank were removed by vacuum truck and the septic tank was abandoned in place as part of the Phase 1 RFI activities.”

NMED Comment: According to Figure 5-4, *Monitoring Well Locations SWMU 11, Building 542*, the sanitary sewer line connected to the septic tank extends far beyond SWMU 11. Explain whether the same sewer line is still connected to any active structures outside of the SWMU or if it is completely disconnected or plugged. Discuss whether there is a possibility of wastewater entering SWMU 11 from other sites in the revised Report.

36. Section 5.3.1, Soil Investigation, lines 21-24, page 5-9

Permittee Statement: “The soil boring was advanced to the water table, with samples collected at 5, 10, and 20 feet bgs and at the bottom of the borehole (37.9 to 38.9 ft. bgs) since the water table was not encountered prior to drilling refusal (Figure 5-5).”

NMED Comment: The statement does not make sense. Correct the statement in the revised Report.

37. Section 5.3.1, Soil Investigation, lines 21-24, page 5-9

Permittee Statement: “One soil boring was advanced near the center of the septic tank drain field.”

NMED Comment: Provide a designation for the referenced soil boring for clarification in the revised Report.

38. Section 5.4.1, Soil Characterization, lines 27-29, page 5-10

Permittee Statement: “Two soil samples from soil boring 6 (SB06) were in exceedance of the 3.90 mg/kg screening criteria for arsenic; one from the 0-1 ft bgs depth interval (6.8 mg/kg) and one from the 9-10 ft bgs depth interval (6.1 mg/kg).”

NMED Comment: According to Figure 5-6, *TAL Metals-Arsenic Screening Criteria Exceedances, SWMU 11*, and Table 5-8, *Parcel 6 SWMU 11, Method 6010B/7471A Metals Soil Investigation Detected Constituents*, the arsenic concentration in the soil sample collected from the depth of 9-10 feet bgs is recorded as 8.7 mg/kg. Resolve the discrepancy in the revised Report.

39. Section 5.4.2, Soil-to-Groundwater Pathway, page 5-11

NMED Comment: The Permittee provides a list of lines-of-evidence that demonstrates the soil-to-groundwater pathway is incomplete. In the list, the item numbers 2 and 3 are missing. Provide the missing lines-of-evidence in the revised Report.

40. Section 5.4.2, Soil-to-Groundwater Pathway, lines 8-12, page 5-12

Permittee Statement: “Site conditions of low average precipitation and high evaporation rates in addition to the depth to groundwater being 50 to 70 bgs further supports that analytes reaching groundwater is extremely unlikely.”

NMED Comment: It should be noted that various analytes have already reached to the depth of groundwater at other sites. Therefore, the statement cannot be used as a reason why further evaluation of the soil-to-groundwater pathway is unnecessary. Remove the statement from the Report.

41. Section 6.1.1, Location, Description, and Operational History, lines 4-7, page 6-1

Permittee Statement: “The Western Landfill Area is a former burial site located approximately 0.5 mile west of the Administrative Area, southwest of the Sewage Treatment Plant and directly west of Building 23 as shown in Figures 6-1 and 6-2.”

NMED Comment: Neither figure indicates the location of the Administration Area, Sewage Treatment Plant or Building 23. Identify these locations in the revised figures.

42. Section 6.2.2, Sampling Data, Final Remedial Investigation/Feasibility Study & RCRA Corrective Action Program Document; ERM Program Management Company, 1997, lines 8-10, page 6-4

Permittee Statement: “The extent of contamination was believed to be limited to the visible waste and associated matrix and not to have impacted the native soil below the landfill.”

NMED Comment: Provide an example to demonstrate the basis of the statement in the revised Report. For instance, the Permittee states that area DA3 was the only disturbed area found to contain significant amounts of waste. The analytical results of confirmation soil samples collected from area DA3 during the investigation must be referenced and discussed.

43. Section 6.2.2, Sampling Data, Final Report on Airborne Geophysical Survey; Battelle, 2009, lines, page 6-5

Permittee Statement: “The results of the airborne geophysical survey for SWMU 20 are shown in Figure 6-5.”

NMED Comment: The Section of the Report does not discuss any findings from the geophysical survey. Figure 6-5, *Airborne Geophysical Survey*, page 6-40, was referenced in the section; however, no explanation is provided how to interpret the figure. Include the discussion and explanation in the revised Report.

44. Section 6.3.1, Soil Investigation, lines 23-24, 26-27, and 33-36, page 6-6

Permittee Statements: “An ISM surface soil sample was collected and analyzed for explosives (EPA Method 8330B).”

and,

“One soil boring was advanced to 5 ft. bgs with discrete soil samples collected at the 0 to 1 ft. bgs and 4- to 5 ft. bgs intervals (Figure 6-6).”

and,

“All samples were analyzed for; VOCs (EPA Method 8260B); SVOCs (EPA Method 8270C); RCRA metals (EPA Method 6010B and Method 7471A); pesticides (EPA Method 8081A); and chlorinated herbicides (EPA Method 8151); and explosives (EPA Method 8330B).”

NMED Comment: Table 6-4 indicates that the ISM samples were analyzed for metals as well. Provide information regarding all analyses conducted for the ISM samples. In addition, the last statement indicates that the ISM samples were analyzed for VOCs and SVOCs. Clarify whether the ISM samples were analyzed for VOCs and SVOCs. Section 6.3.1 generally lacks clarity; revise the Report for clarity.

45. Section 6.5, Conclusions and Recommendations, lines 16-19, page 6-7

Permittee Statement: “As demonstrated in the attached Tables 6-3 through 6-5, none of the constituents at SWMU 20 exceeded soil screening criteria under the 2011 investigation. The Army recommends no further characterization at SWMU 20, except for within Feature 4.”

NMED Comment: Table 6-4 indicates that the ISM samples were analyzed for metals. Comment 10 in the NMED *Disapproval Final RCRA Facility Investigation Work Plan, Parcel 2, Revision 1*, dated February 6, 2018, states, “[t]he reported constituent concentrations for incremental samples must be multiplied by the number of subsamples in each decision unit to evaluate for the presence of hot spots. If any exceedances are found during the screening process, the Permittee is required to conduct additional soil sampling by further dividing the sampling grid in the decision unit in order to determine the area of contamination. This comment applies to all AOCs and SWMUs where an incremental sampling approach is utilized.” According to Table 6-4, some metal constituents exceed the screening criteria. If discrete soil samples were collected for metals from the same area where ISM samples were collected, compare the results and discuss whether or not further investigation is necessary for the detected metals. Revise the Report accordingly. The Permittee has been provided direction at least 16 times on the use of ISM sampling. See Comment 3.

46. Section 6.5, Conclusions and Recommendations, lines 22-24, page 6-7

Permittee Statement: “The Revised Final Permitted-Initiated Interim Measures Report received a disapproval by NMED on November 7, 2018 and is currently being revised by the Army.”

NMED Comment: The revised Parcel 6 Permittee-Initiated Interim Measures Report (PIIM Report) was required to be submitted to NMED no later than April 1, 2019. NMED has not received the report at this time. Failure to submit the PIIM Report constitutes noncompliance with Section VII.L.4 of the FWDA RCRA Permit.

47. Section 6.5, Conclusions and Recommendations, lines 28-30, page 6-7

Permittee Statement: “Since the majority of these locations physically occur within the Parcel 7 boundary, further investigation and remediation strategies will be proposed in a Parcel 7 work plan.”

NMED Comment: The statement is not accurate. Feature 4 is divided by the boundary of Parcels 6 and 7. The larger portion of Feature 4 belongs to Parcel 6; however, the investigated area of Feature 4 belongs to Parcel 7. Explain why the area of Feature 4 that belongs to Parcel 6 has not been investigated or will not require further investigation. Figure 6-5 indicates that the area of Feature 4 that belongs to Parcel 6 may require further investigation as well.

48. Section 7.2.2, Sampling Data, Environmental Baseline Survey for the Transfer of Lands at Fort Wingate Depot Activity, New Mexico; USACE, 2000, lines 21-22, page 7-4

Permittee Statement: “This report provides a physical description of Igloo Block B. It also discusses the baseline surveys completed which included ACM, LBP, PCBs, and radon surveys.”

NMED Comment: Rodents in the igloos may potentially create hazardous conditions associated with hantavirus. Future investigation for igloo interior must include a survey for hantavirus.

49. Section 7.3.3, Soil Sampling, lines 30-31, page 7-6 and lines 3-4, page 7-7

Permittee Statements: “One ISM surface soil sample and two discrete surface soil samples were collected from 10 of the 100 igloos in AOC 28 (Figure 7-2).”
and,
“Results indicate that no explosives were detected in any of the ISM samples collected. However, “J” qualified concentrations of explosives were detected at two of the drain outfalls. A summary of the sample analysis results is presented in Table 7 2 (located at the end of this section).”

NMED Comment: Table 7-2, *Release Assessment Laboratory Data Summary Table for AOC 28, Igloo Block B*, pages 7-16 – 7-27, does not provide clear distinction between ISM and discrete samples. Clarify which results represent discrete or ISM samples. The results representing ISM samples must be multiplied by the number of subsamples for appropriate evaluation. See Comment 3. Revise the Report accordingly.

50. Section 7.4.1, Soil Investigation, Igloo Aprons, lines 6-7, page 7-8

Permittee Statement: “Figure 7-7 shows the M ISM I decision units.”

NMED Comment: All sampling locations shown in Figure 7-7, *Multi-Incremental Soil Sample Locations, Igloos, AOC 28* are identified as “SS-M” rather than “M ISM I”. Revise the Report, as necessary.

51. Section 7.5, Evaluation of Current Investigation (2011)

Permittee Statement: “As summarized in Table 7-5, constituent concentrations in soil samples taken around SWMU 28 did not exceed the NMED 2009 screening criteria for explosives (EPA Method 8330B).”

NMED Comment: This section provides discussion for AOC 28 rather than SWMU 28. Correct the typographical error in the revised Report.

52. Section 7.5.1, Soil Characterization, Igloo Drains, lines 33-34, page 7-9

Permittee Statement: “Nineteen composite soil samples collected from Igloo drains in exceedance of the 3.90 mg/kg arsenic screening criterion are as follows (Figure 7-10).”

NMED Comment: Figure 7-5 indicates that the samples collected from igloo drains are discrete rather than composite soil samples. Resolve the discrepancy in the revised Report. In addition, the method used to collect composite samples is not described in the Report. Include the description in the revised Report.

53. Section 7.5.1, Soil Characterization, Igloo Drains, lines 7-9, page 7-11

Permittee Statement: “One composite soil sample (sample ID: 0628B-1074-SS-C-SO), collected from the 0-6 inch bgs depth interval, was in exceedance (3.9 mg/kg) of the 3.90 mg/kg screening criterion for arsenic.”

NMED Comment: According to Figure 7-10, *TAL Metals Arsenic and Lead Screening Criteria Exceedances, Igloos and Igloo Drains AOC 28*, the arsenic concentration in the soil sample is recorded as 4.2 mg/kg. Resolve the discrepancy in the revised Report.

54. Section 7.5.1, Soil Characterization, Igloo Drains, lines 13-15, page 7-11

Permittee Statement: “One composite soil sample (sample ID: 0628B-1099-SS-C-SO), collected from the 0-6 inch bgs depth interval, was in exceedance (4.8 mg/kg) of the 3.90 mg/kg screening criterion for arsenic.”

NMED Comment: According to Figure 7-10, the arsenic concentration in the soil sample is recorded as 3.9 mg/kg. Resolve the discrepancy in the revised Report.

55. Section 7.5.1, Soil Characterization, Igloo Revetments, lines 2-4, page 7-13

Permittee Statement: “Fifteen ISM soil samples collected from the igloo revetments yielding results in exceedance of the 3.90 mg/kg arsenic screening criterion are as follows (Figure 7-11).”

NMED Comment: 30 subsamples were collected for each ISM sample at the revetment according to Figure 7-6, *Proposed Multi-Incremental Subsampling Locations, Revetments, AOC 28*. The site concentrations recorded in Table 7-4 must be multiplied by the number of subsamples for comparison to the SSLs. See Comment 3. Revise the Report accordingly.

56. Section 7.6.2, Conclusions and recommendations, line 23, page 7-15

Permittee Statement: “These activities [associated with determination of future igloo use] occur external to NMED’s RCRA authority.”

NMED Comment: Since AOC 28 is located within the RCRA permitted facility and the igloos are part of an AOC, the statement is not accurate. The Permittee must address the NMED’s concerns regarding the future use of igloos.

57. Section 8.1.4, Waste Characterization and Contaminants of Potential Concern, lines 22-23, page 8-1

Permittee Statement: “Ammunition was handled and temporarily stored at AOC 42; therefore, explosives and lead are considered the only COPCs.”

NMED Comment: The statement does not explain why lead is a contaminant of concern at AOC 42, but not other metals associated with munitions. Section 8.2.2 states that LBP is assumed to be present based on building construction dates. Include the explanation in this section of the revised Report. This comment also applies to other sections of the Report (e.g., Section 12.1.4), where applicable.

58. Section 8.3.3, Soil Sampling, lines 4-5, and 9-10, page 8-4

Permittee Statements: “The ISM sample consisted of 10 increments...”
and,

“Lead was detected at a low concentration of 21 mg/kg. This concentration is below the NMED 2009 residential SSL for lead, which is 400 mg/kg.”

NMED Comment: The number of subsamples for the ISM sample was ten. Therefore, the lead concentration must be multiplied by ten to evaluate the risk associated with lead. Accordingly, a concentration of 210 mg/kg must be compared to the screening level of 400 mg/kg. The concentration is still below 400 mg/kg and the outcome of data interpretation will not change. However, the statement must be revised to incorporate appropriate interpretation of the ISM results. See Comment 3. This comment also applies to Section

9.3.4.1.

59. Section 8.5.1, Soil Characterization, lines 27-29, page 8-5

Permittee Statement: “As summarized in Table 8-3, constituent concentrations in soil samples taken around AOC 42 did not exceed the NMED 2009 residential screening criteria for RCRA metals (EPA Methods 6010B and 7471A).”

NMED Comment: The number of subsamples for the ISM sample was 30. Therefore, the site metals concentrations must be multiplied by 30 to evaluate the risk associated with each metal. See Comment 3. Revise the Report accordingly. This comment also applies to Section 9.5.1.

60. Section 11.5, Evaluation of Current Investigation, lines 31-33, page 11-5

Permittee Statement: “As summarized in Table 11-3, RCRA total metals (EPA methods 6010B/7471A) were not detected in concentrations exceeding the screening criteria with the exception of arsenic (Figure 11-5).”

NMED Comment: The number of subsamples for the ISM sample was 50. Therefore, the site metals concentrations must be multiplied by 50 to evaluate the potential for hot spots associated with each metal. See Comment 3. Revise the Report accordingly. This comment also applies to Section 13.5.1.

61. Section 12.3.3, Soil Sampling, lines 18-19, page 12-4

Permittee Statement: “The ISM sampling locations are shown in Figure 12-2.”

NMED Comment: Figure 12-2 is not included in the Report. The Report includes two copies of Figure 12-1. Include Figure 12-2 and remove one copy of Figure 12-1 from the revised Report.

62. Section 12.4, Current Investigation (2011), lines 10-11, page 12-5

Permittee Statement: “Sample locations with associated sample identifiers are listed in Table 10-2.”

NMED Comment: Table 10-2 is not pertinent to AOC 81. Presumably, the referenced table is Table 12-2. Correct the reference in the revised Report. In addition, although Table 12-2 is appropriately titled as “Parcel 6 AOC 81, Sample Locations with Associated Sample Identifiers”, the content of Table 12-2 does not provide any pertinent information. The content of Table 12-2 is identical to that of Table 12-1 which provides a summary of the release assessment laboratory data. Revise Table 12-2 to include pertinent information.

63. Section 12.5.1, Soil Characterization, lines 35-37, page 12-5

Permittee Statement: “As summarized in Tables 12-2 and 12-3, neither explosives (EPA Method 8330B), nor RCRA metals (EPA Methods 6010B and 7471A) were detected above screening values.”

NMED Comment: Table 12-3 provides the 2011 analytical results for metals. However, a table that provides the 2011 analytical results for explosive compounds is not included in the Report. If explosive compounds were detected below the applicable screening levels during the 2011 investigation, include the table summarizing the results of explosive compound analysis in the revised Report. In addition, the number of subsamples for the ISM sample was 50. Therefore, the site concentrations must be multiplied by 50 for comparison to the SSLs associated with the detected constituents. See Comment 3. Revise the Report accordingly.

64. Section 13.1.1, Location, Description, and Operational History, lines 4-5, page 13-1

Permittee Statement: “Area of Concern 83 is located in the west-central portion of Parcel 6, as shown in Figure 13-1.”

NMED Comment: Figure 13-1 is not included in the Report. Include the figure in the revised Report.

65. Section 14.4, Current Investigation (2011), lines 12-13, page 14-5

Permittee Statement: “Sampling was conducted in accordance with the approved Work Plan (CH2M Hill, 2011) and Section 2.5 of this report.”

NMED Comment: Although the Permittee states that sampling was conducted in accordance with the approved work plan, the ISM sampling procedure referenced in EPA Method 8330B was not followed. For example, the method states, “[t]o establish the sampling uncertainty for estimating mean concentrations of energetic material residues, triplicate multi-incremental samples should be collected...” The Permittees did not collect triplicate samples. The data collected from ISM samples can only be used for screening purposes (e.g., to determine hot spots) as stated by multiple comments previously provided by NMED. The ISM data cannot be used for compliance purposes. NMED cannot accept conclusions and recommendations that were drawn from the ISM data where the Permittee did not appropriately follow Method 8330B. This comment applies to all sections where ISM samples were used. See Comment 3.

66. Table 4-1, Summary of reportable Concentrations for Soil Analyses Completed at SWMU 8, Building 537 (Page 14 of 17), page 4-25

NMED Comment: The table notes that the concentrations exceeding SSLs are bold and positive detections of organic compounds are shaded. The Aroclor 1260 concentration in soil sample B537TK081 exceeded the SSL. Accordingly, the concentration is shown with bold

font; however, it is not shaded. Since Aroclor 1260 is an organic compound, the concentration should be shaded. Correct the table in the revised Report, as necessary.

67. Table 4-5, Parcel 6 SWMU 8, Method 8270C Semi-Volatile Organic Compounds Soil Investigation Detected Constituents, page 4-34

NMED Comment: The table presents analytical results for total petroleum hydrocarbon oil range organics, rather than semi-volatile organic compounds as titled. Correct the title in the revised Report.

68. Table 4-7, Parcel 6 SWMU 8, Method 8015M Oil Range Organics Soil Investigation Detected Constituents, page 4-38

NMED Comment: The table presents analytical results for polychlorinated biphenyls, rather than oil range organics as titled. Correct the title in the revised Report.

69. Table 4-8, Parcel 6 SWMU 8, Method 8081A Pesticides Soil Investigation Detected Constituents, page 4-40

NMED Comment: The table presents analytical results for metals, rather than pesticides as titled. Correct the title in the revised Report.

70. Table 7-5, Parcel 6 SWMU 8, Method 8330B Explosives Soil Investigation Detected Constituents, page 7-83

NMED Comment: The sample identification nomenclature does not provide a definition for "C" and "M". Revise the table to include the definitions. This comment also applies to all other tables, where applicable (e.g., Table 8-3).

71. Figure 5-5, Soil Sample Locations, SWMU 11, page 5-49

NMED Comment: Surface soil samples were not collected at borings SB01, SB02, SB03, and SB04. These borings were installed to assess whether potential discharges from loading/unloading or wash-down practices resulted in releases to the environment. Surface soils were likely affected by the operations. Provide a justification for not collecting surface soil samples at the locations in the revised Report. The Permittee may be required to collect the surface samples at these locations during future investigation efforts.

72. Figure 7-6, Proposed Multi-Incremental Subsampling Locations, Revetments, AOC 28, page 7-89

NMED Comment: The figure depicts an igloo and igloo apron rather than a revetment. Revise the figure.

73. Figure 12-3, Proposed Sampling Locations, AOC 81, page 12-13

NMED Comment: Figure 12-3 identifies the location of AOCs 28 and 84; however, the location of AOC 81 is not identified. Identify the location of AOC 81 in the revised figure.

74. Photographs, Photos 5-13 and 5-14, SWMU 11, page 5-57

NMED Comment: The description for the photographs indicates that soil boring [SB]03 hit an old unmarked water pipe. Boring SB03 was advanced west of the sanitary sewer line according to Figure 5-3; however, the pipeline identified during the advancement of boring SB03 is not shown on the figure. Revise the figure to depict the pipeline. Additionally, it is not clear what depth the boring hit the pipeline, whether the pipeline was removed, the pipeline use, or whether the released water contained any contaminants. Provide a detailed discussion of the incident in the revised Report.

75. Appendix A, Responses to Regulatory Agency Comments

NMED Comment: The Permittee includes the March 21, 2018 letter requesting an extension from March 31, 2018 to March 31, 2019 in Appendix A; however, NMED's correspondence to the Permittee's extension request is not included. Since the Report was submitted on March 25, 2019, presumably there is a record for approving the extension request. Provide the missing correspondence documents in the revised Report.

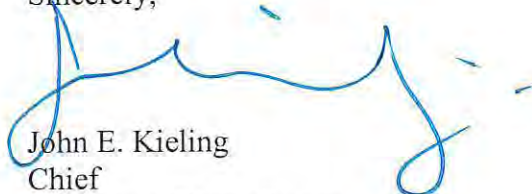
The Permittee must submit a revised Report that addresses all comments contained in this Disapproval. Two hard copies and an electronic version of the revised Report must be submitted to NMED. The Permittee must also include a red-line strikeout version in electronic format showing where all revisions to the Report have been made. The revised Report must be accompanied with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The revised Report must be submitted to NMED no later than **September 2, 2019**.

All documents submitted by the Permittee to the NMED subsequent to receipt of this letter shall include the certification included in 40 CFR 270.11(d)(1) in its entirety and without any modification above the signature line(s) on each document.

Messrs. Patterson and Smith
June 4, 2019
Page 26

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 476-6059.

Sincerely,



John E. Kielling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
B. Wear, NMED HWB
M. Suzuki, NMED HWB
C. Hendrickson, EPA Region 6 (6LCRRC)
L. Rodgers, Navajo Nation
S. Begay-Platero, Navajo Nation
M. Harrington, Pueblo of Zuni
C. Seoutewa, Southwest Region BIA
G. Padilla, Navajo BIA
J. Wilson, BIA
B. Howerton, BIA
R. White, BIA
C. Esler, Sundance Consulting, Inc.

File: FWDA 2019 and Reading, Parcel 6



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

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RYAN FLYNN
Cabinet Secretary-Designate

BUTCH TONGATE
Deputy Secretary

TOM BLAINE, P.E.
Director
Environmental Health Division

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 24, 2014

Mark Patterson
BRAC Coordinator
Ravenna Army Ammunition Plan
Building 1038
8451 State Route 5
Rootstown, OH 44272

Steve Smith
USACE FWDA & Lone Star PM
CESWF-PEC-EF
819 Taylor Street, Room 3A12
PO Box 17300
Fort Worth, TX 76102-0300

**RE: APPROVAL WITH MODIFICATIONS
RCRA FINAL FACILITY INVESTIGATION REPORT
PARCEL 16
FORT WINGATE DEPOT ACTIVITY, NEW MEXICO
EPA ID# NM6213820974
FWDA-13-008**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) received the Department of the Army's (the Permittee) *Final RCRA Facility Investigation Report (RFI); Parcel 16 (Report)*, dated August 16, 2013. NMED has reviewed the Report and hereby issues this Approval with the following modification.

Comment 1.

SWMU 16: X and Z Open Storage Areas, page 3-17, lines 4-29. The Permittee proposes to collect one nine-increment composite sample from each of the 25' x 75' grids at 12-18 inches below ground surface (bgs). Nine-increments are not sufficient to reduce sampling error due to

heterogeneity and utilizing a deeper soil interval increases uncertainty. Therefore, continue to use multi-incremental sampling per EPA Method 8330B, Appendix A (i.e., minimum of 30-increments per sample) for the phase II investigation. The Permittee must sample at the 6-12 inch depth interval where the compounds of concern were detected. Once the Permittee has defined the hot-spots, the vertical extent of contamination must be evaluated by collecting discrete samples at the proposed depth of 12-18 inches. The proposed six discrete samples to the northwest and the southwest may be collected as surface samples.

Comment 2.

The Permittee is requesting no further action at AOC 41 – Area K-Block Igloos. However, the entire AOC has not yet been evaluated because the igloo interiors have not been investigated. NMED and FWDA are in discussions regarding the igloo interiors. NMED cannot evaluate human health risk until all investigations are complete; therefore, a request for corrective action complete status cannot be evaluated for this AOC at this time.

The Phase II Work Plan must be submitted to NMED no later than May 5, 2014.

Messrs. Patterson and Smith
January 24, 2013
Page 3

If you have questions regarding this approval with modifications please contact Vicky Baca of my staff at 505-476-6059.

Sincerely,



John E. Kielling

Chief

Hazardous Waste Bureau

cc: Dave Cobrain, NMED HWB
N. Dhawan, NMED HWB
Christy Esler, USACE
Laurie King, U.S EPA Region 6
Chuck Hendrickson, U.S. EPA Region 6
Steve Beran, Zuni Pueblo
Darrell Tsabetsaye, Zuni Pueblo
Kirk Bemis, Zuni Pueblo
Tony Perry, Navajo Nation
Franklin Jishie, Navajo Nation
Jason John, Navajo Nation
Eugenia Quintana, Navajo Nation
Clayton Seoutewa, Southwest Region BIA
Rose Duwyenie, Navajo BIA
Judith Wilson, BIA
Eldine Stevens, BIA
Matthew Kirkland, BIA

File: FWDA 2013 & Reading File
FWDA-13-008



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

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RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 18, 2015

Mark Patterson
FWDA BEC
P.O. Box 93
Ravenna, OH 44266

Steve Smith
USACE FWDA & Lone Star PM
CESWF-PEC-EF
819 Taylor Street, Room 3A12
Fort Worth, TX 76102

**RE: APPROVAL WITH MODIFICATION
FINAL RELEASE ASSESSMENT REPORT
PARCEL 24
FORT WINGATE DEPOT ACTIVITY
EPA ID# NM6213820974
HWB-FWDA-14-002**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) has reviewed the *Final, Release Assessment Report, Parcel 24*, (Report) dated January 31, 2014 for the Fort Wingate Depot Activity (FWDA)(the Permittee). NMED has reviewed the Report and hereby issues this approval with the following modifications.

Comment 1.

Executive Summary, page ES-3, lines 4-14, and in Section 5.0, the Permittee states “[s]everal World War I (WWI) magazines were formerly located within the boundaries of Igloo Block A. There are approximately 27 former WWI magazine sites that are within Parcel 24. Many of these former WWI magazine sites have been obliterated by current structures and roads. No investigation activities have been completed within area of concern (AOC) 18 at the former WWI magazine sites. However, previous soil sampling events took place at former WWI magazine sites outside of AOC 18 in April 2007 as reported in *Report of Investigation for Potential Environmental Areas of Concern*, October 2007 and in October 2012 in Parcel 16 as reported in the *RCRA Facility Investigation Report, Parcel 16, Army Draft*, 20 March 2013.

None of the former WWI magazine sites exceeded NMED SSLs for explosives. Based on the sampling event results reported in both of the above documents, the Army does not believe there are any significant releases of explosives from these sites within Parcel 24.” NMED cannot determine risk without evaluating quantifiable data specific to these sites. While these sites do not comprise an AOC, the Permittee must be aware that each AOC or solid waste management unit (SWMU) should be treated independently as a potential source of contamination. Data from other AOC/SWMU must not be used to make assumptions regarding contamination at another. No response required.

Comment 2.

In Section 4.6, Release Assessment Conclusions, Page 4-12, Lines 18-22, the Permittee states “[r]efer to the Memorandum for DAIM-ODB-RA by the U.S. Army Legal Services Agency dated March 3, 2011 concerning the Army position on sampling of the igloo interiors at Fort Wingate. It states that there is no evidence that the igloos in Parcels 4A, 6, and 22 ever stored RCRA hazardous waste and do not require sampling under the Army’s RCRA hazardous waste permit. This conclusion would also extend to the igloos in Parcel 24.” The requirement to sample the igloo interiors is within the scope of RCRA and is within the scope of the RCRA Permit corrective action requirements. Without such information, NMED cannot evaluate human health risk at the units listed on the Permit that contain igloo blocks. NMED cannot make a determination that corrective action is complete at any SWMU or AOC where there is a suspected release of hazardous waste or hazardous constituents that may pose a threat to human health or the environment. The future use or disposition of the igloos is unknown at this time. Therefore, the igloo interiors must be characterized in order to determine whether residual contamination is present as part of characterization of any AOC that contains igloos.

Comment 3.

In Section 4.7, Army’s Recommendations, page 4-12, line 42-43, the Permittee states, “[t]he Army proposes a future Permittee-initiated interim action to address the soil removal and removal of igloo drain pipes that are coated with lead-based paint.” The Permittee must submit an interim measures work plan in accordance with the Permit, Section VII.G.5, IM Work Plan Requirements, within sixty calendar days from receipt of this letter. In addition, the Permittee must complete the interim measures within one hundred eighty calendar days of the start of implementation of the interim measure or provide notification to NMED, if anything should change.

Messrs. Patterson and Smith
May 18, 2015
Page 3

If you have any questions regarding this letter, please contact Vicky Baca at (505) 476-6059.

Sincerely,



John E. Kielling
Chief
Hazardous Waste Bureau

cc: Dave Cobrain, NMED HWB
Neelam Dhawan, NMED HWB
Chuck Hendrickson, EPA Region 6
Larry Rodgers, Navajo Nation
Sharlene Begay-Platero, Navajo Nation
Governor Val Penteah, Zuni Pueblo
Clayton Seoutewa, Southwest Region BIA
Rose Duwyenie, Navajo BIA
Judith Wilson, BIA
Eldine Stevens, BIA
Angela Kelsey, BIA

File: FWDA 2014
Reading FWDA-14-002

Appendix A2: NMED correspondence in regard to Parcel 4A reports

(NMED: Approval with Direction, Release Assessment Report for Parcel 4A, Igloo Block C, 22 July 2009; NMED: Approval, Permittee-Initiated Interim Measures Report, Parcel 4A, Area of Concern 29, 01 August 2014; ARMY: Petition for the Corrective Action Determination without controls for AOC 29 (Igloo Block C); NMED: Disapproval, Final Igloo Exteriors and Revetments RCRA Facility Investigation Sampling Workplan, 19 December 2024)



BILL RICHARDSON
Governor

DIANE DENISH
Lieutenant Governor

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RON CURRY
Secretary

JON GOLDSTEIN
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 22, 2009

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Ravenna Army Ammunition Plant
Building 1037
8451 State Route 5
Ravenna, OH 44266

Steve Smith
CESWF-PER-DD
819 Taylor Street, Room 3A12
PO Box 17300
Fort Worth, TX 76102-0300

**RE: APPROVAL WITH DIRECTION
RELEASE ASSESSMENT REPORT FOR
PARCEL 4A, IGLOO BLOCK C
FORT WINGATE DEPOT ACTIVITY
EPA ID# NM6213820974
FW-08-005**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) received the Department of the Army's (the Permittee) *Release Assessment Report for Parcel 4A Igloo Block C, Final* (the Report), dated March 27, 2009. The submittal is a requirement of Section VII.F of the *Fort Wingate Depot Activity RCRA Permit (RCRA Permit)*. NMED hereby approves this Report with the following direction.

The Permittee proposes that their next submittal to NMED will be an Interim Corrective Measures Work Plan (Section 5.1, Army's Recommendations); however, igloo Block C is designated an Area of Concern (AOC 29) and NMED requires further characterization at the site, therefore the Permittee must submit a RCRA Facility Investigation Work Plan (RFI Work Plan) rather than the Interim Measures Work Plan as proposed in the Report.

COMMENT 1

The Permittee collected composite samples from the drain of 35 igloos and tested the samples for explosives and lead. The lead detections ranged from 3.4 mg/kg to 1,290 mg/kg with three of the

detections over the NMED soil screening limit (SSL) of 400 mg/kg. While only three of the samples were over the SSLs, NMED requires additional discrete sampling be conducted at all locations where lead was detected at concentrations between 200 and 400 mg/kg. For example, the composite sample collected from beneath the drain outlets at location C-1103 contained a lead concentration of 329 mg/kg; therefore, the Permittee must collect discrete samples from each drain to determine the source of the elevated lead concentration. The Permittee must propose the additional sampling for RCRA metals at these locations in the RFI Work Plan.

COMMENT 2

In Section 4.5.3, Multi-Incremental Soil Sample Results at Revetments, the Permittee states, "MI samples were collected at all 33 revetments; six duplicate samples were collected. Detections of lead ranged from 2.8 mg/kg to 11.3 mg/kg with one sample reported at 221 mg/kg. No detections of lead exceeded the NMED SSL of 400 mg/kg. No explosives constituents were detected in the MI samples collected at the revetments."

Sample location Y-C1111 has the concentration of 221 mg/kg lead. Since this is a MI sample, it is very like that at least one sample in the decision unit exceeded the cleanup level. The Permittee must propose to divide the decision unit into smaller decision units and collect thirty MI samples in each new decision unit in order to determine if there is a hot spot. The Permittee must propose these sampling activities in the RFI Work Plan.

COMMENT 3

In Section 5.1, "Army's Recommendations," the Permittee states, "[t]he Army recommends that soil be removed at the drain outfalls of igloos C-1105, C-1109 and C-1128 where concentrations of lead exceed NMED cleanup standards. A response action would likely be combined with igloos from other igloo blocks. Confirmation testing of lead in soil after soil removal may be accomplished using a field-portable X-Ray Fluorescence (XRF) instrument. Use of XRF instrumentation would allow decision making in the field regarding the need for additional soil removal. If XRF instrumentation is used, twenty percent of the XRF samples would be confirmed by laboratory analyses ... The Army proposes as its next submittal on Parcel 4A, a simplified design of the anticipated corrective action (soil removal). The design document would be a brief description of the soil removal activities and a sampling and analysis plan of the soil characterization and confirmation sampling. In summary, the Army will propose removing a few inches of soil from each igloo drain outfall, estimated to be approximately $\frac{1}{4}$ to $\frac{1}{2}$ cubic yard, where the lead concentration exceeds the NMED residential SSL of 400 mg/kg."

- a. If XRF instrumentation is used for confirmation sampling, the Permittee must propose in the RFI Work Plan that 20% of the samples sent to the lab for confirmation analysis will include analysis for high-explosives (HE) and RCRA metals.
- b. The Permittee proposes to remove soil from the drain outfalls at C-1105, C-1109 and C-1128 as part of corrective measures. If results from the additional sampling required by NMED (*see* Comment 1) reveal levels of metals contamination above

residential soil screening levels (SSLs) at the igloo locations referred to in Comment 1, the Permittee must also propose to remove those soils in the RFI Work Plan.

COMMENT 4

In Section 6.0, Release Assessment (AOC 75 Electrical Transformers), the Permittee states, "AOC 75 is listed in the Permit as 'Electrical Transformers.' In Table VII.2 of the Permit, there is a statement that transformers could possibly be located in Parcel 4. FWDA Drawing C-1-10 dated May 1968 is a General Electric Map showing electrical utilities to Igloo Block C. This map and information found in previous reports regarding potential transformers in Parcel 4 are included in Appendices B and C."

AOC 75 includes transformers located throughout the facility and Buildings 5 and 15 are addressed in the Parcel 11 Work Plan. Drawing C-1-10 in Appendix B is not legible and it is not clear if transformers were present on Parcel 4 in 1968. If a more recent electric utility map is available, the Permittee must provide it to NMED. The Permittee must provide NMED with a location map of the approximate location of where the transformers were stored and used in Parcel 4A. The map may be included in the RFI Work Plan.

COMMENT 5

In the Comment Response Table for Tribal Draft, in a comment regarding Section 5.1 of the Report, the Pueblo of Zuni suggests "the interiors of three igloos be cleaned with pressure wash gear and that the resulting contaminated water be disposed of properly." The Permittees response to this statement was that they agreed that potential releases inside the igloos will have to be addressed and will consider this request during the development of the RFI Work Plan. NMED concurs that the interior of the igloos must be addressed in the Investigation Work Plan. Based on the results from other studies and discussion with all stakeholders, the Permittee will be required to collect samples in the interior of the igloos.

COMMENT 6

In Section 4.5.3, Multi-Incremental Soil Sample Results at Revetments, the Permittee states that lead was detected at locations outside of the drainage outfall at three igloos in Igloo Block C. In addition as stated in the Comment Response Table the Pueblo of Zuni states that "the interiors of three igloos be cleaned with pressure wash gear and that the resulting contaminated water be disposed of properly." Given that the source of the contamination is unknown and prior to proceeding with corrective action efforts, the Permittee must locate the source of the soil contamination. Therefore, the Permittee must collect seven swipe samples from the floor of each of the igloos throughout the facility. Three swipe samples must be collected from the front, middle, and back of the floor and the remaining two swipe samples must be collected from discretionary locations along the floor. In addition, the Permittee must collect one swipe sample

from each of the indoor drainage troughs, specifically from an area less than three feet of the drain outlet.

All swipe samples must be analyzed for arsenic, barium, lead, and mercury using X-ray fluorescence (XRF) (if the Permittee prefers). In addition, two of the seven swipe samples collected (one from the floor and one from the drainage trough) must be sent to the laboratory for verification purposes. Laboratory analysis must include RCRA 8 metals, explosives. The Permittee must revise the Work Plan to include the proposed sampling activities as well as include a figure with the proposed sample locations. This applies to all future and applicable Work Plans.

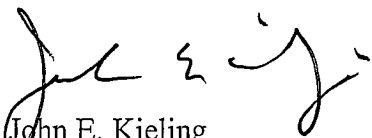
COMMENT 7

Figure 2 (C-Block Igloo and Revetment Sampling) must be supplemented by figures showing the locations of composite sampling and the MI sampling at igloos and revetments. The Permittees must provide detailed figures showing the sampling locations in the RFI Work Plan.

Messrs. Patterson and Smith
July 22, 2009
Page 5

If you have any questions regarding this letter, please contact Tammy Diaz-Martinez at (505) 476-6056.

Sincerely,



John E. Kieling
Manager
Permits Management Program
Hazardous Waste Bureau

cc:

Tammy Diaz-Martinez, NMED HWB
Dave Cobrain, NMED HWB
Laurie King, U.S EPA Region 6
Chuck Hendrickson, U.S. EPA Region 6
Sharlene Begay-Platero, Navajo Nation
Eugenia Quintana, Navajo Nation
Steve Beran, Zuni Pueblo
Edward Wemytewa, Zuni Pueblo
Valerie Lahalla, Zuni Pueblo
Steven Davis, Zuni BIA
Clayton Seoutewa, Southwest Region BIA
Charles Long, Navajo Nation
Rose Duwyenie, Navajo BIA

File: FWDA 2009 & Reading File
FWDA-08-005



SUSANA MARTINEZ
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RYAN FLYNN
Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 1, 2014

Mark Patterson
FWDA, BRAC Coordinator
P.O. Box 93
Ravenna, OH 44266

Steve Smith
USACE FWDA Program Manager
CESWF-PEC-EF
819 Taylor Street, Room 3A12
Fort Worth, TX 76102

**RE: APPROVAL
PERMITTEE-INITIATED INTERIM MEASURES REPORT
PARCEL 4A, AREA OF CONCERN 29
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-14-005**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) has reviewed the *Permittee-Initiated Interim Measures Report, Parcel 4A, Area of Concern 29* (Report) dated April 15, 2014 for Fort Wingate Depot Activity. The Report summarized the results of the interim corrective measures work conducted at Area of Concern (AOC) 29. NMED has reviewed the Report and hereby issues this approval.

Messrs. Patterson and Smith
August 1, 2014
Page 2

If you have any questions regarding this letter, please contact Vicky Baca at (505) 476-6059.

Sincerely,

A handwritten signature in blue ink, appearing to read 'John E. Kielling', is written over a horizontal line.

John E. Kielling
Chief
Hazardous Waste Bureau

cc: Dave Cobrain, NMED, HWB
Neelam Dhawan, NMED, HWB
Kristen Vanhorn, NMED, HWB
Shannon Duran, NMED, HWB
Chuck Hendrickson, EPA-6PD-N
Tony Perry, Navajo Nation
Darrell Tsabetsaye, Zuni Pueblo
Clayton Seoutewa, Southwest Region BIA
Rose Duwyenie, Navajo BIA
Judith Wilson, BIA
Eldine Stevens, BIA
Robin White, BIA
Mike Scoville, USACE Ft. Worth
Eric Kirwan, USACE Ft. Worth

File: FWDA 2014 and Reading
FWDA-14-005



DEPARTMENT OF THE ARMY
FORT WINGATE DEPOT ACTIVITY
P.O. BOX 268
FORT WINGATE, NM 87316

September 2, 2015

Mr. John Kieling
Chief, Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Dear Mr. Kieling:

The purpose of this letter is to submit a petition for the Corrective Action Complete Determination without controls for Area of Concern (AOC) 29 (igloo block C) and AOC 75 (transformer site in Parcel 2) at Fort Wingate Depot Activity (FWDA). In addition the Army proposes removing Parcel 4A from RCRA Permit EPA ID# NM6213820974 (Permit). The Army proposes modifying Permit Attachment 8 by moving AOCs 29 and 75 within Parcel 4A, 2, 19, and 23 from Table 1 (SWMUs and AOCs that Require Corrective Action) to Table 4 (SWMUs and AOCs Corrective Action Complete Without Controls) and modifying Attachment 2 depicting the parcel removed. The Army elected to address the entire AOC 29 under Parcel 4A to expedite the restoration and transfer process. Upon further examination, AOC 29 only lies in Parcels 4A and 2. It does not lie in Parcels 19 and 23. The rationale for this petition is provided in the paragraphs below.

AOC 29 is found in Parcels 4A and 2. AOC 29 is listed in Permit Attachment 8, Table 1, as "Igloo Block C." AOC 75 is listed in Attachment 8, Table 1 as "Electrical Transformers" and covers all transformers on FWDA regardless of Parcel number.

The Army submitted to NMED a *Final of the Release Assessment Report (RAR) for Parcel 4A (Revision 2)*, dated October 11, 2012. This report summarized the previous editions of the RAR which were disapproved by NMED. The Army does not have a record of the NMED reviewing this document. However, the Army elected to implement all the recommended soil removal actions in the RAR under a Permittee-Initiated Interim Measures in accordance with Permit Section VII.G.3. The interim measures were outlined in the Notification of Permittee-Initiated Interim Measures dated September 10, 2013 which was approved by the NMED on September 24, 2013 via email correspondence. Interim measures were conducted in October and November 2013 and included small amounts of soil removal under igloo drain pipes where the soil exceeded clean up levels and removal of the drain pipes on each igloo. The holes were plugged with concrete. Former transformer site I-25 (AOC 75) was sampled under this notification. This site lies in Parcel 2 however the Army elected to sample the site under the Parcel 4A action due to its proximity to the AOC 29 area. No PCBs were detected in the sample.

The Army submitted a *Final Permittee-Initiated Interim Measures Report for Parcel 4A* to the NMED on April 15, 2014. Based on the confirmation sampling results and results at the former transformer site the Army recommended no further investigation or corrective action for the soils within AOC 29 (Igloo Block C) and transformer site I-25 (AOC 75). The NMED

approved the report on August 1, 2014. The only other site within Parcel 4A was AOC 78 which has been removed from the Permit. Since AOC 29 and 75 are the only Permit sites remaining in Parcel 4A, the Army petitions Parcel 4A for removal from the Permit. Permit Attachment 2 has been updated to reflect this change and is attached to this letter.

All of the above cited documents were submitted to the Pueblo of Zuni and the Navajo Nation for Tribal consultation concurrently with the submission to NMED. This consultation is required by Permit Section VIII.B.1. Copies of all the correspondence and documents referenced in this letter can be found in the FWDA Administrative Record and online at www.ftwingate.org. If you have questions or require further information, please call me at 330-358-7312.

Sincerely,



Mark Patterson
BRAC Environmental Coordinator

CF:

Dave Cobrain, NMED HWB
Vicky Baca, NMED HWB
Neelam Dhawan, NMED HWB
Bill O'Donnell, BRACD
Chuck Hendrickson, U.S. EPA Region 6
William Walker, BIA SW
Eugenia Quintana, Navajo Nation
Sharlene Begay-Platero, Navajo Nation
Mark Harrington, Pueblo of Zuni
Clayton Seoutewa, BIA Zuni Agency
Rose Duwyenie, Navajo BIA-NR
Phillip Vicenti, Pueblo of Zuni
Larry Rodgers, Acting Deputy Chief of Staff
Judith Wilson, DOI/BLM
Eldine Stevens, DOI/BLM
Angela Kelsey, BIA
FWDA Admin Record, NM
FWDA Admin Record, OH



Certified Mail - Return Receipt Requested

December 19, 2024

George H. Cushman
Headquarters, Department of the Army
Office of the DCS, G-9
Army Environmental Office, Room 5C140
600 Army Pentagon
Washington, DC 20310-0600

**RE: DISAPPROVAL
FINAL IGLOO EXTERIORS AND REVETMENTS RCRA FACILITY INVESTIGATION SAMPLING
WORK PLAN
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-23-006**

Dear Mr. Cushman:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) *Final Igloo Exteriors and Revetments RCRA Facility Investigation Sampling Work Plan* (Work Plan), dated July 2023. NMED has reviewed the Work Plan and hereby issues this Disapproval with the following comments.

COMMENTS

1. Executive Summary, ES 4, Approach, page 13, paragraph 4

Permittee Statement: "To evaluate both nature and extent, and exposure, each decision unit (DU)/sampling unit (SU) will be one incremental sampling methodology (ISM) sample taken in triplicate."

NMED Comment: According to the March 4, 2021 email correspondence from Mr. Ben Wear of NMED to Mr. George Cushman of BRAC (March 4, 2021 email) included in Appendix B, *NMED Correspondence*, NMED required the sample results of the Incremental Sampling Methodology (ISM) to be multiplied by the number of sample increments before comparison to the screening levels and decision-making. This provision was not included in the Work Plan.

While reevaluating the direction provided by the NMED's March 4, 2021 email, NMED finds that the proposed ISM is generally acceptable for the investigation of the revetments without the required multiplication. Because there is no known hotspot in the revetments, the ISM results may reasonably be representative of soil concentrations within the decision/sampling units and are unlikely to underestimate potential risks that may be present within the revetments. The multiplication of the ISM results is not required for the investigation of the revetments.

However, since there is a known source of the release (i.e., lead paint from the drainpipes) regarding apron swales of the igloo exteriors, the ISM results may underestimate hotspots by utilizing the proposed systematic random sampling method (e.g., dilution of hotspot concentrations). Although multiplication of the ISM results would account for underestimation of the contaminants of concern (COCs) concentrations, it can also overestimate the concentrations of chemicals that may not be related to the release and misrepresent actual conditions of the site. The ISM for apron swales appears to have issues with potentially underestimating hotspots and overestimating concentrations with the multiplication of results. Therefore, NMED finds that the direction provided by the NMED's March 4, 2021 email was inaccurate. It is NMED's opinion that a targeted/biased collection of discrete samples from the areas where the COCs accumulate within the apron swales (e.g., rainwater flow paths, depressed spots) provides the most conservative and protective representation of data associated with the site. Propose to collect discrete samples for the investigation of the igloo exteriors and revise all applicable sections of the Work Plan accordingly.

2. Executive Summary, ES 6, Risk Assessment Evaluation Approach, page 13, last paragraph, and page 14, first paragraph

NMED Comment: A stepwise risk evaluation approach is discussed in this section. Although no revision is necessary for the investigation of the revetments, the approach must be revised to account for Comment 1 above. Revise all applicable sections of the Work Plan accordingly.

3. Executive Summary, ES 7, page 14, last paragraph

Permittee Statement: "Using the results from this sampling effort and following the assessment of nature and extent and risk, the Army proposes to apply the results using the following approach for the remaining, unsampled igloos and revetments at FWDA:

- a) IF all ISM sample results are below NMED residential and ecological soil screening values, THEN no further evaluation of igloo and revetments will be required at FWDA.
- b) IF ISM sample results exceed NMED residential and/or ecological soil screening values and no significant risk is found for human and/or ecological receptors after

risk refinements, THEN no further evaluation of igloo and revetments will be required at FWDA.

- c) IF ISM sample results exceed NMED residential and/or ecological soil screening values and risk is found for human and/or ecological receptors after risk refinements, THEN the ARMY will propose further evaluation of igloo exteriors and revetments at FWDA.”

NMED Comment: The risk refinement may be premature at this stage of the investigation. Evaluate potential risks by direct comparison of applicable soil screening levels (SSLs), as appropriate, and revise all applicable sections of the Work Plan.

In addition, the following approach must be incorporated to determine the necessity of conducting the investigation of the remaining unsampled igloo exteriors and revetments in the revised Work Plan:

Igloo Exterior Investigation:

Regardless of the discrete sampling results whether or not there are identifiable hotspots in the selected igloo sampling locations, all remaining unsampled igloo exteriors must be sampled directly below the drainpipes. If the soil below the drainpipes is found to be contaminated with levels exceeding the applicable soil screening standards, the soil must be removed and the confirmation samples must be collected.

Scenario 1:

If the discrete sampling results indicate that there are no identifiable hot spots in the selected igloo sampling locations, soil sampling for the apron swales leading away from the drainpipes will not be required for all remaining unsampled igloo exteriors.

Scenario 2:

If the discrete sampling results indicate that there are identifiable hot spots in the selected igloo sampling locations, soil sampling for the apron swales leading away from the drainpipes will be required for the unsampled igloo exteriors where the soil below the drainpipes is found to be contaminated with levels exceeding the applicable soil screening standards.

Revetment Investigation:

Scenario 1:

If the investigation results indicate that there are no identifiable hotspots in the selected revetment sampling locations, the investigation of all remaining unsampled revetments will not be required.

Scenario 2:

If the investigation results indicate that there are identifiable hotspots in the selected

revetment sampling locations, all remaining unsampled revetments must be investigated for potential contamination.

Include this approach in the revised Work Plan.

4. Section 1.1, Objectives, page 15, item 2

Permittee Statement: “To sample soil at these locations for RCRA 8 metals and explosives to quantify potential residual COC levels both external to the igloos and within/external to the bermed areas of the revetments.”

NMED Comment: Since explosive compounds are potential COCs at the igloo exteriors and revetments, the degradation products of explosive compounds (i.e., semi-volatile organic compounds (SVOCs) such as phenol) may potentially be present at the site. Propose to collect soil samples for SVOC analysis in the revised Work Plan, as appropriate, or provide a justification for excluding SVOC analysis in the response letter. Note that ISM is not applicable to SVOC analysis because the laboratory procedures involving soil grinding may cause loss of some analytes; therefore, discrete soil samples must be collected for SVOC analysis, if SVOC analysis is deemed necessary.

5. Section 2.1.3.1, Parcel 6, Area of Concern (AOC) 28, Igloo Block B, page 18, last paragraph, and page 19, first paragraph

Permittee Statement: “For several years, TPL, Inc. was a Large Quantity Generator (NMR000000216) of hazardous wastes consisting of fuses and fin assemblies (explosives) that were temporarily stored in a less-than-90-day RCRA storage area in Igloo B-1019. TPL, Inc. conducted operations within the AOC 28 area (USGS 2011).”

NMED Comment: Clarify whether soil sampling was previously conducted at Igloo B-1019 and provide the analytical results with the response letter. If soil sampling was not conducted at Igloo B-1019, include Igloo B-1019 as an additional sampling location in the revised Work Plan.

6. Section 2.2, Historical Data Collection and Review, page 19, last paragraph

Permittee Statement: “Discrete and composite samples from under the igloo drains were used to select igloo locations (Table 2-1a for RCRA 8 metals and Table 2-2a for explosives). Only multi-increment (MI) samples were used to select revetment locations because these were the only type of data available for revetments (Table 2-1b RCRA 8 metals and Table 2-2b for explosives).”

NMED Comment: Tables 2-1a, 2-2a, 2-1b, and 2-2b are not included in the Work Plan. Although Appendix C, *Historical Analytical Data Detection Summary Tables*, is included in

the Work Plan, the data included in Appendix C does not explain how each sampling location was selected. Provide the missing tables in the revised Work Plan.

7. Section 2.2.1, Parcel 9, AOC 18, Igloo Block A, pages 20, paragraph 1, and Section 8.2.1.2, Lead, page 53, last paragraph

Permittee Statements: “Detections of lead ranged from 72.6 mg/kg to 2,650 mg/kg with fourteen detections over the NMED residential SSL of 400 mg/kg.”

and,

“The NMED SSLs include default values for lead that were calculated by using the USEPA methodologies to back calculate a soil concentration for each receptor that would not result in an estimated blood-lead concentration of 10 micrograms per deciliter (µg/dL) or greater (residential adult of 400 mg/kg and industrial and construction worker of 800 mg/kg) (NMED 2022).”

NMED Comment: On January 17, 2024, the United State Environmental Protection Agency (USEPA) issued the finalized “*Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*.” NMED and the USEPA had been using soil lead screening level based on a blood lead level of 10 micrograms per deciliter (µg/dL) as the 95th percentile target blood lead level resulting in the screening levels of 400 milligrams per kilogram (mg/kg) and 800 mg/kg. At the time, a blood lead level above 10 µg/dL was recognized to be associated with adverse health outcomes in children. As noted in the 2024 directive, the science on lead has evolved and demonstrates additional adverse health effects of lead exposure and at lower levels than previously known. NMED is implementing the new guidance and requires all lead screening levels to be based on a blood lead level of 5 µg/dL. Implementation of the allowed blood lead level is effective immediately. A lead screening level of 200 mg/kg must be used and all applicable sections and relevant tables of the Work Plan must be revised accordingly.

8. Section 2.2.4, Parcel 6, AOC 28, Igloo Block B, page 23, paragraph 3

Permittee Statement: “These soil samples were analyzed for explosives and were reported below background levels. The report does not indicate a specific source for the final background values, only a description of a 1992 work plan that outlined the methodology for determination of the background values.”

NMED Comment: Since explosive compounds are not naturally occurring chemicals, there are no acceptable background levels. Remove the statement from the revised Work Plan.

9. Sections 2.2.1, Parcel 9, AOC 18, Igloo Block A through 2.2.4, Parcel 6, AOC 28, Igloo Block B, pages 20 through 23

NMED Comment: The discussions regarding the history of Igloo Blocks A, B, and K are

provided in Sections 2.2.1 through 2.2.4; however, multiple igloos and revetments are also present in the other Igloo Blocks (e.g., Igloo Blocks C, D, E, F, G, H, and J). The discussions regarding Igloo Blocks C, D, E, F, G, H, and J are not provided, presumably no previous investigations were conducted in these Igloo Blocks. Include a brief explanation for the other Igloo Blocks C, D, E, F, G, H, and J in the revised Work Plan.

10. Section 2.3.1, Selection of the Six Highest Concentration Igloo Exteriors for Further Study, page 24, step 2

Permittee Statement: “Only samples from the 0-0.5 ft depth, representative of the currently planned apron superficial soils sampling depth, were retained (Table 2-1a and 2-2a).”

NMED Comment: According to Appendix C, Table 2, the lead concentrations in multiple samples collected at one (1) foot (i.e., 1 – 1.5 ft) below ground surface (bgs) exceeded the applicable soil screening levels. Explain why the investigation at depths exceeding 0.5 feet bgs along apron swales is unnecessary in the response letter; otherwise, propose to investigate soil below depths exceeding 0.5 feet bgs along apron swales if the contaminant concentrations in the samples collected from the surface (0 – 0.5 feet bgs) exceed the applicable SSLs in the revised Work Plan. Revise all applicable sections of the Work Plan accordingly.

11. Section 2.3.1, Selection of the Six Highest Concentration Igloo Exteriors for Further Study, page 24, step 5

Permittee Statement: “Exceedances of the PALs were reviewed. Metals showed greater exceedance factors (Table 2-1a) than explosives (Table 2-2a). Only 79 PAL exceedance factors > 1.0 were observed for metals. There were 75 PAL exceedance factors greater than 1.0 for lead, three values for arsenic, and a single value for chromium; the chromium detection was at the same location as the largest lead exceedance.”

NMED Comment: Hexavalent chromium compounds have been used as an anticorrosive agent for liquid paints. The paint used to coat the igloo drainpipes could potentially contain hexavalent chromium because there appears to be a correlation between the concentrations of lead and total chromium in the soil samples collected beneath the drainpipes. Since the project action limit (PAL) for hexavalent chromium would be lower than that of total chromium, propose to conduct hexavalent chromium analysis in addition to the proposed analyses in the revised Work Plan, or demonstrate that hexavalent chromium analysis is not warranted in this investigation.

12. Section 3.1.1, Igloo Exteriors and Revetment Physical Settings, page 26, paragraph 6

Permittee Statement: “Igloos and revetments are set up as “blocks” within FWDA (Figure 2-2).”

NMED Comment: Explain whether the nature of contamination may potentially be different from one igloo block to another in the response letter. For example, some igloo blocks are leased to the Missile Defense Agency (MDA) and others are not; explain if the lease can make any difference in potential COCs between the igloo blocks in the response letter.

13. Section 3.1.3, Media and Contaminant Fate and Transport, page 27, paragraph 5

Permittee Statement: “The medium of concern in the work plan is surficial soil. For igloo exteriors, this is supported by an evaluation of contamination as a function of depth for drainpipe removals conducted in igloo blocks A, B, C, D, and K, where confirmation sampling showed that 99% of excavations had COC concentrations below NMED residential SSLs in soil at a depth of 6 inches, and 100% had COC concentrations below NMED residential SSLs at a depth of 12 inches (Army presentation to NMED, 2019; Appendix B).”

NMED Comment: According to Appendix C Table 2, the lead concentration in soil sample 24A941-EFR-D-SO collected at depths from one (1) to 1.5 feet bgs is recorded as 6,350 mg/kg, exceeding the lead residential soil screening level of 200 mg/kg. Similarly, the lead concentrations in soil samples 24A918-EFR-D-SO, 24A943-EFR-D-SO, 24A969-EFL-D-SO, 24A944-EFR-D-SO, 24A926-EFL-D-SO, 24A951-EFR-D-SO, 24A955-EFR-D-SO, 24A929-EFL-D-SO, 24A920-EFL-D-SO, 24A922-EFR-D-SO, 24A955-EFL-D-SO2, 24A923-EFR-D-SO, 24A948-EFL-D-SO, 24A955-EFL-D-SO, and 24A976-EFR-D-SO collected at depths greater than one-foot bgs exceed the SSL of 200 mg/kg. Therefore, the medium of concern does not appear to be limited to surficial soil. Propose to investigate soil at depths greater than 0.5 feet bgs along apron swales if exceedances are found in surficial soil samples in the revised Work Plan (see also Comment 10 above).

14. Section 3.1.3.1, Igloos, page 27, last paragraph

Permittee Statement: “Consequently, the primary release mechanism would be due to spillage or leakage from these stored munitions, which would migrate to the interior drainage channels and subsequently discharge to the exterior.”

NMED Comment: The liquid paint used to coat the igloo drainpipes released lead and potentially hexavalent chromium. The Permittee must also state this release mechanism as a potential source in the revised Work Plan.

15. Section 3.1.4.1, Human Receptors, page 28, paragraph 6, and Section 3.1.5.1, Human Health, page 29, paragraph 3

Permittee Statements: “Consequently, the only human receptor considered in the site-specific CSM is the commercial/industrial worker (NMED 2022) (Figure 3-7).”

and,

“The commercial/industrial worker scenario will be evaluated at the selected igloo exterior and revetments (Section 3.4.2). Dermal contact, ingestion, and inhalation pathways (Figure 3-7) to surface soils in the igloo apron swales and revetments are complete (Figures 3-3 and 3-6).”

NMED Comment: If the Permittee does not demonstrate that the soil concentrations are below the residential SSLs in confirmation samples, the Permittee must implement institutional controls to manage residual risks at the site, as applicable. Acknowledge this provision in the response letter.

In addition, Figure 3-7 is not included in the Work Plan. Include the missing figure in the revised Work Plan.

16. Section 3.1.4.2, Ecological Receptors, page 28, last paragraph

Permittee Statement: “The igloo and revetment areas under reevaluation are limited in size, therefore, prior to inclusion of a representative receptor category in the ecological CSM, Area Use Factors (AUFs) were calculated for five of the six representative receptors (deer mouse, horned lark, kit fox, red-tailed hawk, prong horned antelope). The AUF calculations used the study areas for the igloos and revetments (Table 3-2) and the home ranges for the receptor to determine if the site area comprised >10% of the receptors home range (NMED 2017, revised). To be conservative and protective the area calculation included both the apron and road swales for igloos and the interior, access ramp and road swale for revetments.”

NMED Comment: Igloos and revetments are clustered together as a block and the areas adjacent to the selected sampling locations (i.e., study areas) may exhibit similar risks associated with the sampling locations. All areas where ecological receptors are likely to contact site-related chemicals must be considered for the calculation of the Area Use Factors (AUFs). Note that the focus of the habitat and receptor observations should be on a community level rather than each sampling location. Revise the Work Plan, as applicable.

17. Section 3.1.4.2, Ecological Receptors, page 29, first paragraph

Permittee Statement: “Historically contamination has been found in surficial soils, so the exposure medium for plants will be restricted to only surficial soils, though plant root systems extend below the surficial layer of soil (Figure 3-8).”

NMED Comment: The lead concentrations in multiple soil samples collected at depths greater than one (1) foot bgs exceeded the residential soil screening level of 200 mg/kg as stated in the previous comments. Correct the ecological risk evaluation based on the fact that soil contamination is present below one (1) foot bgs in the revised Work Plan, as appropriate.

In addition, the referenced figure (Figure 3-8) is not included in the Work Plan. Include the missing figure in the revised Work Plan.

18. Section 3.1.5.2, Ecological, page 29, paragraph 5

Permittee Statement: “Plants will be evaluated for both igloos and revetments due to direct contact with surface soil, however, exposure to subsurface soil will not be included. These receptor categories are the only receptors requiring evaluation, regardless of whether the road swales are included in the AUF calculations (Tables 3-1 and 3-2, Figure 3-8).”

NMED Comment: Subsurface soils at depths greater than one (1) foot bgs were found to be contaminated with lead, as stated in the previous comments. The ecological risks associated with subsurface soil contamination must be reevaluated, as appropriate. In addition, Figure 3-8 is not included in the Work Plan.

19. Section 3.3, Incremental Sampling Methodology Design – Sampling Units, Decision Units and Exposure Units, page 30, paragraph 2

Permittee Statement: “ISM is a structured composite sampling and processing protocol that reduces data variability and provides a reasonably unbiased estimate of mean contaminant concentrations in a volume of soil targeted for sampling. ISM also provides representative samples of specific soil volumes defined as decision units (DUs) and requires fewer analytical samples than would be required to yield a comparable estimate mean concentration using a discrete sampling approach (ITRC 2020). For these reasons, ISM was selected for sampling igloo exteriors and revetments and applied to the approach for selecting and designing DUs and SUs.”

NMED Comment: As stated in Comment 1 above, the proposed ISM is acceptable for the investigation of the revetments; however, a targeted/biased collection of discrete samples from the areas where the COCs accumulate within the apron swales provides the most

protective representation of data for the igloo exterior investigation. The following discrete soil sampling approach must be followed for the igloo exterior investigation. Refer to Figure 3-2, *Igloo Schematic Showing Decision Units (DUs) for Evaluating Nature and Extent* for the location of the referenced DUs.

- i. Collect two surficial discrete soil samples from the area of a decision unit that is located immediately downgradient of the drainpipe (e.g., DU-1, DU-3). The sampling locations must target the spots where rainwater is likely to accumulate.
- ii. If the contaminant concentrations in the samples collected at the decision unit do not exceed the applicable SSLs, no further sampling is warranted.
- iii. If the contaminant concentrations exceed the SSLs at the decision unit (e.g., DU-1, DU-3), further investigation will be warranted as follows:
 - a. Collect subsurface discrete soil samples at the depth of 1.0 – 1.5 feet bgs immediately below the same sampling locations where the exceedances are found.
 - b. Collect two surficial discrete soil samples from the area of a decision unit that is located farther downgradient (e.g., DU-2, DU-4). The sampling locations must target the spots where rainwater is likely to accumulate.
- iv. If the contaminant concentrations in the subsurface samples do not exceed the applicable SSLs, no further subsurface sampling is warranted. Otherwise, the vertical extent of the contamination must be investigated at the locations.
- v. If the contaminant concentrations in the surficial discrete soil samples collected from the decision unit (e.g., DU-2, DU-4) do not exceed the applicable SSLs, no further sampling is warranted.
- vi. If the contaminant concentrations exceed the SSLs at the decision unit (e.g., DU-2, DU-4), further investigation will be warranted as follows:
 - a. Collect subsurface discrete soil samples at the depth of 1.0 – 1.5 feet bgs immediately below the same sampling locations where the exceedances are found.
 - b. Collect surficial discrete soil samples from the area farther downgradient of the sampling locations, where rainwater will flow and accumulate depending on the topography of the site, to evaluate the lateral extent of the surficial contamination.
- vii. Repeat the process until the lateral and vertical extent of the contamination is delineated.

Revise the Work Plan to include the discrete soil sampling approach for the igloo exterior investigation. If the Permittee wishes to address part(s) of this stepwise investigation in a separate work plan (e.g., phase 2 work plan), such a proposal will also be acceptable. All applicable sections of the Work Plan must be revised accordingly.

20. Section 5.1, Site and Safety Plan, page 34, paragraph 3

Permittee Statement: “The FWDA Site and Safety Plan (SSP) (Appendix D) defines the roles and responsibilities of site personnel, establishes proper levels of personal protective equipment (PPE), and describes emergency response and contingency procedures.”

NMED Comment: Although NMED does not usually review Site and Safety Plans, the information in Appendix D, *FWDA Site and Safety Plan*, does not appear to be relevant to the current Work Plan. The Site and Safety Plan (SSP) states that the subsurface exploration will consist of drilling eight soil borings to an average depth on the order of 65 feet below ground surface. Ensure that the contents of the SSP are relevant to this investigation in the revised Work Plan.

21. Section 5.2, Materials and Methods, page 34, last paragraph

Permittee Statement: “Required materials and procedures for sample collection, required volume, handling, preservation and storage, decontamination, and shipment are outlined in the following sections and follow the standard operating procedure (SOP) for ISM sampling included as Appendix E. Sampling will occur from areas of expected lowest concentrations to areas of highest concentrations.”

NMED Comment: Note that NMED does not review, nor approve SOPs in appendices; all sampling procedures must be discussed within the text of the work plans.

22. Section 5.2.6, Unmilled Quality Control Samples, page 40, paragraph 3

Permittee Statement: “This contamination may be significant when the milling equipment contains the same metals as the contaminants of interest in the environmental samples. This issue can be overcome by using non-metallic equipment (Clausen 2013), however, at the time of development of this work plan, there were no ELAP certified labs that perform ISM sample grinding/milling with an ELAP certified non-metallic grinding apparatus. To address potential introduction of metals into the ISM samples from grinding with a mill with metallic components, a QC sample will be collected by the lab from each replicate of the selected site characterization samples prior to milling.”

NMED Comment: If the QC samples indicate that there is potential interference in the sample preparation procedure, the ISM results collected for the revetment investigation may not be acceptable. Discuss mitigative measures to be taken under such a circumstance in the revised Work Plan.

23. Section 6.0, Laboratory Approach, page 44, last paragraph, and page 45, first paragraph

Permittee Statement: “The independent analytical laboratory must have documentation of current accreditation/certification (Appendix F) prior to the field work portion of the study commencing and sample acceptance.”

NMED Comment: Appendix F is not included in the Work Plan. Include Appendix F in the revised Work Plan. This is another example of missing information from this Work Plan.

24. Section 6.2.2, Data Validation and Useability Determination, pages 47 through 48

NMED Comment: Two subsections included in Section 6.2.2 are numbered as Sections 6.2.1, *Data Validation*, and 6.2.2, *Data Usability*. However, the numbering of the subsections is incorrect. The subsections should have been numbered as Sections 6.2.2.1 and 6.2.2.2, respectively. Correct the typographical error in the revised Work Plan.

25. Section 6.4.2, Supplemental Parameters, page 49, last paragraph, and page 50, first paragraph

Permittee Statement: “The following supplemental parameters will be analyzed for the following: total organic carbon (TOC) by Lloyd Khan method (three burns), soil pH by method USEPA SW-846 9045D, particle size distribution by method ASTM D422 including sieve and hydrometer for fines, and cation exchange capacity (CEC) by USDA No. 60.”

NMED Comment: The Permittee did not explain the purpose of the supplemental analyses in the Work Plan. Explain the purpose of the supplemental analyses (i.e., TOC, pH, and particle size distribution, and CEC analyses) in the appropriate section(s) of the revised Work Plan.

26. Section 6.4.3.1, Metals Concentrations in Milled and Unmilled Samples, page 50, last paragraph, and page 51, first paragraph

Permittee Statement: “The 95UCLs for the unmilled samples will be evaluated and compared to the milled ISM samples for RCRA 8 metals.”

NMED Comment: According to Tables 5-2A through 5-2F, *Summary of ISM Samples to be Collected at Igloo*, and Tables 5-3A through 5-2F, *Summary of ISM Samples to be Collected at Revetment*, most unmilled samples are proposed to be analyzed for supplemental parameters only (i.e., TOC, pH, particle size distribution, and CEC). All unmilled samples must be analyzed for metals to evaluate the presence of contamination associated with the sample preparation procedures. Revise the Work Plan accordingly.

27. Section 7.0, Nature and Extent Evaluation Approach, through Section 9.0, Summary, pages 51 through 59

NMED Comment: The Work Plan does not address conducting a site attribution analysis to eliminate metals reflective of background levels. While ISM is used for decision-making purposes, a background decision unit must be identified and sampled. Section 2.8.3.2.2 of the NMED's November 2022 *Risk Assessment Guidance for Site Investigations and Remediation* (RAG) provides the direction to conduct the site attribution analysis. Include the site attribution analysis that is consistent with the methodology described in the RAG in the revised Work Plan.

28. Section 8.2.1, Defining Project Action Limits, page 52, paragraph 3

Permittee Statement: "The selected igloo PALs are summarized in Table 6-1A and revetment PALs in Table 6-1B."

NMED Comment: The Permittee previously selected the residential soil screening levels as cleanup action threshold; therefore, the soil concentrations exceeding the respective PALs, which are lower than the residential soil screening levels, may still remain after soil removal in some locations. For example, the lead contaminated soil beneath the drainpipes was removed based on the cleanup action threshold of 200 mg/kg. However, the selected PAL for lead is 120 mg/kg for igloo exteriors. The lead concentrations in multiple confirmation soil samples (e.g., 1641-K1539L-SS-D-SO) still exceed the PAL of 120 mg/kg. All of the soil concentrations exceeding the respective PALs that still remain must be identified in the response letter.

In addition, discuss if the PALs should also be considered as the cleanup action thresholds for igloos and revetments (i.e., if the PALs are more conservative than the current screening levels) in the response letter.

29. Section 8.2.2, Human Health Soil Screening Levels, page 52, last paragraph, and page 53, first paragraph

Permittee Statement: "At FWDA, site-specific reasonably anticipated current or future use (USEPA 2000) for human receptors at the igloos and revetments is for activities associated with commercial storage of materials (Figure 3-7, Section 3.3.1.2). However, NMED has requested that chemical concentrations be screened against the more conservative and restrictive residential standards. Consequently, this document uses the commercial/industrial exposure patterns around the igloo exteriors and revetments for sampling design and collection but screens the chemical analyses against the more conservative residential standards, per NMED request."

NMED Comment: The last sentence in the statement is unclear. The Permittee states that the Work Plan uses the commercial/industrial exposure patterns for sampling design and collection but screens the chemical analyses against the more conservative residential standards. Provide an example to demonstrate the difference between the commercial/industrial and residential exposure patterns for sampling design and collection in the response letter. If the sampling design and collection between two scenarios are different in a way causing any discrepancies, utilize only residential exposure patterns in the revised Work Plan. Note that if residual contamination exceeding the residential standards is present, an institutional control to manage the risk will be necessary at the time corrective action is complete and if clean closure without controls is desired, the screening levels should not include restrictive parameters.

30. Section 8.3.1, Human Health Cumulative Risk, page 55

Permittee Statement: “In accordance with NMED RAG, V.1 (June 2022), lead will be evaluated separately and not included in the HI for human health.”

NMED Comment: The EPA’s January 17, 2024 *Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities* mandates lower residential soil screening levels for lead (i.e., 200 mg/kg). All investigations/corrective actions proposed after January 17, 2024 will be subject to the requirements of the updated EPA guidance. See also Comment 7 above.

31. Section 8.4.1, Human Health Risk Screening Refinements, page 57, paragraph 3

Permittee Statement: “If the 95UCL of the EU exceeds the human health residential SSL, a lines-of-evidence (LOE) approach will be developed that will incorporate site-specific parameters while also accounting for future migration and parent chemical degradation potential. As stated by NMED (Wear to Cushman, email, 13 April 2022), these LOEs may include, but are not limited to...”

NMED Comment: Section 9.0, *Summary*, states, “IF ISM sample results exceed NMED residential and/or ecological soil screening values and potentially significant risk is found for human and/or ecological receptors after risk refinements, THEN the Army will consider further evaluation of igloo and revetments at FWDA under a separate work plan.” This statement in Section 9.0 is appropriate. Revise the statement in Section 8.4.1 to be consistent with the statement included in Section 9.0 in the revised Work Plan.

32. Section 8.4.2.1, Plants, page 58, paragraph 3, and Section 8.4.2.2, Deer Mouse, page 59, first paragraph

Permittee Statements: “If exceedances of Tier 2 LOAELs occur, a LOE approach will be developed as described above in Section 8.4.1.”
and,

“For sites that have an HI $\geq$ 1.0 using Tier 2 [lowest observed adverse effect levels (LOAELS)], a LOE approach will be developed as described above in Section 8.4.1.”

NMED Comment: Propose to submit a separate work plan, as necessary, to be consistent with the statement included in Section 9.0, as appropriate, in the revised Work Plan.

The Permittee must submit a revised Work Plan that addresses all comments contained in this letter. Two hard copies and one copy of the electronic version on a CD/DVD of the revised Work Plan must be submitted to the NMED. The Permittee must also include a redline-strikeout version in electronic format showing where all revisions to the Work Plan have been made. The revised Work Plan must be accompanied with a response letter that details where all revisions have been made to the Work Plan, cross-referencing NMED’s numbered comments. The revised Work Plan must be submitted to NMED no later than **December 19, 2025**.

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 690-6930.

Sincerely,

JohnDavid Nance
Chief
Hazardous Waste Bureau

cc: N. Dhawan, NMED HWB
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A. Kucate, Pueblo of Zuni
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J. Wilson, BIA
R. White, BIA
C. Esler, Sundance Consulting, Inc.
C. Frischkorn, BRAC
A. Soicher, USACE

File: FWDA 2024 and Reading

Appendix B: MRA memorandum

(Memorandum for Secretary of the Army: *Authorization to use the Fort Wingate Launch Complex in Support of Department of Defense Requirements*)



THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION,
TECHNOLOGY,
AND LOGISTICS

JAN - 6 2017

MEMORANDUM FOR SECRETARY OF THE ARMY

SUBJECT: Authorization to use the Fort Wingate Launch Complex in Support of Department of Defense Requirements

Fort Wingate Ammunition Storage Depot, New Mexico, was closed pursuant to title II of the Defense Authorization Amendments and Base Closure and Realignment Act (Public Law 100-526; title 10, U.S.C., section 2687 note). Through the authorized property disposal process, the Army retained a portion of the installation to support the Ballistic Missile Defense Organization (BMDO) (now the Missile Defense Agency (MDA)) for use as a launch site in support of Theater Missile Defense. The action was approved by the Assistant Secretary of Defense for Economic Security.

In addition to requirements supporting the MDA mission, the Department has identified requirements for Fort Wingate Launch Complex (FWLC) to support the Army Lower Tier Project Office and Precision Fires Rocket and Missile Systems Project Office and noted possible future use to support the Navy Integrated Fire Control – Counter Air program and future hypersonic programs. These additional requirements will require the use of the FWLC well beyond the 2025 timeframe.

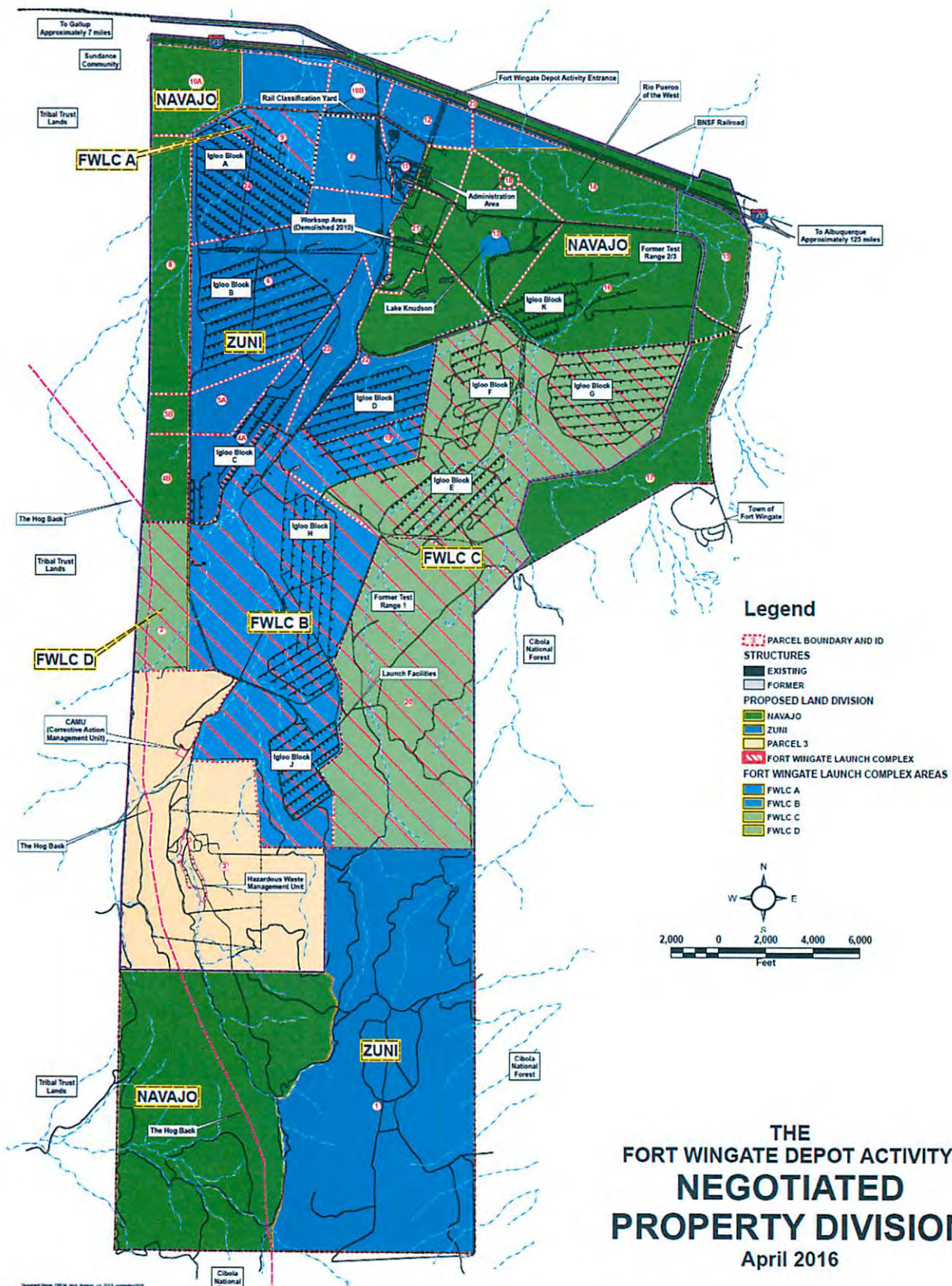
I therefore approve the use of FWLC to support all Department of Defense (DoD) activities. This expands the previous approval of the FWLC to support the BMDO (now MDA).

The FWLC consists of approximately 6,500 acres as shown in the attached document. It includes launch facilities and supporting structures required to support DoD activities. Should it become necessary, the Army may incorporate Parcel 3, consisting of approximately 1,800 acres, into the FWLC.


Frank Kendall

Attachments:
As stated

cc:
Secretary of the Navy
Secretary of the Air Force
Director, Operational Test and Evaluation
Assistant Secretary of Defense for Acquisition
Director, Missile Defense Agency
Director, Test Resource Management Center



Appendix C: Historical Analytical Data Detection Summary Tables

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1004-SS-M-SO	0	0.25	7439-97-6	Mercury	0.029	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-C-SO	0	0.5	7439-92-1	Lead	540	J	0.91	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-C-SO	0	0.5	7439-92-1	Lead	490	J	0.96	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-C-SO	0	0.5	7439-92-1	Lead	450	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.4	=	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-C-SO	0	0.5	7439-97-6	Mercury	0.031	=	0.016	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-C-SO	0	0.5	7439-92-1	Lead	450	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.8	J	2.3	0.61	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-M-SO	0	0.25	7440-39-3	Barium	110	J	1.8	0.07	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.46	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-M-SO	0	0.25	7440-47-3	Chromium	7.7	J	3.2	0.053	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1524LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	432	=	0.147	0.294	0.979	0.943	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1032-SS-C-SO	0	0.5	7439-92-1	Lead	390	J	0.91	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-C-SO	0	0.5	7439-92-1	Lead	380	J	0.97	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-C-SO	0	0.5	7439-92-1	Lead	360	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-C-SO	0	0.5	7440-38-2	Arsenic	5.6	=	2.5	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	2	0.077	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.45	J	0.51	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.5	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-C-SO	0	0.5	7439-97-6	Mercury	0.034	=	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-C-SO	0	0.5	7439-92-1	Lead	350	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.4	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-M-SO	0	0.25	7440-47-3	Chromium	8.1	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-M-SO	0	0.25	7439-97-6	Mercury	0.037	=	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-C-SO	0	0.5	7439-92-1	Lead	340	J	0.91	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SO	0	0.5	7439-92-1	Lead	310	J	0.94	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-C-SO	0	0.5	7439-92-1	Lead	300	J	0.88	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.1	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.32	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-C-SO	0	0.5	7440-47-3	Chromium	8.6	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-C-SO	0	0.5	7439-97-6	Mercury	0.025	=	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-C-SO	0	0.5	7439-92-1	Lead	290	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.5	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-M-SO	0	0.25	7440-39-3	Barium	150	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.29	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-M-SO	0	0.25	7440-47-3	Chromium	6.8	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-M-SO	0	0.25	7439-97-6	Mercury	0.024	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-C-SO	0	0.5	7439-92-1	Lead	260	J	0.93	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.8	=	2.2	0.59	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	1.8	0.068	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.19	J	0.45	0.037	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-C-SO	0	0.5	7440-47-3	Chromium	8.6	=	3.1	0.052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-C-SO	0	0.5	7439-97-6	Mercury	0.022	=	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-C-SO	0	0.5	7439-92-1	Lead	260	J	0.94	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.6	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1014-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.18	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-M-SO	0	0.25	7440-47-3	Chromium	8.6	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-M-SO	0	0.25	7439-97-6	Mercury	0.036	=	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SO	0	0.25	7440-38-2	Arsenic	4.3	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.19	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SO	0	0.25	7440-47-3	Chromium	8.3	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SO	0	0.25	7439-97-6	Mercury	0.024	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.94	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	3.9	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SODUP	0	0.25	7440-39-3	Barium	120	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.17	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SODUP	0	0.25	7440-47-3	Chromium	7	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.023	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-C-SO	0	0.5	7439-92-1	Lead	250	=	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.93	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.97	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1545LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	242	=	0.139	0.278	0.927	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1022-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.5	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-C-SO	0	0.5	7440-47-3	Chromium	9.7	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-C-SO	0	0.5	7439-97-6	Mercury	0.03	=	0.016	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SODUP	0	0.5	7439-92-1	Lead	220	J	0.96	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-M-SO	0	0.25	7440-38-2	Arsenic	3	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-M-SO	0	0.25	7440-39-3	Barium	100	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-M-SO	0	0.25	7440-47-3	Chromium	5.7	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-M-SO	0	0.25	7439-97-6	Mercury	0.029	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-C-SO	0	0.5	7439-92-1	Lead	200	J	0.96	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.3	0.61	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	1.8	0.07	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.46	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-C-SO	0	0.5	7440-47-3	Chromium	7.1	=	3.2	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-C-SO	0	0.5	7439-97-6	Mercury	0.023	=	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-C-SO	0	0.5	7439-92-1	Lead	190	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.3	J	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-M-SO	0	0.25	7440-39-3	Barium	120	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.19	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-M-SO	0	0.25	7440-47-3	Chromium	6.6	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-M-SO	0	0.25	7439-97-6	Mercury	0.02	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-C-SO	0	0.5	7439-92-1	Lead	180	J	0.97	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-C-SO	0	0.5	7439-92-1	Lead	170	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-C-SO	0	0.5	7439-92-1	Lead	170	=	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-C-SO	0	0.5	7440-38-2	Arsenic	5.2	=	2.3	0.6	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	1.8	0.069	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.21	J	0.45	0.037	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-C-SO	0	0.5	7440-47-3	Chromium	7.3	=	3.2	0.052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-C-SO	0	0.5	7439-97-6	Mercury	0.021	=	0.017	0.0054	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1066-SS-C-SO	0	0.5	7439-92-1	Lead	160	J	0.99	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.9	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-M-SO	0	0.25	7440-47-3	Chromium	6.5	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-M-SO	0	0.25	7439-97-6	Mercury	0.017	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-C-SO	0	0.5	7439-92-1	Lead	160	J	1	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.7	=	2.7	0.7	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-C-SO	0	0.5	7440-39-3	Barium	130	=	2.1	0.081	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.33	J	0.53	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-C-SO	0	0.5	7440-47-3	Chromium	9.9	J	3.7	0.062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-C-SO	0	0.5	7439-97-6	Mercury	0.034	=	0.019	0.0061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-C-SO	0	0.5	7439-92-1	Lead	150	J	0.83	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.6	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-M-SO	0	0.25	7440-39-3	Barium	130	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-M-SO	0	0.25	7440-47-3	Chromium	7.9	J	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-C-SO	0	0.5	7439-92-1	Lead	140	J	1	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-C-SO	0	0.5	7440-38-2	Arsenic	3	=	2.3	0.6	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	1.8	0.069	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.25	J	0.45	0.037	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.2	0.053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-C-SO	0	0.5	7439-92-1	Lead	140	J	0.81	0.24	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.5	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-M-SO	0	0.25	7440-39-3	Barium	130	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.18	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-M-SO	0	0.25	7440-47-3	Chromium	7.6	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-M-SO	0	0.25	7439-97-6	Mercury	0.022	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-C-SO	0	0.5	7439-92-1	Lead	140	J	0.99	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-C-SO	0	0.5	7440-39-3	Barium	130	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-C-SO	0	0.5	7439-97-6	Mercury	0.026	=	0.018	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	131	=	0.291	0.145	0.97	0.901	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1012-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.7	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SO	0	0.25	7440-39-3	Barium	91	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.087	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SO	0	0.25	7440-47-3	Chromium	5.2	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SO	0	0.25	7439-97-6	Mercury	0.015	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1525LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	131	=	0.145	0.29	0.968	0.926	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1012-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	3	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SODUP	0	0.25	7440-39-3	Barium	180	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.22	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SODUP	0	0.25	7440-47-3	Chromium	8.3	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.019	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	1641K-1525LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	131	=	0.134	0.267	0.891	0.862	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1019-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.1	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-M-SO	0	0.25	7440-39-3	Barium	150	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-M-SO	0	0.25	7440-47-3	Chromium	12	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-M-SO	0	0.25	7439-97-6	Mercury	0.024	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-C-SO	0	0.5	7439-92-1	Lead	130	=	0.97	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.8	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-C-SO	0	0.5	7440-39-3	Barium	140	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.35	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-C-SO	0	0.5	7439-97-6	Mercury	0.025	=	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-C-SO	0	0.5	7439-92-1	Lead	130	J	0.99	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.5	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-M-SO	0	0.25	7440-39-3	Barium	170	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-M-SO	0	0.25	7440-47-3	Chromium	9.1	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-M-SO	0	0.25	7439-97-6	Mercury	0.02	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-C-SO	0	0.5	7439-92-1	Lead	120	=	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.7	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-C-SO	0	0.5	7440-39-3	Barium	140	=	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-C-SO	0	0.5	7439-97-6	Mercury	0.027	=	0.016	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-C-SO	0	0.5	7439-92-1	Lead	120	J	0.95	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.7	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-C-SO	0	0.5	7440-39-3	Barium	110	=	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.34	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-C-SO	0	0.5	7440-47-3	Chromium	8.6	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-C-SO	0	0.5	7439-97-6	Mercury	0.027	=	0.018	0.0057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-C-SO	0	0.5	7439-92-1	Lead	120	J	1	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SO	0	0.25	7440-38-2	Arsenic	2.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SO	0	0.25	7440-39-3	Barium	77	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.087	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SO	0	0.25	7440-47-3	Chromium	5.6	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SO	0	0.25	7439-97-6	Mercury	0.023	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-C-SO	0	0.5	7439-92-1	Lead	120	J	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	2.8	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SODUP	0	0.25	7440-39-3	Barium	82	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.099	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SODUP	0	0.25	7440-47-3	Chromium	6.3	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.021	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SO	0.17	0.5	7439-92-1	Lead	120	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-C-SO	0	0.5	7439-92-1	Lead	110	J	0.81	0.24	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-C-SO	0	0.5	7439-92-1	Lead	110	=	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.1	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-C-SO	0	0.5	7440-47-3	Chromium	7.7	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.016	0.0051	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	1641K-1543REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	104	=	0.143	0.285	0.951	0.926	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1009-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.3	=	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.79	=	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-C-SO	0	0.5	7439-97-6	Mercury	0.047	=	0.018	0.0057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	101	=	0.313	0.156	1.04	0.926	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1009-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.7	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-M-SO	0	0.25	7440-47-3	Chromium	8.5	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-M-SO	0	0.25	7439-97-6	Mercury	0.027	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-C-SO	0	0.5	7439-92-1	Lead	100	J	0.91	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-C-SO	0	0.5	7439-92-1	Lead	100	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	98.2	=	0.303	0.151	1.01	0.909	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1030-SS-C-SO	0	0.5	7439-92-1	Lead	97	J	0.82	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.2	=	2.6	0.7	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-C-SO	0	0.5	7440-39-3	Barium	130	=	2.1	0.08	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.37	J	0.53	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-C-SO	0	0.5	7440-47-3	Chromium	8.9	=	3.7	0.061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-C-SO	0	0.5	7439-97-6	Mercury	0.028	=	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	94.8	J	0.319	0.16	1.06	0.971	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1010-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.7	J	2.4	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-M-SO	0	0.25	7440-39-3	Barium	130	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.18	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-M-SO	0	0.25	7440-47-3	Chromium	7.4	J	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-M-SO	0	0.25	7439-97-6	Mercury	0.031	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-C-SO	0	0.5	7439-92-1	Lead	93	=	0.8	0.24	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-M-SO	0	0.25	7440-38-2	Arsenic	2.9	=	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-M-SO	0	0.25	7440-39-3	Barium	180	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-M-SO	0	0.25	7440-47-3	Chromium	12	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-M-SO	0	0.25	7439-97-6	Mercury	0.026	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005-SS-M-SO	0	0.25	7439-92-1	Lead	92	J	0.83	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SODUP	0	0.5	7439-92-1	Lead	89	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-C-SO	0	0.5	7439-92-1	Lead	88	J	0.8	0.24	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-C-SO	0	0.5	7440-38-2	Arsenic	8.1	=	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	2.2	0.082	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.27	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-C-SO	0	0.5	7439-92-1	Lead	86	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1018-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.3	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-M-SO	0	0.25	7440-47-3	Chromium	9.5	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1018-SS-M-SO	0	0.25	7439-97-6	Mercury	0.025	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-C-SO	0	0.5	7439-92-1	Lead	83	J	1.1	0.32	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.6	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	78.5	=	0.296	0.148	0.988	0.909	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1007-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.6	0.69	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2.1	0.079	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.34	J	0.52	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-C-SO	0	0.5	7439-97-6	Mercury	0.027	=	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-C-SO	0	0.5	7439-92-1	Lead	78	=	0.83	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.6	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-M-SO	0	0.25	7440-39-3	Barium	170	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.18	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-M-SO	0	0.25	7440-47-3	Chromium	9	J	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-M-SO	0	0.25	7439-97-6	Mercury	0.025	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	77.1	=	0.299	0.15	0.998	0.917	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1094-SS-C-SO	0	0.5	7439-92-1	Lead	76	=	0.99	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SO	0	0.5	7439-92-1	Lead	69	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.1	=	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2.1	0.079	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.24	J	0.52	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	66.1	J	0.31	0.155	1.03	0.971	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1008-SS-M-SO	0	0.25	7440-38-2	Arsenic	4.5	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-M-SO	0	0.25	7440-39-3	Barium	120	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.2	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-M-SO	0	0.25	7440-47-3	Chromium	9.1	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-M-SO	0	0.25	7439-97-6	Mercury	0.028	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-C-SO	0	0.5	7439-92-1	Lead	64	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-C-SO	0	0.5	7439-92-1	Lead	64	=	0.97	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-C-SO	0	0.5	7439-92-1	Lead	63	=	0.82	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.3	0.61	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.42	J	0.46	0.038	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1015-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-C-SO	0	0.5	7439-97-6	Mercury	0.022	=	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-C-SO	0	0.5	7439-92-1	Lead	63	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.1	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-M-SO	0	0.25	7440-39-3	Barium	150	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.19	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-M-SO	0	0.25	7440-47-3	Chromium	8.6	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-M-SO	0	0.25	7439-97-6	Mercury	0.028	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-C-SO	0	0.5	7439-92-1	Lead	63	J	0.93	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-C-SO	0	0.5	7439-92-1	Lead	63	J	0.94	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	61.8	=	0.328	0.164	1.09	0.971	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1016-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-C-SO	0	0.5	7440-39-3	Barium	230	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.17	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-C-SO	0	0.5	7439-92-1	Lead	61	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-M-SO	0	0.25	7440-38-2	Arsenic	2.6	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-M-SO	0	0.25	7440-39-3	Barium	180	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-M-SO	0	0.25	7439-97-6	Mercury	0.017	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	57	=	0.338	0.169	1.13	0.935	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1017-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.38	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-C-SO	0	0.5	7439-92-1	Lead	57	J	0.95	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.5	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-M-SO	0	0.25	7440-39-3	Barium	130	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.16	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-M-SO	0	0.25	7440-47-3	Chromium	6.8	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-M-SO	0	0.25	7439-97-6	Mercury	0.022	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	55.3	J	0.289	0.144	0.963	0.893	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1024-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.4	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-C-SO	0	0.5	7440-47-3	Chromium	8.4	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	54.9	=	0.288	0.144	0.962	0.901	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1024-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.8	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-M-SO	0	0.25	7440-39-3	Barium	130	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.17	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-M-SO	0	0.25	7440-47-3	Chromium	7.1	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-M-SO	0	0.25	7439-97-6	Mercury	0.028	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-C-SO	0	0.5	7439-92-1	Lead	54	J	0.98	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.3	0.59	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	1.8	0.069	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.18	J	0.45	0.037	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-C-SO	0	0.5	7440-47-3	Chromium	9.2	=	3.2	0.052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.015	0.005	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	53.1	=	0.312	0.156	1.04	0.926	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1032-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.5	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-C-SO	0	0.5	7440-39-3	Barium	270	=	2	0.077	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.39	J	0.51	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-C-SO	0	0.5	7440-47-3	Chromium	22	=	3.5	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-C-SO	0	0.5	7439-97-6	Mercury	0.022	=	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-C-SO	0	0.5	7439-92-1	Lead	52	J	0.94	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.4	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.16	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-M-SO	0	0.25	7440-47-3	Chromium	8.8	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-M-SO	0	0.25	7439-97-6	Mercury	0.02	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-C-SO	0	0.5	7439-92-1	Lead	52	J	1	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1528REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	52	=	0.144	0.287	0.958	0.935	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1079-SS-C-SO	0	0.5	7439-92-1	Lead	50	J	1	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.2	0.59	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	1.8	0.067	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.41	J	0.44	0.036	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-C-SO	0	0.5	7440-47-3	Chromium	9.2	=	3.1	0.052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-C-SO	0	0.5	7439-97-6	Mercury	0.018	=	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-C-SO	0	0.5	7439-92-1	Lead	50	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.3	=	2.4	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-M-SO	0	0.25	7440-39-3	Barium	140	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-M-SO	0	0.25	7440-47-3	Chromium	7.5	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-M-SO	0	0.25	7439-97-6	Mercury	0.023	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-C-SO	0	0.5	7439-92-1	Lead	49	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SO	0	0.5	7439-92-1	Lead	48	J	0.91	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.8	0.74	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2.3	0.086	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.21	J	0.56	0.046	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.9	0.065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.019	0.0063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-C-SO	0	0.5	7439-92-1	Lead	47	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.8	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-M-SO	0	0.25	7440-39-3	Barium	220	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1045-SS-M-SO	0	0.25	7440-47-3	Chromium	10	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-C-SO	0	0.5	7439-92-1	Lead	47	J	0.93	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.069	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.017	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-C-SO	0	0.5	7439-92-1	Lead	46	=	0.99	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-M-SO	0	0.25	7440-39-3	Barium	180	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.1	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-M-SO	0	0.25	7440-47-3	Chromium	10	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-C-SO	0	0.5	7439-92-1	Lead	46	J	0.91	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-M-SO	0	0.25	7440-39-3	Barium	220	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.076	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-M-SO	0	0.25	7440-47-3	Chromium	9.1	=	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-C-SO	0	0.5	7439-92-1	Lead	45	=	0.81	0.24	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.7	0.72	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2.2	0.083	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.41	J	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.8	0.064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-C-SO	0	0.5	7439-97-6	Mercury	0.018	J	0.019	0.0062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-C-SO	0	0.5	7439-92-1	Lead	45	=	0.99	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-M-SO	0	0.25	7440-39-3	Barium	210	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-M-SO	0	0.25	7440-47-3	Chromium	9.6	J	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-M-SO	0	0.25	7439-97-6	Mercury	0.015	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-C-SO	0	0.5	7439-92-1	Lead	45	J	0.95	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.97	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-C-SO	0	0.5	7440-39-3	Barium	200	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.018	0.0059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1005REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	40	=	0.315	0.157	1.05	0.962	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1061-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.3	J	2.7	0.72	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2.2	0.083	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.067	J	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.018	0.0059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-C-SO	0	0.5	7439-92-1	Lead	40	J	0.93	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-M-SO	0	0.25	7440-38-2	Arsenic	1	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-M-SO	0	0.25	7440-39-3	Barium	240	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.044	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-M-SO	0	0.25	7440-47-3	Chromium	8	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1061-SS-M-SO	0	0.25	7439-97-6	Mercury	0.01	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-C-SO	0	0.5	7439-92-1	Lead	39	=	1	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-C-SO	0	0.5	7440-38-2	Arsenic	3	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-C-SO	0	0.5	7440-39-3	Barium	350	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.017	0.0057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-M-SO	0	0.25	7439-92-1	Lead	39	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.5	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-M-SO	0	0.25	7440-39-3	Barium	320	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-M-SO	0	0.25	7440-47-3	Chromium	8.4	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-C-SO	0	0.5	7439-92-1	Lead	38	J	0.97	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-C-SO	0	0.5	7440-39-3	Barium	370	=	2.1	0.079	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.091	J	0.52	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.018	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-C-SO	0	0.5	7439-92-1	Lead	38	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.74	J	2.6	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-C-SO	0	0.5	7440-39-3	Barium	270	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.019	0.0061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	37.3	=	0.282	0.141	0.941	0.901	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1070-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SO	0	0.25	7440-39-3	Barium	270	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.093	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SO	0	0.25	7440-47-3	Chromium	9.6	J	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058REC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	36.5	J	0.299	0.15	0.997	0.935	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1070-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	0.9	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SODUP	0	0.25	7440-39-3	Barium	270	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.081	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SODUP	0	0.25	7440-47-3	Chromium	9.9	J	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.012	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SODUP	0	0.5	7439-92-1	Lead	35	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.92	J	2.8	0.74	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-C-SO	0	0.5	7440-39-3	Barium	310	=	2.2	0.085	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.56	0.046	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.9	0.065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SO	0	0.25	7439-92-1	Lead	35	J	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.3	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-M-SO	0	0.25	7440-39-3	Barium	270	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SODUP	0	0.25	7439-92-1	Lead	35	J	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1078-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.019	0.0063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-C-SO	0	0.5	7439-92-1	Lead	34	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-M-SO	0	0.25	7440-39-3	Barium	240	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-M-SO	0	0.25	7782-49-2	Selenium	0.87	J	3	0.86	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-M-SO	0	0.25	7439-97-6	Mercury	0.009	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-C-SO	0	0.5	7439-92-1	Lead	34	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-C-SO	0	0.5	7440-39-3	Barium	250	=	2.2	0.084	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-C-SO	0	0.5	7440-47-3	Chromium	19	=	3.9	0.064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0086	J	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SO	0	0.25	7439-92-1	Lead	34	=	0.88	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-M-SO	0	0.25	7440-39-3	Barium	270	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.1	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-M-SO	0	0.25	7439-97-6	Mercury	0.01	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-C-SO	0	0.5	7439-92-1	Lead	34	=	0.97	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-C-SO	0	0.5	7440-39-3	Barium	280	=	2.1	0.079	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.099	J	0.52	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1013-SS-M-SO	0	0.25	7439-92-1	Lead	33	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-C-SO	0	0.5	7440-38-2	Arsenic	7.2	=	2.6	0.69	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-C-SO	0	0.5	7440-39-3	Barium	1600	J	2.1	0.079	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.19	J	0.52	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-C-SO	0	0.5	7440-47-3	Chromium	4.8	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.018	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-C-SO	0	0.5	7439-92-1	Lead	33	J	0.88	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-M-SO	0	0.25	7440-38-2	Arsenic	2.7	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-M-SO	0	0.25	7440-39-3	Barium	320	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.11	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-M-SO	0	0.25	7440-47-3	Chromium	9.8	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0087	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-C-SO	0	0.5	7439-92-1	Lead	33	=	0.93	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-C-SO	0	0.5	7440-38-2	Arsenic	2	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-C-SO	0	0.5	7440-39-3	Barium	270	J	2.2	0.085	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.56	0.046	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.9	0.065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0081	J	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SO	0	0.25	7439-92-1	Lead	33	J	0.88	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.9	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-M-SO	0	0.25	7440-39-3	Barium	350	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.11	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-M-SO	0	0.25	7440-47-3	Chromium	7.5	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-M-SO	0	0.25	7439-97-6	Mercury	0.014	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1021LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	32.6	=	0.305	0.152	1.02	0.952	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1095-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.2	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SO	0	0.5	7440-39-3	Barium	410	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.094	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0067	J	0.02	0.0064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-C-SO	0	0.5	7439-92-1	Lead	32	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	1.6	J	2.7	0.72	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SODUP	0	0.5	7440-39-3	Barium	410	J	2.2	0.083	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.11	J	0.54	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SODUP	0	0.5	7440-47-3	Chromium	12	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	31.6	=	0.316	0.158	1.05	0.935	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1095-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.5	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-M-SO	0	0.25	7440-39-3	Barium	330	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-M-SO	0	0.25	7440-47-3	Chromium	9.6	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SODUP	0	0.25	7439-92-1	Lead	30	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.5	J	2.7	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-C-SO	0	0.5	7440-39-3	Barium	450	J	2.2	0.084	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.24	J	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-C-SO	0	0.5	7440-47-3	Chromium	17	=	3.8	0.064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-C-SO	0	0.5	7439-97-6	Mercury	0.021	=	0.016	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SODUP	0	0.25	7439-92-1	Lead	30	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-M-SO	0	0.25	7440-38-2	Arsenic	3	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-M-SO	0	0.25	7440-39-3	Barium	190	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-M-SO	0	0.25	7440-47-3	Chromium	9.2	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-M-SO	0	0.25	7439-97-6	Mercury	0.018	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-C-SO	0	0.5	7439-92-1	Lead	30	J	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.1	=	2.6	0.69	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SO	0	0.5	7440-39-3	Barium	200	=	2.1	0.079	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.52	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.7	0.061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.016	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-C-SO	0	0.5	7439-92-1	Lead	30	=	0.98	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	3.1	=	2.7	0.7	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SODUP	0	0.5	7440-39-3	Barium	200	=	2.1	0.081	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.21	J	0.53	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SODUP	0	0.5	7440-47-3	Chromium	14	=	3.7	0.062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-C-SODUP	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-C-SO	0	0.5	7439-92-1	Lead	29	J	1	0.3	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.1	=	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-M-SO	0	0.25	7440-39-3	Barium	160	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1031-SS-M-SO	0	0.25	7440-47-3	Chromium	9.8	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-M-SO	0	0.25	7439-97-6	Mercury	0.016	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	28.3	=	0.326	0.163	1.09	0.971	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1021REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	28.2	=	0.28	0.14	0.933	0.885	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1021REC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	28	=	0.275	0.138	0.917	0.87	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1038-SS-C-SO	0	0.5	7440-39-3	Barium	300	=	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.093	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.019	0.0063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-M-SO	0	0.25	7439-92-1	Lead	28	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-M-SO	0	0.25	7440-39-3	Barium	260	=	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-M-SO	0	0.25	7440-47-3	Chromium	13	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-M-SO	0	0.25	7439-97-6	Mercury	0.01	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-M-SO	0	0.25	7439-92-1	Lead	28	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.5	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-C-SO	0	0.5	7440-39-3	Barium	240	J	2	0.077	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.51	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-C-SO	0	0.5	7440-47-3	Chromium	17	=	3.5	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-C-SO	0	0.5	7782-49-2	Selenium	0.95	J	3	0.87	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.019	0.0061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	27.5	=	0.3	0.15	1	0.917	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1044-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.7	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SO	0	0.25	7440-47-3	Chromium	13	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SODUP	0	0.25	7439-92-1	Lead	26	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	1.9	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SODUP	0	0.25	7440-39-3	Barium	220	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.14	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SODUP	0	0.25	7440-47-3	Chromium	12	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1547REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	25.4	=	0.133	0.266	0.887	0.87	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1050-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-M-SO	0	0.25	7440-39-3	Barium	240	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-M-SO	0	0.25	7440-47-3	Chromium	9.5	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1050-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0093	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1019-SS-C-SO	0	0.5	7439-92-1	Lead	25	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.92	J	2.5	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2	0.077	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.23	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-C-SO	0	0.5	7440-47-3	Chromium	18	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1045-SS-M-SO	0	0.25	7439-92-1	Lead	25	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.3	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-M-SO	0	0.25	7440-39-3	Barium	280	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-M-SO	0	0.25	7440-47-3	Chromium	11	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051-SS-M-SO	0	0.25	7439-97-6	Mercury	0.014	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1087-SS-M-SO	0	0.25	7439-92-1	Lead	25	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-M-SO	0	0.25	7439-92-1	Lead	25	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-C-SO	0	0.5	7439-92-1	Lead	24	J	0.91	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SO	0	0.5	7440-39-3	Barium	500	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SO	0	0.5	7440-47-3	Chromium	9.8	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.018	0.0059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SO	0	0.25	7439-92-1	Lead	23	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	1	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SODUP	0	0.5	7440-39-3	Barium	200	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.15	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SODUP	0	0.5	7440-47-3	Chromium	11	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-C-SODUP	0	0.5	7439-97-6	Mercury	0.017	J	0.018	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031-SS-M-SO	0	0.25	7439-92-1	Lead	23	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-C-SO	0	0.5	7440-39-3	Barium	250	J	2.2	0.082	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	J	0.02	0.0067	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	22.5	=	0.298	0.149	0.994	0.926	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1059-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.3	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.073	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-M-SO	0	0.25	7440-47-3	Chromium	8.9	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1021-SS-M-SODUP	0	0.25	7439-92-1	Lead	22	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1078-SS-M-SO	0	0.25	7439-92-1	Lead	22	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	21.6	=	0.315	0.157	1.05	0.962	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1060-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.4	J	2.7	0.7	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2.1	0.081	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.094	J	0.53	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.7	0.062	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1060-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	J	0.02	0.0064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1011-SS-M-SO	0	0.25	7439-92-1	Lead	20	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.3	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.053	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-M-SO	0	0.25	7440-47-3	Chromium	10	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1060-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.03	0.005	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-M-SO	0	0.25	7440-39-3	Barium	250	=	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.055	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-M-SO	0	0.25	7440-47-3	Chromium	10	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1008-SS-M-SO	0	0.25	7439-92-1	Lead	20	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-C-SO	0	0.5	7440-39-3	Barium	400	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.057	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-M-SO	0	0.25	7439-92-1	Lead	20	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-M-SO	0	0.25	7440-38-2	Arsenic	0.95	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-M-SO	0	0.25	7440-39-3	Barium	250	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.063	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-M-SO	0	0.25	7440-47-3	Chromium	10	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0099	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SODUP	0	0.25	7439-92-1	Lead	20	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-C-SO	0	0.5	7440-39-3	Barium	250	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1524REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.9	=	0.137	0.273	0.91	0.87	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1069-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-M-SO	0	0.25	7440-39-3	Barium	290	=	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.085	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-M-SO	0	0.25	7440-47-3	Chromium	10	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1069-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.7	=	0.303	0.152	1.01	0.952	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1076-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-C-SO	0	0.5	7440-39-3	Barium	660	=	2.2	0.085	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.56	0.046	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0089	J	0.019	0.0062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.6	=	0.291	0.146	0.97	0.952	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1076-SS-M-SO	0	0.25	7440-38-2	Arsenic	1	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-M-SO	0	0.25	7440-39-3	Barium	280	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.072	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1076-SS-M-SO	0	0.25	7440-47-3	Chromium	9.6	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0075	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.6	=	0.3	0.15	1	0.943	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1077-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.7	J	2.6	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-C-SO	0	0.5	7440-39-3	Barium	320	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.065	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.019	0.0063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002-SS-M-SO	0	0.25	7439-92-1	Lead	19	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-M-SO	0	0.25	7440-38-2	Arsenic	1	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.094	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-M-SO	0	0.25	7440-47-3	Chromium	7.4	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0069	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-M-SO	0	0.25	7440-47-3	Chromium	8.3	=	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-C-SO	0	0.5	7439-92-1	Lead	19	=	0.96	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.5	J	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-C-SO	0	0.5	7440-39-3	Barium	380	=	2.2	0.082	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-C-SO	0	0.5	7439-97-6	Mercury	0.01	J	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1527REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	18.9	=	0.145	0.291	0.968	0.952	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1085-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-M-SO	0	0.25	7440-39-3	Barium	280	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.11	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-M-SO	0	0.25	7440-47-3	Chromium	8.9	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1002LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	18.6	=	0.324	0.162	1.08	0.962	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1086-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.2	J	2.6	0.69	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-C-SO	0	0.5	7440-39-3	Barium	260	=	2.1	0.08	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.32	J	0.53	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.7	0.061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0094	J	0.019	0.0062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1006-SS-M-SO	0	0.25	7439-92-1	Lead	18	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.3	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-M-SO	0	0.25	7440-39-3	Barium	310	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-M-SO	0	0.25	7440-47-3	Chromium	9.3	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-M-SO	0	0.25	7439-92-1	Lead	18	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.3	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-C-SO	0	0.5	7440-39-3	Barium	220	J	2.2	0.084	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.064	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1093-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0089	J	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SO	0	0.25	7439-92-1	Lead	18	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-M-SO	0	0.25	7439-92-1	Lead	18	=	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.1	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-C-SO	0	0.5	7440-39-3	Barium	340	J	2.2	0.084	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-C-SO	0	0.5	7440-43-9	Cadmium	1.5	=	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-C-SO	0	0.5	7439-97-6	Mercury	0.01	J	0.018	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-C-SO	0	0.5	7439-92-1	Lead	18	J	0.95	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-M-SO	0	0.25	7440-39-3	Barium	290	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-M-SO	0	0.25	7440-47-3	Chromium	10	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	17.3	J	0.29	0.145	0.967	0.917	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feature 4 (Areas A and B) and Locomotive
6	0628B-1025-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.3	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SO	0	0.25	7440-39-3	Barium	97	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SO	0	0.25	7440-47-3	Chromium	5.2	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SO	0	0.25	7439-97-6	Mercury	0.019	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1033-SS-M-SO	0	0.25	7439-92-1	Lead	17	=	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	3.7	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SODUP	0	0.25	7440-39-3	Barium	100	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.14	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SODUP	0	0.25	7440-47-3	Chromium	5.7	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.019	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1053-SS-M-SO	0	0.25	7439-92-1	Lead	17	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.5	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2	0.077	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.51	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.5	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.016	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1038-SS-C-SO	0	0.5	7439-92-1	Lead	17	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-M-SO	0	0.25	7440-38-2	Arsenic	2	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-M-SO	0	0.25	7440-39-3	Barium	180	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.09	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-M-SO	0	0.25	7440-47-3	Chromium	9	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-M-SO	0	0.25	7439-92-1	Lead	17	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.9	=	2.3	0.6	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-C-SO	0	0.5	7440-39-3	Barium	260	=	1.8	0.069	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.39	J	0.46	0.037	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.2	0.053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-M-SO	0	0.25	7439-92-1	Lead	17	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1036-SS-M-SO	0	0.25	7440-38-2	Arsenic	2.7	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SO	0	0.25	7440-39-3	Barium	120	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.16	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SO	0	0.25	7440-47-3	Chromium	9.1	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SO	0	0.25	7439-97-6	Mercury	0.016	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	16.7	=	0.316	0.158	1.05	0.971	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1036-SS-M-SODUP	0	0.25	7440-39-3	Barium	110	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.14	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SODUP	0	0.25	7440-47-3	Chromium	8.2	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.017	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	16.1	=	0.308	0.154	1.03	0.952	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1037-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-C-SO	0	0.5	7440-39-3	Barium	310	=	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.19	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-C-SO	0	0.5	7440-47-3	Chromium	17	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1014-SS-M-SO	0	0.25	7439-92-1	Lead	16	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.7	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-M-SO	0	0.25	7440-39-3	Barium	250	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.099	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-M-SO	0	0.25	7440-47-3	Chromium	12	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1003-SS-M-SO	0	0.25	7439-92-1	Lead	16	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.2	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-M-SO	0	0.25	7440-39-3	Barium	200	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.11	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-M-SO	0	0.25	7440-47-3	Chromium	8.6	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0098	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1004-SS-M-SO	0	0.25	7439-92-1	Lead	16	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-C-SO	0	0.5	7440-39-3	Barium	250	=	2.1	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-C-SO	0	0.5	7440-47-3	Chromium	9.5	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.016	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1010-SS-M-SO	0	0.25	7439-92-1	Lead	16	J	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-M-SO	0	0.25	7440-39-3	Barium	290	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-M-SO	0	0.25	7440-47-3	Chromium	8.1	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-M-SO	0	0.25	7439-97-6	Mercury	0.014	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1017-SS-M-SO	0	0.25	7439-92-1	Lead	16	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-C-SO	0	0.5	7440-38-2	Arsenic	1	J	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-M-SO	0	0.25	7439-97-6	Mercury	0.017	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1018-SS-M-SO	0	0.25	7439-92-1	Lead	16	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.4	J	2.9	0.77	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-C-SO	0	0.5	7440-39-3	Barium	340	=	2.3	0.089	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.58	0.048	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	4.1	0.068	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-C-SO	0	0.5	7439-97-6	Mercury	0.023	=	0.02	0.0065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1007-SS-M-SO	0	0.25	7439-92-1	Lead	16	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-M-SO	0	0.25	7439-92-1	Lead	16	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-C-SO	0	0.5	7440-39-3	Barium	270	=	2.2	0.082	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-C-SO	0	0.5	7439-97-6	Mercury	0.023	=	0.019	0.0062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1044-SS-M-SODUP	0	0.25	7439-92-1	Lead	16	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-M-SO	0	0.25	7440-38-2	Arsenic	0.98	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-M-SO	0	0.25	7440-39-3	Barium	220	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-M-SO	0	0.25	7440-47-3	Chromium	8.7	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-M-SO	0	0.25	7439-97-6	Mercury	0.017	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-M-SO	0	0.25	7439-92-1	Lead	16	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SO	0	0.25	7439-92-1	Lead	16	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1549REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	15.2	=	0.138	0.275	0.918	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1019-SS-M-SO	0	0.25	7439-92-1	Lead	15	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-M-SO	0	0.25	7440-39-3	Barium	330	=	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.1	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-M-SO	0	0.25	7440-47-3	Chromium	11	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1024-SS-M-SO	0	0.25	7439-92-1	Lead	15	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2.2	0.084	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.49	J	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.02	0.0065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SODUP	0	0.5	7439-92-1	Lead	15	=	0.98	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-M-SO	0	0.25	7440-39-3	Barium	300	=	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.092	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-M-SO	0	0.25	7440-47-3	Chromium	9.9	J	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-M-SO	0	0.25	7439-92-1	Lead	15	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-C-SO	0	0.5	7440-39-3	Barium	340	=	2.1	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1069-SS-M-SO	0	0.25	7439-92-1	Lead	15	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-M-SO	0	0.25	7440-38-2	Arsenic	0.95	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1066-SS-M-SO	0	0.25	7439-92-1	Lead	15	=	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.2	=	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-C-SO	0	0.5	7440-39-3	Barium	360	=	2.2	0.082	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-M-SO	0	0.25	7439-92-1	Lead	15	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.9	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-M-SO	0	0.25	7440-39-3	Barium	250	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-M-SO	0	0.25	7440-47-3	Chromium	11	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-M-SO	0	0.25	7782-49-2	Selenium	0.87	J	2.9	0.83	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0065	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	14.8	=	0.298	0.149	0.993	0.935	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1075-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.6	0.69	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2.1	0.08	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.53	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.7	0.061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0093	J	0.018	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	14.4	=	0.294	0.147	0.98	0.893	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1075-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.2	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-M-SO	0	0.25	7440-39-3	Barium	220	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.081	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-M-SO	0	0.25	7440-47-3	Chromium	8.5	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0061	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1051REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	14.1	=	0.306	0.153	1.02	0.962	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1082-SS-M-SO	0	0.25	7440-38-2	Arsenic	1	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.16	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1022-SS-M-SO	0	0.25	7439-92-1	Lead	14	=	0.88	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.4	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-C-SO	0	0.5	7440-39-3	Barium	280	=	2.2	0.085	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.56	0.046	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.02	0.0065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1020-SS-M-SO	0	0.25	7439-92-1	Lead	14	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.5	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1083-SS-M-SO	0	0.25	7440-47-3	Chromium	9.4	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1009-SS-M-SO	0	0.25	7439-92-1	Lead	14	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-C-SO	0	0.5	7440-39-3	Barium	240	=	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0094	J	0.02	0.0065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015-SS-M-SO	0	0.25	7439-92-1	Lead	14	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-M-SO	0	0.25	7440-39-3	Barium	300	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.11	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.3	J	2.7	0.7	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-C-SO	0	0.5	7440-39-3	Barium	140	J	2.1	0.081	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.073	J	0.53	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.7	0.062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0065	J	0.019	0.0061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1023-SS-M-SO	0	0.25	7439-92-1	Lead	14	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.2	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SO	0	0.25	7440-39-3	Barium	160	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.11	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SO	0	0.25	7440-47-3	Chromium	13	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SO	0	0.25	7439-92-1	Lead	14	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	1.2	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SODUP	0	0.25	7440-39-3	Barium	170	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.13	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SODUP	0	0.25	7440-47-3	Chromium	14	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1091-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.011	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1079-SS-M-SO	0	0.25	7439-92-1	Lead	14	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.7	J	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-C-SO	0	0.5	7440-39-3	Barium	270	J	2.1	0.081	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.087	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.7	0.062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1095-SS-C-SO	0	0.5	7439-92-1	Lead	14	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-M-SO	0	0.25	7440-39-3	Barium	240	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-M-SO	0	0.25	7440-47-3	Chromium	12	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.9	=	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2.1	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.29	J	0.52	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-C-SO	0	0.5	7439-97-6	Mercury	0.018	=	0.017	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1030-SS-M-SO	0	0.25	7439-92-1	Lead	14	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.3	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-M-SO	0	0.25	7440-39-3	Barium	160	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.21	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-M-SO	0	0.25	7440-47-3	Chromium	8	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034-SS-M-SO	0	0.25	7439-97-6	Mercury	0.019	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1050-SS-M-SO	0	0.25	7439-92-1	Lead	14	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1060-SS-M-SO	0	0.25	7439-92-1	Lead	14	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1057-SS-M-SO	0	0.25	7439-92-1	Lead	14	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.5	=	2.3	0.61	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	1.8	0.07	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.26	J	0.46	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.2	0.053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.016	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058-SS-M-SO	0	0.25	7439-92-1	Lead	14	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-M-SO	0	0.25	7440-38-2	Arsenic	3.7	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-M-SO	0	0.25	7440-39-3	Barium	150	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.15	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-M-SO	0	0.25	7440-47-3	Chromium	7.1	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-M-SO	0	0.25	7439-97-6	Mercury	0.021	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1527LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.8	=	0.137	0.275	0.916	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1036-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.2	0.59	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.8	0.068	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.24	J	0.45	0.037	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.1	0.052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1036-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.016	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1533LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.6	=	0.136	0.273	0.91	0.885	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1047-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.5	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SO	0	0.5	7440-39-3	Barium	180	=	2	0.077	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.019	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1531REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.5	=	0.145	0.29	0.967	0.952	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1047-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	1.7	J	2.6	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SODUP	0	0.5	7440-39-3	Barium	180	=	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.083	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SODUP	0	0.5	7440-47-3	Chromium	13	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-C-SODUP	0	0.5	7439-97-6	Mercury	0.012	J	0.017	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.2	=	0.293	0.147	0.978	0.935	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1047-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SO	0	0.25	7440-39-3	Barium	170	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.16	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1016-SS-M-SO	0	0.25	7439-92-1	Lead	13	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	1.2	J	2.3	0.61	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SODUP	0	0.25	7440-39-3	Barium	170	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.23	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SODUP	0	0.25	7440-47-3	Chromium	9.9	=	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1047-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.01	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1046-SS-M-SO	0	0.25	7439-92-1	Lead	13	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1048-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.13	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1048-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-M-SO	0	0.25	7439-92-1	Lead	13	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.2	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-M-SO	0	0.25	7440-39-3	Barium	220	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1062-SS-M-SO	0	0.25	7440-47-3	Chromium	9.1	J	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-M-SO	0	0.25	7439-97-6	Mercury	0.014	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059-SS-M-SO	0	0.25	7439-92-1	Lead	13	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1037-SS-M-SO	0	0.25	7439-92-1	Lead	13	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1035-SS-M-SO	0	0.25	7439-92-1	Lead	13	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.3	J	2.8	0.74	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-C-SO	0	0.5	7440-39-3	Barium	240	=	2.2	0.085	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.56	0.046	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.065	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-C-SO	0	0.5	7439-97-6	Mercury	0.017	J	0.018	0.0057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-C-SO	0	0.5	7439-92-1	Lead	13	J	0.96	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-M-SO	0	0.25	7440-38-2	Arsenic	1	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-M-SO	0	0.25	7440-39-3	Barium	250	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.11	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-M-SO	0	0.25	7440-47-3	Chromium	9.7	J	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1055-SS-M-SO	0	0.25	7439-97-6	Mercury	0.014	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-M-SO	0	0.25	7439-92-1	Lead	13	J	0.88	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-C-SO	0	0.5	7440-39-3	Barium	360	=	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.055	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0057	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1541LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13	=	0.15	0.299	0.997	0.971	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1056-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-M-SO	0	0.25	7440-39-3	Barium	250	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.14	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1056-SS-M-SO	0	0.25	7440-47-3	Chromium	9.9	J	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1546LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.8	=	0.145	0.291	0.968	0.952	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1063-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.6	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-M-SO	0	0.25	7440-39-3	Barium	370	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-M-SO	0	0.25	7440-47-3	Chromium	9.2	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-M-SO	0	0.25	7782-49-2	Selenium	1.7	J	2.8	0.82	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1063-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1529LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.4	=	0.144	0.287	0.957	0.935	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628B-1064-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-C-SO	0	0.5	7440-39-3	Barium	290	=	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0085	J	0.018	0.0059	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1034LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.3	=	0.285	0.143	0.951	0.885	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628B-1064-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.1	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-M-SO	0	0.25	7440-39-3	Barium	260	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.061	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-M-SO	0	0.25	7440-47-3	Chromium	9.6	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-M-SO	0	0.25	7439-97-6	Mercury	0.01	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1061-SS-M-SO	0	0.25	7439-92-1	Lead	12	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.6	0.69	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	2.1	0.079	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.11	J	0.52	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-C-SO	0	0.5	7440-47-3	Chromium	6.9	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1065-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.016	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.091	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-M-SO	0	0.25	7440-47-3	Chromium	10	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-M-SO	0	0.25	7439-92-1	Lead	12	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-C-SO	0	0.5	7440-22-4	Silver	0.61	J	1.6	0.17	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-C-SO	0	0.5	7440-39-3	Barium	320	J	2.1	0.08	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.35	J	0.52	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.7	0.061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.018	0.0059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SO	0	0.25	7439-92-1	Lead	12	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.9	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.16	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-M-SO	0	0.25	7440-47-3	Chromium	8.6	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-M-SO	0	0.25	7782-49-2	Selenium	0.85	J	3	0.85	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.03	0.005	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1025-SS-M-SODUP	0	0.25	7439-92-1	Lead	12	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1027-SS-M-SO	0	0.25	7439-92-1	Lead	12	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1074-SS-M-SO	0	0.25	7439-92-1	Lead	12	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.2	J	2.8	0.73	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-C-SO	0	0.5	7440-39-3	Barium	290	=	2.2	0.084	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.38	J	0.55	0.045	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.9	0.064	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-M-SO	0	0.25	7439-92-1	Lead	12	J	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.4	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-M-SO	0	0.25	7440-39-3	Barium	260	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.13	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1073-SS-M-SO	0	0.25	7439-97-6	Mercury	0.01	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.017	0.0056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-M-SO	0	0.25	7439-92-1	Lead	12	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.7	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-M-SO	0	0.25	7440-39-3	Barium	260	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1080-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1006-SS-M-SO	0.17	0.5	7439-92-1	Lead	12	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.6	0.7	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2.1	0.08	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.53	0.043	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.7	0.061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.017	0.0057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1034REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	11.9	=	0.271	0.136	0.905	0.855	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1081-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.8	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-M-SO	0	0.25	7440-39-3	Barium	230	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.16	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-M-SO	0	0.25	7440-47-3	Chromium	10	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1081-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1015LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	11.3	=	0.287	0.144	0.957	0.877	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1082-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.7	J	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-C-SO	0	0.5	7440-39-3	Barium	260	=	2.1	0.081	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.056	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.8	0.062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1082-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	11.1	=	0.306	0.153	1.02	0.935	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaure 4 (Areas A and B) and Locomotive
6	0628B-1089-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.91	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-C-SO	0	0.5	7440-39-3	Barium	160	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-C-SO	0	0.5	7440-47-3	Chromium	8.9	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.019	0.0061	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1052-SS-M-SO	0	0.25	7439-92-1	Lead	11	=	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.5	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-M-SO	0	0.25	7440-39-3	Barium	240	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.089	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-M-SO	0	0.25	7440-47-3	Chromium	14	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1071-SS-M-SO	0	0.25	7439-92-1	Lead	11	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.6	0.67	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-C-SO	0	0.5	7440-39-3	Barium	250	J	2	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.27	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.6	0.059	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0089	J	0.019	0.0062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1054-SS-M-SO	0	0.25	7439-92-1	Lead	11	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.5	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-M-SO	0	0.25	7440-39-3	Barium	260	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.096	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-M-SO	0	0.25	7440-47-3	Chromium	12	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-M-SO	0	0.25	7439-97-6	Mercury	0.01	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1063-SS-M-SO	0	0.25	7439-92-1	Lead	11	=	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1080-SS-M-SO	0	0.25	7439-92-1	Lead	11	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-M-SO	0	0.25	7440-39-3	Barium	340	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-M-SO	0	0.25	7440-47-3	Chromium	11	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1005-SS-M-SO	0.17	0.5	7439-92-1	Lead	11	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.6	0.68	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-C-SO	0	0.5	7440-39-3	Barium	240	J	2.1	0.078	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.51	0.042	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-C-SO	0	0.5	7440-47-3	Chromium	9.5	=	3.6	0.06	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-C-SO	0	0.5	7439-97-6	Mercury	0.03	=	0.018	0.006	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1008-SS-M-SO	0.17	0.5	7439-92-1	Lead	11	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.9	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-M-SO	0	0.25	7440-39-3	Barium	300	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.068	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-M-SO	0	0.25	7440-47-3	Chromium	6.8	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1097-SS-M-SO	0	0.25	7439-97-6	Mercury	0.0092	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1019-SS-M-SO	0.17	0.5	7439-92-1	Lead	11	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.7	0.72	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-C-SO	0	0.5	7440-39-3	Barium	340	J	2.2	0.082	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.13	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-C-SO	0	0.5	7439-97-6	Mercury	0.01	J	0.018	0.0058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1015-SS-M-SO	0.17	0.5	7439-92-1	Lead	11	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-M-SO	0	0.25	7440-39-3	Barium	220	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.1	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SODUP	0.17	0.5	7439-92-1	Lead	11	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1005-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.6	J	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1005-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1005-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.13	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1005-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1005-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.035	=	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1011-SS-M-SO	0.17	0.5	7439-92-1	Lead	11	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1006-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.6	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1006-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1006-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1006-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.7	J	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1006-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.036	=	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1012-SS-M-SO	0.17	0.5	7439-92-1	Lead	11	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1008-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.3	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1008-SS-M-SO	0.17	0.5	7440-39-3	Barium	130	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1008-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.14	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1008-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.5	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1008-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.037	=	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1524LEC-1.0-1.5D-SO	1	1.5	7439-92-1	Lead	10.8	J	0.162	0.324	1.08	0.971	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628Y-B1009-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.6	J	2.4	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1009-SS-M-SO	0.17	0.5	7440-39-3	Barium	110	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1009-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.09	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628Y-B1009-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8.7	J	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1009-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.027	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SODUP	0	0.25	7439-92-1	Lead	10	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1025-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.9	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1025-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1025-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.11	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1025-SS-M-SO	0.17	0.5	7440-47-3	Chromium	6.5	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1025-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.031	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1070-SS-M-SODUP	0	0.25	7439-92-1	Lead	10	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.9	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SO	0.17	0.5	7440-39-3	Barium	230	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.063	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SO	0.17	0.5	7440-47-3	Chromium	10	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.011	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SO	0.17	0.5	7439-92-1	Lead	10	=	0.85	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SODUP	0.17	0.5	7440-38-2	Arsenic	2.1	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SODUP	0.17	0.5	7440-39-3	Barium	230	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SODUP	0.17	0.5	7440-43-9	Cadmium	0.062	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SODUP	0.17	0.5	7440-47-3	Chromium	10	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SODUP	0.17	0.5	7439-97-6	Mercury	0.011	J	0.03	0.005	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1033-SS-M-SO	0.17	0.5	7439-92-1	Lead	10	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1028-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	2.2	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1028-SS-M-SO	0.17	0.5	7440-39-3	Barium	220	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1028-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.1	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1028-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1028-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1043-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1022-SS-M-SO	0.17	0.5	7439-92-1	Lead	9.9	=	0.85	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1045-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.6	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1045-SS-M-SO	0.17	0.5	7440-39-3	Barium	210	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1045-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.066	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1045-SS-M-SO	0.17	0.5	7440-47-3	Chromium	13	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1045-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.01	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1547LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.86	=	0.137	0.275	0.917	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628Y-B1046-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.5	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1046-SS-M-SO	0.17	0.5	7440-39-3	Barium	220	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1046-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.068	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1046-SS-M-SO	0.17	0.5	7440-47-3	Chromium	12	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1046-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.01	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1021-SS-M-SO	0.17	0.5	7439-92-1	Lead	9.8	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1047-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.5	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1047-SS-M-SO	0.17	0.5	7440-39-3	Barium	200	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1047-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.071	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1047-SS-M-SO	0.17	0.5	7440-47-3	Chromium	13	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1047-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0091	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1059LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.79	=	0.303	0.151	1.01	0.943	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628Y-B1048-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.6	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1048-SS-M-SO	0.17	0.5	7440-39-3	Barium	180	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628Y-B1048-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.063	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1048-SS-M-SO	0.17	0.5	7440-47-3	Chromium	12	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1048-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0081	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1084-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.3	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1084-SS-M-SO	0.17	0.5	7440-39-3	Barium	290	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1084-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.062	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1084-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1084-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0089	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1049-SS-M-SO	0	0.25	7439-92-1	Lead	9.7	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SO	0.17	0.5	7440-39-3	Barium	340	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.081	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8.9	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.01	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1024-SS-M-SO	0.17	0.5	7439-92-1	Lead	9.7	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SODUP	0.17	0.5	7440-38-2	Arsenic	1.3	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SODUP	0.17	0.5	7440-39-3	Barium	330	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SODUP	0.17	0.5	7440-43-9	Cadmium	0.074	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SODUP	0.17	0.5	7440-47-3	Chromium	9.1	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SODUP	0.17	0.5	7439-97-6	Mercury	0.009	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1017-SS-M-SO	0.17	0.5	7439-92-1	Lead	9.7	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1086-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.2	J	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1086-SS-M-SO	0.17	0.5	7440-39-3	Barium	330	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1086-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.086	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1086-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.7	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1086-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0099	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SO	0	0.25	7439-97-6	Mercury	0.012	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1025-SS-M-SO	0.17	0.5	7439-92-1	Lead	9.6	=	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SODUP	0	0.25	7440-38-2	Arsenic	1.4	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SODUP	0	0.25	7440-39-3	Barium	250	=	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SODUP	0	0.25	7440-43-9	Cadmium	0.17	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SODUP	0	0.25	7440-47-3	Chromium	9.5	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SODUP	0	0.25	7439-97-6	Mercury	0.011	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1031LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.55	=	0.31	0.155	1.03	0.971	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628Y-B1002-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.1	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1002-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1002-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.11	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1002-SS-M-SO	0.17	0.5	7440-47-3	Chromium	7.7	J	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1002-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.029	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1032REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.44	=	0.289	0.144	0.963	0.926	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628Y-B1003-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.3	J	2.3	0.61	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1003-SS-M-SO	0.17	0.5	7440-39-3	Barium	78	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1003-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.075	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1003-SS-M-SO	0.17	0.5	7440-47-3	Chromium	5.1	J	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1003-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.02	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1002-SS-M-SO	0.17	0.5	7439-92-1	Lead	9.2	J	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628Y-B1004-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.1	J	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1004-SS-M-SO	0.17	0.5	7440-39-3	Barium	140	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1004-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.085	J	0.47	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1004-SS-M-SO	0.17	0.5	7440-47-3	Chromium	5.8	J	3.3	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1004-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.032	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1092-SS-C-SO	0	0.5	7439-92-1	Lead	9.1	=	0.96	0.29	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1019-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.6	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1019-SS-M-SO	0.17	0.5	7440-39-3	Barium	140	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1019-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1019-SS-M-SO	0.17	0.5	7440-47-3	Chromium	10	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1019-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.024	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1023-SS-M-SO	0.17	0.5	7439-92-1	Lead	9	J	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1021-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.5	=	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1021-SS-M-SO	0.17	0.5	7440-39-3	Barium	110	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1021-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1021-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8.1	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1021-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.027	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1036-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.9	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1022-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.2	=	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1022-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1022-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1022-SS-M-SO	0.17	0.5	7440-47-3	Chromium	6.8	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1022-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.025	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1029-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.9	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1023-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1023-SS-M-SO	0.17	0.5	7440-39-3	Barium	110	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1023-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.13	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1023-SS-M-SO	0.17	0.5	7440-47-3	Chromium	6.9	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1023-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.024	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1009-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.8	J	0.85	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1024-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.3	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1024-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1024-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.11	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1024-SS-M-SO	0.17	0.5	7440-47-3	Chromium	7.1	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1024-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.023	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1030-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.7	=	0.85	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SODUP	0.17	0.5	7440-38-2	Arsenic	1.9	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SODUP	0.17	0.5	7440-39-3	Barium	270	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SODUP	0.17	0.5	7440-43-9	Cadmium	0.073	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SODUP	0.17	0.5	7440-47-3	Chromium	15	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SODUP	0.17	0.5	7439-97-6	Mercury	0.012	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1077-SS-C-SO	0	0.5	7439-92-1	Lead	8.5	J	0.92	0.28	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1040-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	2	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1040-SS-M-SO	0.17	0.5	7440-39-3	Barium	250	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1040-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.064	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1040-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1040-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0088	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1093-SS-M-SO	0	0.25	7439-92-1	Lead	8.5	J	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1041-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.8	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1041-SS-M-SO	0.17	0.5	7440-39-3	Barium	230	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1041-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.071	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1041-SS-M-SO	0.17	0.5	7440-47-3	Chromium	13	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628Y-B1041-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1032-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.5	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1042-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	2.1	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1042-SS-M-SO	0.17	0.5	7440-39-3	Barium	220	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1042-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.07	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1042-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1042-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1067-SS-M-SO	0	0.25	7439-92-1	Lead	8.4	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1043-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	2.2	J	2.3	0.61	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1043-SS-M-SO	0.17	0.5	7440-39-3	Barium	230	J	1.8	0.07	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1043-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.056	J	0.46	0.038	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1043-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	=	3.2	0.054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1043-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.2	=	0.83	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1068-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1068-SS-M-SO	0.17	0.5	7440-39-3	Barium	300	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1068-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.051	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1068-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	J	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1068-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.01	J	0.031	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1068-SS-M-SO	0	0.25	7439-92-1	Lead	8.1	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1072-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1072-SS-M-SO	0.17	0.5	7440-39-3	Barium	240	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1072-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.067	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1072-SS-M-SO	0.17	0.5	7440-47-3	Chromium	10	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1072-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0073	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1028-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.1	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1074-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1074-SS-M-SO	0.17	0.5	7440-39-3	Barium	280	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1074-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.092	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1074-SS-M-SO	0.17	0.5	7440-47-3	Chromium	10	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1074-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.011	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1045-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.1	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1083-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	0.97	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1083-SS-M-SO	0.17	0.5	7440-39-3	Barium	260	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1083-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.054	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1083-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.7	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1083-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0077	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1035-SS-M-SO	0.17	0.5	7439-92-1	Lead	8.1	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-M-SO	0	0.25	7440-47-3	Chromium	9.7	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1098-SS-M-SO	0	0.25	7439-97-6	Mercury	0.011	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1001-SS-M-SO	0	0.25	7439-92-1	Lead	8	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.9	=	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-C-SO	0	0.5	7440-39-3	Barium	160	J	2.1	0.081	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.8	0.062	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-C-SO	0	0.5	7439-97-6	Mercury	0.017	J	0.019	0.0063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SODUP	0.17	0.5	7439-92-1	Lead	8	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.8	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-M-SO	0	0.25	7440-39-3	Barium	200	=	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.087	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-M-SO	0	0.25	7440-47-3	Chromium	8.7	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1099-SS-M-SO	0	0.25	7439-97-6	Mercury	0.013	J	0.031	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1041-SS-M-SO	0.17	0.5	7439-92-1	Lead	8	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628B-1100-SS-C-SO	0	0.5	7440-22-4	Silver	0.31	J	1.6	0.17	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-C-SO	0	0.5	7440-38-2	Arsenic	8.7	=	2.7	0.71	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-C-SO	0	0.5	7440-39-3	Barium	440	J	2.2	0.082	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.37	J	0.54	0.044	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.8	0.063	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1014-SS-M-SO	0.17	0.5	7439-92-1	Lead	8	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SO	0	0.25	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SO	0	0.25	7440-39-3	Barium	260	=	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SO	0	0.25	7440-43-9	Cadmium	0.17	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1100-SS-M-SO	0	0.25	7440-47-3	Chromium	13	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1086-SS-M-SO	0	0.25	7439-92-1	Lead	7.9	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1015-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.2	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1015-SS-M-SO	0.17	0.5	7440-39-3	Barium	110	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1015-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1015-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8.6	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1015-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.034	=	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1015-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.9	J	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1017-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1017-SS-M-SO	0.17	0.5	7440-39-3	Barium	170	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1017-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.11	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1017-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.9	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1017-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.023	J	0.03	0.005	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1042-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.9	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.8	=	2.4	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SO	0.17	0.5	7440-39-3	Barium	130	J	1.9	0.072	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.11	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.7	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.026	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1076-SS-M-SO	0	0.25	7439-92-1	Lead	7.8	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SODUP	0.17	0.5	7440-38-2	Arsenic	3.9	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SODUP	0.17	0.5	7440-39-3	Barium	150	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SODUP	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SODUP	0.17	0.5	7440-47-3	Chromium	10	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1018-SS-M-SODUP	0.17	0.5	7439-97-6	Mercury	0.027	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1034-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.018	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1090-SS-M-SO	0	0.25	7439-92-1	Lead	7.8	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1035-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	5	J	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1035-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1035-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.18	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1035-SS-M-SO	0.17	0.5	7440-47-3	Chromium	6.8	J	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1035-SS-M-SO	0.17	0.5	7782-49-2	Selenium	0.88	J	3	0.85	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1035-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.02	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1060-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.8	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1036-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.9	=	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1036-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1036-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1036-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1036-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.022	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1012-SS-M-SO	0	0.25	7439-92-1	Lead	7.7	=	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1038-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.7	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1038-SS-M-SO	0.17	0.5	7440-39-3	Barium	260	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1038-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.069	J	0.48	0.039	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628Y-B1038-SS-M-SO	0.17	0.5	7440-47-3	Chromium	14	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1038-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.011	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1072-SS-M-SO	0	0.25	7439-92-1	Lead	7.6	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.7	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SO	0.17	0.5	7440-39-3	Barium	270	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.079	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SO	0.17	0.5	7440-47-3	Chromium	13	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1059-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.062	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1059-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1059-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1040-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.6	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1060-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.2	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1060-SS-M-SO	0.17	0.5	7440-39-3	Barium	240	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1060-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.042	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1060-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1060-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1059-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.6	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1061-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1	J	2.4	0.63	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1061-SS-M-SO	0.17	0.5	7440-39-3	Barium	240	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1061-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8.8	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1061-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.008	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1540LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	7.53	=	0.142	0.284	0.948	0.926	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628Y-B1066-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.1	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1066-SS-M-SO	0.17	0.5	7440-39-3	Barium	250	=	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1066-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1066-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0087	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1088-SS-M-SO	0	0.25	7439-92-1	Lead	7.5	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1067-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.1	J	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1067-SS-M-SO	0.17	0.5	7440-39-3	Barium	250	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1067-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.072	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1067-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1067-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SODUP	0.17	0.5	7439-92-1	Lead	7.5	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1011-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.2	J	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1011-SS-M-SO	0.17	0.5	7440-39-3	Barium	120	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1011-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1011-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8.6	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1011-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.035	=	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1094-SS-M-SO	0	0.25	7439-92-1	Lead	7.4	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1012-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1012-SS-M-SO	0.17	0.5	7440-39-3	Barium	150	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1012-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.15	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1012-SS-M-SO	0.17	0.5	7440-47-3	Chromium	7.5	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1012-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.029	J	0.03	0.005	-	1	Final RCRA Facility Investigation Parcel 6
6	1641K-1540LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	7.37	=	0.132	0.264	0.88	0.862	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
6	0628Y-B1013-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3	=	2.5	0.66	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SO	0.17	0.5	7440-39-3	Barium	180	J	2	0.076	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.15	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SO	0.17	0.5	7440-47-3	Chromium	7.9	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628Y-B1013-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.019	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1064-SS-M-SO	0	0.25	7439-92-1	Lead	7.3	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SODUP	0.17	0.5	7440-38-2	Arsenic	3.5	=	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SODUP	0.17	0.5	7440-39-3	Barium	90	J	1.9	0.073	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SODUP	0.17	0.5	7440-43-9	Cadmium	0.094	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SODUP	0.17	0.5	7440-47-3	Chromium	5.5	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1013-SS-M-SODUP	0.17	0.5	7439-97-6	Mercury	0.019	J	0.033	0.0055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1084-SS-M-SO	0	0.25	7439-92-1	Lead	7.2	J	0.85	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1014-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.4	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1014-SS-M-SO	0.17	0.5	7440-39-3	Barium	92	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1014-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.092	J	0.49	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1014-SS-M-SO	0.17	0.5	7440-47-3	Chromium	5.7	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1014-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.024	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1096-SS-M-SO	0	0.25	7439-92-1	Lead	7.2	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1029-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	2.1	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1029-SS-M-SO	0.17	0.5	7440-39-3	Barium	220	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1029-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.096	J	0.48	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1029-SS-M-SO	0.17	0.5	7440-47-3	Chromium	10	=	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1029-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.013	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SODUP	0.17	0.5	7439-92-1	Lead	7.2	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1030-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.2	=	2.3	0.62	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1030-SS-M-SO	0.17	0.5	7440-39-3	Barium	150	J	1.9	0.071	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1030-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.1	J	0.47	0.039	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1030-SS-M-SO	0.17	0.5	7440-47-3	Chromium	10	=	3.3	0.055	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1030-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.019	J	0.032	0.0053	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1038-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.2	=	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1032-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.3	=	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1032-SS-M-SO	0.17	0.5	7440-39-3	Barium	140	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1032-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.11	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1032-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.9	=	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1032-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.019	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1089-SS-M-SO	0	0.25	7439-92-1	Lead	7.1	J	0.88	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1033-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	4.3	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1033-SS-M-SO	0.17	0.5	7440-39-3	Barium	130	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1033-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.12	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1033-SS-M-SO	0.17	0.5	7440-47-3	Chromium	8.4	=	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1033-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.029	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1027-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.1	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1034-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	3.1	=	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1034-SS-M-SO	0.17	0.5	7440-39-3	Barium	85	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1034-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.085	J	0.5	0.041	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1034-SS-M-SO	0.17	0.5	7440-47-3	Chromium	5.7	=	3.5	0.058	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1039-SS-M-SO	0.17	0.5	7439-92-1	Lead	7.1	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1051-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.4	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1051-SS-M-SO	0.17	0.5	7440-39-3	Barium	300	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1051-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.067	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1051-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1051-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.011	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1083-SS-M-SO	0	0.25	7439-92-1	Lead	7	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1052-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1	J	2.4	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1052-SS-M-SO	0.17	0.5	7440-39-3	Barium	230	J	2	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1052-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.058	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
6	0628Y-B1052-SS-M-SO	0.17	0.5	7440-47-3	Chromium	9.1	J	3.4	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1052-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.0089	J	0.031	0.0052	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1047-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.9	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1055-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1	J	2.4	0.64	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1055-SS-M-SO	0.17	0.5	7440-39-3	Barium	240	J	1.9	0.074	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1055-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.068	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1055-SS-M-SO	0.17	0.5	7440-47-3	Chromium	10	J	3.4	0.056	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1055-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.012	J	0.032	0.0054	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1048-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.9	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1058-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	0.95	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1058-SS-M-SO	0.17	0.5	7440-39-3	Barium	260	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1058-SS-M-SO	0.17	0.5	7440-43-9	Cadmium	0.081	J	0.49	0.04	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1058-SS-M-SO	0.17	0.5	7440-47-3	Chromium	11	J	3.5	0.057	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1058-SS-M-SO	0.17	0.5	7439-97-6	Mercury	0.011	J	0.03	0.0051	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1067-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.8	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1059-SS-M-SO	0.17	0.5	7440-38-2	Arsenic	1.2	J	2.5	0.65	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1059-SS-M-SO	0.17	0.5	7440-39-3	Barium	250	J	2	0.075	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1058LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	6.78	=	0.292	0.146	0.973	0.926	Final Permittee-Initiated Interim Measures Report Parcel 6 Area of Concern 28 SWMU 8 Former Building 537 SWMU 20 Feaura 4 (Areas A and B) and Locomotive
6	0628Y-B1068-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.7	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1034-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.6	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1046-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.5	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1085-SS-M-SO	0	0.25	7439-92-1	Lead	6.4	J	0.86	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1051-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.4	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1061-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.3	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1066-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.3	=	0.87	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1003-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.2	J	0.84	0.25	-	1	Final RCRA Facility Investigation Parcel 6
6	0628B-1075-SS-M-SO	0	0.25	7439-92-1	Lead	6.1	J	0.85	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1058-SS-M-SO	0.17	0.5	7439-92-1	Lead	6.1	=	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1074-SS-M-SO	0.17	0.5	7439-92-1	Lead	5.6	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1084-SS-M-SO	0.17	0.5	7439-92-1	Lead	5.5	J	0.9	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1072-SS-M-SO	0.17	0.5	7439-92-1	Lead	5.2	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SO	0.17	0.5	7439-92-1	Lead	5.1	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1055-SS-M-SO	0.17	0.5	7439-92-1	Lead	5.1	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1085-SS-M-SODUP	0.17	0.5	7439-92-1	Lead	5	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1086-SS-M-SO	0.17	0.5	7439-92-1	Lead	5	J	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1083-SS-M-SO	0.17	0.5	7439-92-1	Lead	4.9	J	0.89	0.27	-	1	Final RCRA Facility Investigation Parcel 6
6	0628Y-B1052-SS-M-SO	0.17	0.5	7439-92-1	Lead	4.9	=	0.88	0.26	-	1	Final RCRA Facility Investigation Parcel 6
9	0918A-979SS-C-SO	0	0.5	7439-92-1	Lead	2650	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-981SS-C-SO	0	0.5	7439-92-1	Lead	1110	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-999SS-C-SO	0	0.5	7439-92-1	Lead	1110	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-1000SS-C-SO	0	0.5	7439-92-1	Lead	1070	J	4.8	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-994SS-C-SO	0	0.5	7439-92-1	Lead	860	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-998SS-C-SO	0	0.5	7439-92-1	Lead	703	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
9	0918A-989SS-C-SO	0	0.5	7439-92-1	Lead	645	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-980SS-C-SO	0	0.5	7439-92-1	Lead	577	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-993SS-C-SO	0	0.5	7439-92-1	Lead	536	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-992SS-C-SO	0	0.5	7439-92-1	Lead	476	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-988SS-C-SO	0	0.5	7439-92-1	Lead	440	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-986SS-C-SO	0	0.5	7439-92-1	Lead	429	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-983SS-C-SO	0	0.5	7439-92-1	Lead	427	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-996SS-C-SO	0	0.5	7439-92-1	Lead	413	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-987SS-C-SO	0	0.5	7439-92-1	Lead	322	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-985SS-C-SO	0	0.5	7439-92-1	Lead	321	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-991SS-C-SO	0	0.5	7439-92-1	Lead	307	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-984SS-C-SO	0	0.5	7439-92-1	Lead	300	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-990SS-C-SO	0	0.5	7439-92-1	Lead	242	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-978SS-C-SO	0	0.5	7439-92-1	Lead	165	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-997SS-C-SO	0	0.5	7439-92-1	Lead	148	=	0.98	0.21	-	1	Final Investigation Report Igloo Block A Parcel 9
9	0918A-799SS-C-SO	0	0.5	7439-92-1	Lead	139	=	0.98	0.21	-	1	Final Investigation Report Igloo Block A Parcel 9
9	0918A-995SS-C-SO	0	0.5	7439-92-1	Lead	119	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-982SS-C-SO	0	0.5	7439-92-1	Lead	72.6	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-1000SS-M-SO	0	0.5	7439-92-1	Lead	68.3	=	1	0.22	-	1	Final Investigation Report Igloo Block A Parcel 9
9	0918A-978SS-M-SO	0	0.5	7439-92-1	Lead	26.9	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-992SS-M-SO	0	0.5	7439-92-1	Lead	22.2	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-986SS-M-SO	0	0.5	7439-92-1	Lead	21.7	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-990SS-M-SO	0	0.5	7439-92-1	Lead	21.1	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-991SS-M-SO	0	0.5	7439-92-1	Lead	20.4	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-995SS-M-SO	0	0.5	7439-92-1	Lead	19.5	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-993SS-M-SO	0	0.5	7439-92-1	Lead	19.1	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
9	0918A-996SS-M-SO	0	0.5	7439-92-1	Lead	18.6	=	0.98	0.21	-	1	Final Investigation Report Igloo Block A Parcel 9
9	0918A-985SS-M-SO	0	0.5	7439-92-1	Lead	18	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-982SS-M-SO	0	0.5	7439-92-1	Lead	17.2	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-980SS-M-SO	0	0.5	7439-92-1	Lead	17.2	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-987SS-M-SO	0	0.5	7439-92-1	Lead	17.2	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-994SS-M-SO	0	0.5	7439-92-1	Lead	16.9	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-983SS-M-SO	0	0.5	7439-92-1	Lead	16.8	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A589SS-M-SO	0	0.5	7439-92-1	Lead	16.5	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-984SS-M-SO	0	0.5	7439-92-1	Lead	16.4	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A979SS-M-SO	0	0.5	7439-92-1	Lead	16	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-989SS-M-SO	0	0.5	7439-92-1	Lead	15.4	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-979SS-M-SO	0	0.5	7439-92-1	Lead	15.3	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A985SS-M-SO	0	0.5	7439-92-1	Lead	15.1	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-981SS-M-SO	0	0.5	7439-92-1	Lead	14.7	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-997SS-M-SO	0	0.5	7439-92-1	Lead	14.5	=	0.99	0.21	-	1	Final Investigation Report Igloo Block A Parcel 9
9	0918A-999SS-M-SO	0	0.5	7439-92-1	Lead	13.7	=	0.99	0.21	-	1	Final Investigation Report Igloo Block A Parcel 9
9	0918A-998SS-M-SO	0	0.5	7439-92-1	Lead	12.9	=	0.98	0.21	-	1	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A978SS-M-SO	0	0.5	7439-92-1	Lead	12.7	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A990SS-M-SO	0	0.5	7439-92-1	Lead	12.6	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A982SS-M-SO	0	0.5	7439-92-1	Lead	12.5	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918A-988SS-M-SO	0	0.5	7439-92-1	Lead	11.9	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A983SS-M-SO	0	0.5	7439-92-1	Lead	11.6	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A992SS-M-SO	0	0.5	7439-92-1	Lead	10.5	J	5	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A987SS-M-SO	0	0.5	7439-92-1	Lead	10.4	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A993SS-M-SO	0	0.5	7439-92-1	Lead	9.9	J	4.9	1	-	5	Final Investigation Report Igloo Block A Parcel 9
9	0918Y-A998SS-M-SO	0	0.5	7439-92-1	Lead	9.9	=	0.99	0.21	-	1	Final Investigation Report Igloo Block A Parcel 9

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1525R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.018	=	-	0.006	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545L-SS-D-SO	0	0.25	7439-92-1	Lead	4200	J	-	1.5	5.1	5	RCRA Facility Investigation Report Revision 1
16	1641-K1526-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.5	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526-SS-M-SO	0	0.5	7440-39-3	Barium	260	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.16	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526-SS-M-SO	0	0.5	7439-97-6	Mercury	0.011	J	-	0.0049	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO	0	0.25	7439-92-1	Lead	960	J	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.9	J	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526L-SS-D-SO	0	0.25	7440-39-3	Barium	250	=	-	0.07	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.21	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526L-SS-D-SO	0	0.25	7440-47-3	Chromium	11	J	-	0.054	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.014	J	-	0.0064	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528R-SS-D-SO	0	0.25	7439-92-1	Lead	960	J	-	0.28	0.93	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526R-SS-D-SO	0	0.25	7440-22-4	Silver	0.14	J	-	0.14	1.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.59	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.068	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526R-SS-D-SO	0	0.25	7440-43-9	Cadmium	1.1	=	-	0.037	0.45	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526R-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.052	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.019	J	-	0.0069	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	830	J	-	0.24	0.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.5	J	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527-SS-M-SO	0	0.5	7440-39-3	Barium	280	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.19	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527-SS-M-SO	0	0.5	7439-97-6	Mercury	0.011	J	-	0.0055	0.017	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527R-SS-D-SO	0	0.25	7439-92-1	Lead	810	J	-	0.25	0.82	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.8	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531-SS-M-SO	0	0.5	7440-39-3	Barium	310	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.17	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531-SS-M-SO	0	0.5	7439-97-6	Mercury	0.011	J	-	0.0045	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533L-SS-D-SO	0	0.25	7439-92-1	Lead	780	J	-	0.28	0.95	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531L-SS-D-SO	0	0.25	7440-39-3	Barium	262	=	-	0.0098	0.054	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.082	=	-	0.0065	0.044	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531L-SS-D-SO	0	0.25	7440-47-3	Chromium	7.5	=	-	0.025	0.15	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0037	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525L-SS-D-SO	0	0.25	7439-92-1	Lead	640	J	-	0.27	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.5	=	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO	0	0.25	7440-39-3	Barium	220	J	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.62	=	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO	0	0.25	7440-47-3	Chromium	10	J	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.0072	0.022	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546L-SS-D-SO	0	0.25	7439-92-1	Lead	540	=	-	0.29	0.97	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	1.1	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	110	J	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.23	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	5.4	J	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524L-SS-D-SO	0	0.25	7439-92-1	Lead	530	J	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.5	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536-SS-M-SO	0	0.5	7440-39-3	Barium	380	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.15	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1536-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0072	J	-	0.0047	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO	0	0.25	7439-92-1	Lead	530	J	-	0.28	0.92	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.2	J	-	0.67	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536L-SS-D-SO	0	0.25	7440-39-3	Barium	410	=	-	0.078	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.23	J	-	0.042	0.51	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536L-SS-D-SO	0	0.25	7440-47-3	Chromium	22	J	-	0.059	3.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.016	J	-	0.0068	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529L-SS-D-SO	0	0.25	7439-92-1	Lead	530	J	-	0.28	0.94	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.6	J	-	0.7	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536R-SS-D-SO	0	0.25	7440-39-3	Barium	490	=	-	0.08	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.043	0.53	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536R-SS-D-SO	0	0.25	7440-47-3	Chromium	22	J	-	0.061	3.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0066	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543R-SS-D-SO	0	0.25	7439-92-1	Lead	510	J	-	0.28	0.94	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.6	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537-SS-M-SO	0	0.5	7440-39-3	Barium	280	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.15	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537-SS-M-SO	0	0.5	7440-47-3	Chromium	12	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0085	J	-	0.0043	0.013	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540R-SS-D-SO	0	0.25	7440-39-3	Barium	320	=	-	0.07	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.37	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540R-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540R-SS-D-SO	0	0.25	7782-49-2	Selenium	0.98	J	-	0.79	2.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.023	=	-	0.0063	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO	0	0.25	7439-92-1	Lead	490	J	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.6	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541-SS-M-SO	0	0.5	7440-39-3	Barium	290	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.19	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541-SS-M-SO	0	0.5	7440-47-3	Chromium	15	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541-SS-M-SO	0	0.5	7439-97-6	Mercury	0.011	J	-	0.0043	0.013	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547L-SS-D-SO	0	0.25	7439-92-1	Lead	490	=	-	0.25	0.84	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541L-SS-D-SO	0	0.25	7440-39-3	Barium	330	J	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.4	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541L-SS-D-SO	0	0.25	7440-47-3	Chromium	15	J	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0068	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541L-SS-D-SO	0	0.25	7439-92-1	Lead	480	J	-	0.26	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.59	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541R-SS-D-SO	0	0.25	7440-39-3	Barium	380	=	-	0.068	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.41	J	-	0.037	0.45	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.052	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0098	J	-	0.0064	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO	0	0.25	7439-92-1	Lead	470	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.9	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542-SS-M-SO	0	0.5	7440-39-3	Barium	300	=	-	0.074	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.2	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542-SS-M-SO	0	0.5	7440-47-3	Chromium	12	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549R-SS-D-SO	0	0.25	7439-92-1	Lead	450	J	-	0.24	0.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.71	2.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545R-SS-D-SO	0	0.25	7440-39-3	Barium	370	=	-	0.082	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.044	0.54	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1545R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.062	3.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545R-SS-D-SO	0	0.25	7782-49-2	Selenium	1.1	J	-	0.93	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641K-1524LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	432	=	0.147	0.294	0.979	0.943	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1546-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.7	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546-SS-M-SO	0	0.5	7440-39-3	Barium	310	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.21	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0088	J	-	0.0053	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544R-SS-D-SO	0	0.25	7439-92-1	Lead	350	J	-	0.28	0.95	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.6	J	-	0.71	2.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546L-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.082	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.46	J	-	0.044	0.54	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546L-SS-D-SO	0	0.25	7440-47-3	Chromium	14	=	-	0.063	3.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546L-SS-D-SO	0	0.25	7782-49-2	Selenium	1.1	J	-	0.93	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.007	0.022	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	350	J	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.6	J	-	0.62	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546R-SS-D-SO	0	0.25	7440-39-3	Barium	470	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	J	-	0.68	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO	0	0.25	7440-39-3	Barium	320	=	-	0.078	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.41	J	-	0.042	0.51	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.06	3.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0064	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543L-SS-D-SO	0	0.25	7439-92-1	Lead	340	J	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2.1	J	-	0.6	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	320	J	-	0.069	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.36	J	-	0.037	0.45	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	12	J	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7782-49-2	Selenium	0.97	J	-	0.78	2.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0065	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	330	J	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.1	J	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525-SS-M-SO	0	0.5	7440-39-3	Barium	340	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.16	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0099	J	-	0.005	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538R-SS-D-SO	0	0.25	7439-92-1	Lead	280	J	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.1	=	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525L-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.4	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525L-SS-D-SO	0	0.25	7440-47-3	Chromium	15	J	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.0069	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526R-SS-D-SO	0	0.25	7439-92-1	Lead	260	J	-	0.24	0.81	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.6	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.069	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.037	0.45	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525R-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539R-SS-D-SO	0	0.25	7439-92-1	Lead	260	J	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1529R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529R-SS-D-SO	0	0.25	7440-47-3	Chromium	29	J	-	0.057	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.019	J	-	0.0068	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549L-SS-D-SO	0	0.25	7439-92-1	Lead	260	J	-	0.29	0.96	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.9	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530-SS-M-SO	0	0.5	7440-39-3	Barium	300	=	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.13	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530-SS-M-SO	0	0.5	7440-47-3	Chromium	10	=	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530-SS-M-SO	0	0.5	7439-97-6	Mercury	0.007	J	-	0.0049	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534L-SS-D-SO	0	0.25	7439-92-1	Lead	250	J	-	0.27	0.91	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.5	J	-	0.62	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530L-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.24	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530L-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.014	J	-	0.0063	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641K-1545LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	242	=	0.139	0.278	0.927	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1530R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.5	J	-	0.58	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530R-SS-D-SO	0	0.25	7440-39-3	Barium	260	=	-	0.067	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.24	J	-	0.036	0.44	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530R-SS-D-SO	0	0.25	7440-47-3	Chromium	19	J	-	0.051	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.006	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	240	=	-	0.3	0.99	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2	J	-	0.55	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	350	=	-	0.064	1.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	3.8	=	-	0.034	0.42	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	10	J	-	0.049	2.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0075	J	-	0.0063	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO	0	0.25	7439-92-1	Lead	230	J	-	0.24	0.81	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.7	J	-	0.62	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535-SS-M-SO	0	0.5	7440-39-3	Barium	300	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.17	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535-SS-M-SO	0	0.5	7440-47-3	Chromium	12	=	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0097	J	-	0.0052	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529R-SS-D-SO	0	0.25	7439-92-1	Lead	210	J	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.9	=	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535L-SS-D-SO	0	0.25	7440-39-3	Barium	380	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.26	J	-	0.041	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535L-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.057	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.018	J	-	0.0062	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	210	J	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.6	=	-	0.65	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535R-SS-D-SO	0	0.25	7440-39-3	Barium	500	=	-	0.074	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.42	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535R-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.02	=	-	0.006	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532R-SS-D-SO	0	0.25	7439-92-1	Lead	210	J	-	0.27	0.91	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.57	=	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539R-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1539R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.023	=	-	0.0066	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538L-SS-D-SO	0	0.25	7439-92-1	Lead	200	J	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.8	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540-SS-M-SO	0	0.5	7440-39-3	Barium	310	J	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.19	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540-SS-M-SO	0	0.5	7440-47-3	Chromium	14	J	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0071	J	-	0.0044	0.013	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550R-SS-D-SO	0	0.25	7439-92-1	Lead	200	J	-	0.28	0.92	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.7	=	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.58	=	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.018	=	-	0.006	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535R-SS-D-SO	0	0.25	7439-92-1	Lead	190	J	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2.2	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	310	=	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.34	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	13	J	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0069	J	-	0.0065	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542R-SS-D-SO	0	0.25	7439-92-1	Lead	190	J	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.5	=	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	180	J	-	0.25	0.82	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2	J	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	370	=	-	0.07	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.31	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	14	J	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0057	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535L-SS-D-SO	0	0.25	7439-92-1	Lead	180	J	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.8	J	-	0.7	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544R-SS-D-SO	0	0.25	7440-39-3	Barium	400	=	-	0.08	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.37	J	-	0.043	0.53	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544R-SS-D-SO	0	0.25	7440-47-3	Chromium	22	J	-	0.061	3.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.01	J	-	0.0063	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO	0	0.25	7439-92-1	Lead	180	J	-	0.24	0.79	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545-SS-M-SO	0	0.5	7440-38-2	Arsenic	2	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545-SS-M-SO	0	0.5	7440-39-3	Barium	420	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.21	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545-SS-M-SO	0	0.5	7439-97-6	Mercury	0.01	J	-	0.0045	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548L-SS-D-SO	0	0.25	7439-92-1	Lead	180	J	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545L-SS-D-SO	0	0.25	7440-39-3	Barium	550	J	-	0.43	11	5	RCRA Facility Investigation Report Revision 1
16	1641-K1545L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.046	0.57	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545L-SS-D-SO	0	0.25	7440-47-3	Chromium	900	J	-	0.066	4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0078	J	-	0.0076	0.023	1	RCRA Facility Investigation Report Revision 1
16	1641-K1545R-SS-D-SO	0	0.25	7439-92-1	Lead	170	J	-	0.29	0.97	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.5	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524-SS-M-SO	0	0.5	7440-39-3	Barium	280	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.15	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0083	J	-	0.005	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	170	J	-	0.23	0.76	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1524L-SS-D-SO	0	0.25	7440-39-3	Barium	300	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524L-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0068	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539L-SS-D-SO	0	0.25	7439-92-1	Lead	170	J	-	0.25	0.84	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO	0	0.25	7439-92-1	Lead	170	J	-	0.28	0.92	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.2	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528L-SS-D-SO	0	0.25	7440-39-3	Barium	350	J	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.31	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0068	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541R-SS-D-SO	0	0.25	7439-92-1	Lead	160	J	-	0.24	0.81	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.68	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528R-SS-D-SO	0	0.25	7440-39-3	Barium	370	=	-	0.079	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.53	=	-	0.043	0.52	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528R-SS-D-SO	0	0.25	7440-47-3	Chromium	10	J	-	0.06	3.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.022	=	-	0.0063	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525R-SS-D-SO	0	0.25	7439-92-1	Lead	160	J	-	0.25	0.82	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.8	J	-	0.62	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529-SS-M-SO	0	0.5	7440-39-3	Barium	330	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.16	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0081	J	-	0.0048	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1546R-SS-D-SO	0	0.25	7439-92-1	Lead	150	=	-	0.25	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.8	J	-	0.69	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529L-SS-D-SO	0	0.25	7440-39-3	Barium	300	=	-	0.079	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.4	J	-	0.043	0.52	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529L-SS-D-SO	0	0.25	7440-47-3	Chromium	19	J	-	0.06	3.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.014	J	-	0.0064	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.44	J	-	0.043	0.53	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533L-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.061	3.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.019	J	-	0.0064	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641K-1525LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	131	=	0.145	0.29	0.968	0.926	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1533R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	=	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533R-SS-D-SO	0	0.25	7440-39-3	Barium	290	=	-	0.07	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.28	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533R-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.0059	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641K-1525LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	131	=	0.134	0.267	0.891	0.862	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1534-SS-M-SO	0	0.5	7440-38-2	Arsenic	2	J	-	0.65	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534-SS-M-SO	0	0.5	7440-39-3	Barium	350	=	-	0.074	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.18	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534-SS-M-SO	0	0.5	7439-97-6	Mercury	0.011	J	-	0.0051	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530L-SS-D-SO	0	0.25	7439-92-1	Lead	130	J	-	0.25	0.84	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.6	J	-	0.67	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534L-SS-D-SO	0	0.25	7440-39-3	Barium	290	=	-	0.077	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.36	J	-	0.041	0.51	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534L-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.059	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.007	0.021	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1550L-SS-D-SO	0	0.25	7439-92-1	Lead	130	J	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.5	=	-	0.58	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO	0	0.25	7440-39-3	Barium	460	=	-	0.067	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO	0	0.25	7440-43-9	Cadmium	4.8	=	-	0.036	0.44	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO	0	0.25	7440-47-3	Chromium	11	J	-	0.051	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.016	J	-	0.006	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540R-SS-D-SO	0	0.25	7439-92-1	Lead	120	J	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.5	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538L-SS-D-SO	0	0.25	7440-39-3	Barium	310	J	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.33	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538L-SS-D-SO	0	0.25	7440-47-3	Chromium	21	J	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.0071	0.022	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533R-SS-D-SO	0	0.25	7439-92-1	Lead	120	J	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.07	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.35	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538R-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538R-SS-D-SO	0	0.25	7782-49-2	Selenium	0.8	J	-	0.79	2.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.037	=	-	0.007	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536R-SS-D-SO	0	0.25	7439-92-1	Lead	110	J	-	0.28	0.95	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.1	J	-	0.62	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539-SS-M-SO	0	0.5	7440-39-3	Barium	340	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.2	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539-SS-M-SO	0	0.5	7440-47-3	Chromium	17	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539-SS-M-SO	0	0.5	7439-97-6	Mercury	0.01	J	-	0.005	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532L-SS-D-SO	0	0.25	7439-92-1	Lead	110	J	-	0.28	0.93	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539L-SS-D-SO	0	0.25	7440-39-3	Barium	350	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539L-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0061	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641K-1543REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	104	=	0.143	0.285	0.951	0.926	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1543L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.1	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543L-SS-D-SO	0	0.25	7440-39-3	Barium	480	J	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543L-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0098	J	-	0.0061	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548R-SS-D-SO	0	0.25	7439-92-1	Lead	100	J	-	0.28	0.95	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543R-SS-D-SO	0	0.25	7440-38-2	Arsenic	6.1	=	-	0.69	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543R-SS-D-SO	0	0.25	7440-39-3	Barium	400	=	-	0.079	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.5	J	-	0.043	0.52	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543R-SS-D-SO	0	0.25	7440-47-3	Chromium	30	J	-	0.061	3.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543R-SS-D-SO	0	0.25	7782-49-2	Selenium	1.1	J	-	0.9	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	87	J	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.2	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544-SS-M-SO	0	0.5	7440-39-3	Barium	360	=	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.18	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544-SS-M-SO	0	0.5	7440-47-3	Chromium	15	=	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544-SS-M-SO	0	0.5	7439-97-6	Mercury	0.011	J	-	0.0054	0.017	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528L-SS-D-SO	0	0.25	7439-92-1	Lead	74	J	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.69	2.6	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1544L-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.079	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.26	J	-	0.043	0.52	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO	0	0.25	7440-47-3	Chromium	18	J	-	0.06	3.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0062	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1544L-SS-D-SO	0	0.25	7439-92-1	Lead	73	J	-	0.28	0.93	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.4	=	-	0.67	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO	0	0.25	7440-39-3	Barium	260	=	-	0.078	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.54	=	-	0.042	0.51	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.059	3.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0061	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530R-SS-D-SO	0	0.25	7439-92-1	Lead	66	J	-	0.24	0.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.59	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	270	=	-	0.068	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.54	=	-	0.037	0.45	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	15	J	-	0.052	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0095	J	-	0.0057	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531L-SS-D-SO	0	0.25	7439-92-1	Lead	59.1	=	-	0.044	0.27	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527R-SS-D-SO	0	0.25	7440-38-2	Arsenic	4	=	-	0.6	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.069	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.64	=	-	0.037	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527R-SS-D-SO	0	0.25	7440-47-3	Chromium	15	J	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.016	J	-	0.006	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526L-SS-D-SO	0	0.25	7439-92-1	Lead	58	J	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528-SS-M-SO	0	0.5	7440-38-2	Arsenic	2	J	-	0.62	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528-SS-M-SO	0	0.5	7440-39-3	Barium	340	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.18	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528-SS-M-SO	0	0.5	7440-47-3	Chromium	12	=	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528-SS-M-SO	0	0.5	7439-97-6	Mercury	0.01	J	-	0.0055	0.017	1	RCRA Facility Investigation Report Revision 1
16	1641K-1528REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	52	=	0.144	0.287	0.958	0.935	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1532-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.7	J	-	0.6	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532-SS-M-SO	0	0.5	7440-39-3	Barium	310	=	-	0.07	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.15	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.053	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0094	J	-	0.0046	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542-SS-M-SO	0	0.5	7439-92-1	Lead	50	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.68	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532L-SS-D-SO	0	0.25	7440-39-3	Barium	330	=	-	0.079	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.23	J	-	0.042	0.52	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532L-SS-D-SO	0	0.25	7440-47-3	Chromium	18	J	-	0.06	3.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.007	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537R-SS-D-SO	0	0.25	7439-92-1	Lead	45	J	-	0.24	0.79	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.67	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532R-SS-D-SO	0	0.25	7440-39-3	Barium	260	=	-	0.077	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.43	J	-	0.042	0.51	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532R-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.059	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0069	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO	0	0.25	7439-92-1	Lead	41	J	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.8	J	-	0.62	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533-SS-M-SO	0	0.5	7440-39-3	Barium	340	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.17	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533-SS-M-SO	0	0.5	7440-47-3	Chromium	15	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1533-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0096	J	-	0.0049	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536L-SS-D-SO	0	0.25	7439-92-1	Lead	37	J	-	0.28	0.92	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.6	=	-	0.69	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533L-SS-D-SO	0	0.25	7440-39-3	Barium	270	=	-	0.08	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	37	J	-	0.24	0.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.1	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO	0	0.25	7440-39-3	Barium	220	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.19	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0059	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1534-SS-M-SO	0	0.5	7439-92-1	Lead	33	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	1.4	J	-	0.59	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	260	=	-	0.068	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.16	J	-	0.037	0.45	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	9.5	J	-	0.052	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1530-SS-M-SO	0	0.5	7439-92-1	Lead	29	=	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.3	J	-	0.58	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537R-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.067	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.28	J	-	0.036	0.44	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537R-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.051	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0061	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1527-SS-M-SO	0	0.5	7439-92-1	Lead	27	=	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.7	J	-	0.62	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538-SS-M-SO	0	0.5	7440-39-3	Barium	260	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.18	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538-SS-M-SO	0	0.5	7440-47-3	Chromium	17	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538-SS-M-SO	0	0.5	7439-97-6	Mercury	0.012	J	-	0.0045	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0096	J	-	0.0049	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641K-1547REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	25.4	=	0.133	0.266	0.887	0.87	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1542L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.2	=	-	0.6	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO	0	0.25	7440-39-3	Barium	250	=	-	0.069	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.49	=	-	0.037	0.45	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.052	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.007	J	-	0.0064	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1526-SS-M-SO	0	0.5	7439-92-1	Lead	23	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	3.2	=	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	240	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.52	=	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	10	J	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0083	J	-	0.0058	0.018	1	RCRA Facility Investigation Report Revision 1
16	1641-K1539-SS-M-SO	0	0.5	7439-92-1	Lead	23	=	-	0.25	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542R-SS-D-SO	0	0.25	7440-39-3	Barium	140	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.31	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-K1542R-SS-D-SO	0	0.25	7440-47-3	Chromium	8.1	J	-	0.054	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1535-SS-M-SO	0	0.5	7439-92-1	Lead	22	=	-	0.25	0.84	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543-SS-M-SO	0	0.5	7440-38-2	Arsenic	2	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543-SS-M-SO	0	0.5	7440-39-3	Barium	510	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.15	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543-SS-M-SO	0	0.5	7440-47-3	Chromium	15	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0075	J	-	0.0049	0.015	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1550-SS-M-SO	0	0.5	7439-92-1	Lead	21	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.7	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547-SS-M-SO	0	0.5	7440-39-3	Barium	380	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.18	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0083	J	-	0.0045	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-K1525-SS-M-SO	0	0.5	7439-92-1	Lead	20	=	-	0.27	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.1	J	-	0.62	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547L-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.57	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547L-SS-D-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0069	J	-	0.0062	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1532-SS-M-SO	0	0.5	7439-92-1	Lead	20	=	-	0.25	0.82	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.65	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO	0	0.25	7440-39-3	Barium	410	=	-	0.074	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.61	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO	0	0.25	7440-47-3	Chromium	17	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.0067	0.021	1	RCRA Facility Investigation Report Revision 1
16	1641K-1524REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.9	=	0.137	0.273	0.91	0.87	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2	J	-	0.73	2.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	420	=	-	0.084	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.48	J	-	0.045	0.55	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	20	=	-	0.064	3.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0088	J	-	0.0063	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.01	J	-	0.0061	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641K-1527REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	18.9	=	0.145	0.291	0.968	0.952	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-Y1524-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1524-SS-M-SO	0	0.5	7440-39-3	Barium	250	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1524-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1524-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1524-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0055	J	-	0.005	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1524-SS-M-SO	0	0.5	7439-92-1	Lead	18	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO	0	0.5	7440-39-3	Barium	230	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.49	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO	0	0.5	7440-47-3	Chromium	12	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0061	J	-	0.0052	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1531-SS-M-SO	0	0.5	7439-92-1	Lead	17	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO-DUP	0	0.5	7440-38-2	Arsenic	2.5	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO-DUP	0	0.5	7440-39-3	Barium	230	=	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO-DUP	0	0.5	7440-43-9	Cadmium	0.5	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO-DUP	0	0.5	7440-47-3	Chromium	13	=	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO-DUP	0	0.5	7439-97-6	Mercury	0.0064	J	-	0.005	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1540-SS-M-SO	0	0.5	7439-92-1	Lead	17	=	-	0.26	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1526-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1526-SS-M-SO	0	0.5	7440-39-3	Barium	270	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1526-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.49	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1526-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1528-SS-M-SO	0	0.5	7439-92-1	Lead	17	=	-	0.25	0.84	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO-DUP	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-Y1541-SS-M-SO-DUP	0	0.5	7440-39-3	Barium	270	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO-DUP	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO-DUP	0	0.5	7440-47-3	Chromium	19	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO-DUP	0	0.5	7439-97-6	Mercury	0.009	J	-	0.0053	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1533-SS-M-SO	0	0.5	7439-92-1	Lead	16	=	-	0.25	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1543-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.4	J	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1543-SS-M-SO	0	0.5	7440-39-3	Barium	450	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1543-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.12	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1543-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1543-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0056	J	-	0.0052	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641K-1549REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	15.2	=	0.138	0.275	0.918	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-Y1544-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.7	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1544-SS-M-SO	0	0.5	7440-39-3	Barium	360	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1544-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.15	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1544-SS-M-SO	0	0.5	7440-47-3	Chromium	17	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1544-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0061	J	-	0.0051	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1537-SS-M-SO	0	0.5	7439-92-1	Lead	15	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1547-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.8	=	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1547-SS-M-SO	0	0.5	7440-39-3	Barium	350	=	-	0.07	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1547-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.2	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1547-SS-M-SO	0	0.5	7440-47-3	Chromium	11	=	-	0.054	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1547-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0091	J	-	0.0052	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1541-SS-M-SO	0	0.5	7439-92-1	Lead	15	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1549-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.9	J	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549L-SS-D-SO	0	0.25	7440-39-3	Barium	370	=	-	0.081	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.044	0.53	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549L-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.062	3.7	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0095	J	-	0.0063	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549L-SS-M-SO	0	0.5	7439-92-1	Lead	15	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.59	2.2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549R-SS-D-SO	0	0.25	7440-39-3	Barium	430	=	-	0.068	1.8	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.036	0.44	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549R-SS-D-SO	0	0.25	7440-47-3	Chromium	19	J	-	0.052	3.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0064	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-K1529-SS-M-SO	0	0.5	7439-92-1	Lead	15	=	-	0.25	0.84	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.9	J	-	0.65	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550-SS-M-SO	0	0.5	7440-39-3	Barium	480	=	-	0.074	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.21	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0062	J	-	0.0052	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1538-SS-M-SO	0	0.5	7439-92-1	Lead	15	=	-	0.25	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550L-SS-D-SO	0	0.25	7440-39-3	Barium	330	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.057	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0079	J	-	0.0062	0.019	1	RCRA Facility Investigation Report Revision 1
16	1641-K1536-SS-M-SO	0	0.5	7439-92-1	Lead	14	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.68	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550R-SS-D-SO	0	0.25	7440-39-3	Barium	300	=	-	0.078	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.58	=	-	0.042	0.51	1	RCRA Facility Investigation Report Revision 1
16	1641-K1550R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.059	3.6	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1545-SS-M-SO	0	0.5	7439-92-1	Lead	14	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1538-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.5	J	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1538-SS-M-SO	0	0.5	7440-39-3	Barium	260	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1538-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.49	J	-	0.041	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1538-SS-M-SO	0	0.5	7440-47-3	Chromium	21	=	-	0.057	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1538-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0083	J	-	0.0053	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549-SS-M-SO	0	0.5	7439-92-1	Lead	14	=	-	0.25	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1539-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1539-SS-M-SO	0	0.5	7440-39-3	Barium	270	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1539-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1539-SS-M-SO	0	0.5	7440-47-3	Chromium	24	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641K-1527LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.8	=	0.137	0.275	0.916	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-Y1540-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1540-SS-M-SO	0	0.5	7440-39-3	Barium	280	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1540-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1540-SS-M-SO	0	0.5	7440-47-3	Chromium	17	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1540-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0095	J	-	0.0051	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641K-1533LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.6	=	0.136	0.273	0.91	0.885	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-Y1541-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO	0	0.5	7440-39-3	Barium	240	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO	0	0.5	7440-47-3	Chromium	18	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO	0	0.5	7439-97-6	Mercury	0.01	J	-	0.0054	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641K-1531REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.5	=	0.145	0.29	0.967	0.952	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1548-SS-M-SO	0	0.5	7439-92-1	Lead	13	=	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641K-1541LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13	=	0.15	0.299	0.997	0.971	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641K-1546LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.8	=	0.145	0.291	0.968	0.952	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641K-1529LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.4	=	0.144	0.287	0.957	0.935	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-K1544-SS-M-SO	0	0.5	7439-92-1	Lead	12	=	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1526-SS-M-SO	0	0.5	7439-92-1	Lead	11	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548-SS-M-SO	0	0.5	7440-38-2	Arsenic	2	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548-SS-M-SO	0	0.5	7440-39-3	Barium	400	=	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.2	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548-SS-M-SO	0	0.5	7439-97-6	Mercury	0.011	J	-	0.0046	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO-DUP	0	0.5	7439-92-1	Lead	11	=	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548L-SS-D-SO	0	0.25	7440-39-3	Barium	350	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.34	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.024	=	-	0.0066	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1538-SS-M-SO	0	0.5	7439-92-1	Lead	11	=	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.1	J	-	0.69	2.6	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548R-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.08	2.1	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.32	J	-	0.043	0.53	1	RCRA Facility Investigation Report Revision 1
16	1641-K1548R-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.061	3.7	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-K1548R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.008	J	-	0.0067	0.02	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1537-SS-M-SO	0	0.5	7439-92-1	Lead	11	J	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549-SS-M-SO	0	0.5	7440-38-2	Arsenic	1.6	J	-	0.62	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549-SS-M-SO	0	0.5	7440-39-3	Barium	390	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.21	J	-	0.038	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549-SS-M-SO	0	0.5	7440-47-3	Chromium	19	=	-	0.054	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549-SS-M-SO	0	0.5	7439-97-6	Mercury	0.014	=	-	0.0045	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1530-SS-M-SO	0	0.5	7439-92-1	Lead	11	=	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-K1549L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.71	2.7	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1531-SS-M-SO	0	0.5	7439-92-1	Lead	11	J	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1533-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.62	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1533-SS-M-SO	0	0.5	7440-39-3	Barium	270	=	-	0.072	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1533-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.47	J	-	0.039	0.47	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1533-SS-M-SO	0	0.5	7440-47-3	Chromium	16	=	-	0.055	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1532-SS-M-SO	0	0.5	7439-92-1	Lead	11	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1534-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1534-SS-M-SO	0	0.5	7440-39-3	Barium	270	=	-	0.074	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1534-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.49	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1534-SS-M-SO	0	0.5	7440-47-3	Chromium	16	=	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1534-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0056	J	-	0.0053	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO	0	0.5	7439-92-1	Lead	11	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1536-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.5	J	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1536-SS-M-SO	0	0.5	7440-39-3	Barium	680	J	-	0.38	9.9	5	RCRA Facility Investigation Report Revision 1
16	1641-Y1536-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.5	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1536-SS-M-SO	0	0.5	7440-47-3	Chromium	15	=	-	0.057	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO-DUP	0	0.5	7439-92-1	Lead	11	=	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1537-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.5	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1537-SS-M-SO	0	0.5	7440-39-3	Barium	270	J	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1537-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.5	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1537-SS-M-SO	0	0.5	7440-47-3	Chromium	21	J	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641K-1524LEC-1.0-1.5D-SO	1	1.5	7439-92-1	Lead	10.8	J	0.162	0.324	1.08	0.971	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-YK4-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-YK4-SS-M-SO	0	0.5	7440-39-3	Barium	240	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-YK4-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-YK4-SS-M-SO	0	0.5	7440-47-3	Chromium	12	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-K1543-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-YK5-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-YK5-SS-M-SO	0	0.5	7440-39-3	Barium	250	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-YK5-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.49	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-YK5-SS-M-SO	0	0.5	7440-47-3	Chromium	11	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-YK5-SS-M-SO	0	0.5	7439-97-6	Mercury	0.006	J	-	0.005	0.015	1	RCRA Facility Investigation Report Revision 1
16	1641-K1547-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1524-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO-DUP	0	0.5	7439-92-1	Lead	10	=	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1539-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1541-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1533-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.25	0.85	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1534-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-YK4-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1527-SS-M-SO	0	0.5	7439-92-1	Lead	10	J	-	0.27	0.9	1	RCRA Facility Investigation Report Revision 1
16	1641-YK2-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-YK3-SS-M-SO	0	0.5	7439-92-1	Lead	10	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1525-SS-M-SO	0	0.5	7439-92-1	Lead	9.9	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641K-1547LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.86	=	0.137	0.275	0.917	0.901	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-YK5-SS-M-SO	0	0.5	7439-92-1	Lead	9.8	=	-	0.26	0.88	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1544-SS-M-SO	0	0.5	7439-92-1	Lead	9	=	-	0.26	0.87	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1527-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.5	J	-	0.66	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1527-SS-M-SO	0	0.5	7440-39-3	Barium	260	J	-	0.076	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1527-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.5	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1527-SS-M-SO	0	0.5	7440-47-3	Chromium	15	J	-	0.058	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1527-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0054	J	-	0.0051	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1540-SS-M-SO	0	0.5	7439-92-1	Lead	8.2	=	-	0.26	0.86	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1530-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.5	J	-	0.65	2.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1530-SS-M-SO	0	0.5	7440-39-3	Barium	300	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1530-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.49	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1530-SS-M-SO	0	0.5	7440-47-3	Chromium	26	=	-	0.057	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1530-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0084	J	-	0.0054	0.017	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1543-SS-M-SO	0	0.5	7439-92-1	Lead	8	=	-	0.25	0.84	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1531-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1531-SS-M-SO	0	0.5	7440-39-3	Barium	260	J	-	0.074	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1531-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.49	J	-	0.04	0.49	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1531-SS-M-SO	0	0.5	7440-47-3	Chromium	19	J	-	0.057	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1531-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0086	J	-	0.0055	0.017	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1536-SS-M-SO	0	0.5	7439-92-1	Lead	7.9	=	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1532-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1532-SS-M-SO	0	0.5	7440-39-3	Barium	260	=	-	0.074	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1532-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1532-SS-M-SO	0	0.5	7440-47-3	Chromium	15	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1549-SS-M-SO	0	0.5	7440-39-3	Barium	240	=	-	0.075	2	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1549-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.094	J	-	0.041	0.5	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1549-SS-M-SO	0	0.5	7440-47-3	Chromium	8	=	-	0.057	3.5	1	RCRA Facility Investigation Report Revision 1
16	1641K-1540LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	7.53	=	0.142	0.284	0.948	0.926	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-YK1-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO	0	0.5	7440-39-3	Barium	270	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO	0	0.5	7440-47-3	Chromium	15	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0055	J	-	0.005	0.016	1	RCRA Facility Investigation Report Revision 1
16	1641K-1540LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	7.37	=	0.132	0.264	0.88	0.862	Final Permittee- Initiated Interim Measures Report Parcel 16 Revision 1.0
16	1641-YK1-SS-M-SO-DUP	0	0.5	7440-38-2	Arsenic	2.3	J	-	0.61	2.3	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO-DUP	0	0.5	7440-39-3	Barium	260	=	-	0.071	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO-DUP	0	0.5	7440-43-9	Cadmium	0.46	J	-	0.038	0.46	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO-DUP	0	0.5	7440-47-3	Chromium	15	=	-	0.054	3.2	1	RCRA Facility Investigation Report Revision 1
16	1641-YK1-SS-M-SO-DUP	0	0.5	7439-97-6	Mercury	0.0062	J	-	0.0045	0.014	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1547-SS-M-SO	0	0.5	7439-92-1	Lead	6.7	=	-	0.25	0.83	1	RCRA Facility Investigation Report Revision 1
16	1641-YK2-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.63	2.4	1	RCRA Facility Investigation Report Revision 1
16	1641-YK2-SS-M-SO	0	0.5	7440-39-3	Barium	240	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-YK2-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.039	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-YK2-SS-M-SO	0	0.5	7440-47-3	Chromium	14	=	-	0.056	3.3	1	RCRA Facility Investigation Report Revision 1
16	1641-Y1549-SS-M-SO	0	0.5	7439-92-1	Lead	6.2	=	-	0.27	0.89	1	RCRA Facility Investigation Report Revision 1
16	1641-YK3-SS-M-SO	0	0.5	7440-38-2	Arsenic	2.4	J	-	0.64	2.4	1	RCRA Facility Investigation Report Revision 1

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
16	1641-YK3-SS-M-SO	0	0.5	7440-39-3	Barium	290	=	-	0.073	1.9	1	RCRA Facility Investigation Report Revision 1
16	1641-YK3-SS-M-SO	0	0.5	7440-43-9	Cadmium	0.48	J	-	0.04	0.48	1	RCRA Facility Investigation Report Revision 1
16	1641-YK3-SS-M-SO	0	0.5	7440-47-3	Chromium	13	=	-	0.056	3.4	1	RCRA Facility Investigation Report Revision 1
16	1641-YK3-SS-M-SO	0	0.5	7439-97-6	Mercury	0.0057	J	-	0.0046	0.014	1	RCRA Facility Investigation Report Revision 1
24	2418A-906SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	8.53	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRF-SO	0	0.25	7439-92-1	Lead	11540	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A941-EFR-D-SO	1	1.5	7439-92-1	Lead	6350	=	44.4	22.2	88.7	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-906SS-R-XRF-SO	0	0.25	7440-39-3	Barium	497	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-906SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	12.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-935SS-L-XRF-SO	0	0.25	7439-92-1	Lead	5290	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-929SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	3900	J	-	0.28	0.94	1	Release Assessment Report Parcel 24
24	2418A-907SS-L-XRF-SO	0	0.25	7440-39-3	Barium	450	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-907SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	19.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-907SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A918-EFR-D-SO	1	1.5	7439-92-1	Lead	2870	=	26	13	51.9	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-907SS-R-XRF-SO	0	0.25	7439-92-1	Lead	2691	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-907SS-R-XRF-SO	0	0.25	7440-39-3	Barium	160	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-907SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	17.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A943-EFR-D-SO	1	1.5	7439-92-1	Lead	2540	=	21.6	10.8	43.1	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-947SS-R-XRF-SO	0	0.25	7439-92-1	Lead	2404	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-908SS-L-XRF-SO	0	0.25	7440-39-3	Barium	499	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-908SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	19.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-914SS-R-XRF-SO	0	0.25	7440-39-3	Barium	235	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-955SS-L-XRF-SO	0	0.25	7439-92-1	Lead	2327	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-914SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.64	1.5	1	Release Assessment Report Parcel 24
24	2418A-914SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	240	=	-	0.074	1.9	1	Release Assessment Report Parcel 24
24	2418A-914SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.17	J	-	0.04	0.48	1	Release Assessment Report Parcel 24
24	2418A-914SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.056	1.9	1	Release Assessment Report Parcel 24
24	2418A-914SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.0081	J	-	0.0055	0.017	1	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	2300	J	-	0.28	0.94	1	Release Assessment Report Parcel 24
24	2418A-946SS-R-XRF-SO	0	0.25	7439-92-1	Lead	2142	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-915SS-L-XRF-SO	0	0.25	7440-39-3	Barium	328	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-915SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.03	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-933SS-C-SO	0	0.5	7439-92-1	Lead	1790	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A969-EFL-D-SO	1	1.5	7439-92-1	Lead	1630	=	22.1	11.1	44.3	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-915SS-R-XRF-SO	0	0.25	7440-39-3	Barium	276	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-915SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	13.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A944-EFR-D-SO	1	1.5	7439-92-1	Lead	1590	=	21.4	10.7	42.8	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-909SS-L-XRF-SO	0	0.25	7439-92-1	Lead	1582	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-916SS-L-XRF-SO	0	0.25	7440-39-3	Barium	260	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-916SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	11.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-916SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A926-EFL-D-SO	1	1.5	7439-92-1	Lead	1490	=	24.4	12.2	48.9	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A951-EFR-D-SO	1	1.5	7439-92-1	Lead	1470	=	22.1	11.1	44.3	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-923SS-L-XRF-SO	0	0.25	7440-39-3	Barium	444	=	-	-	-	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-923SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	18.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-946SS-C-SO	0	0.5	7439-92-1	Lead	1460	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	1400	J	-	0.26	0.88	1	Release Assessment Report Parcel 24
24	2418A-923SS-R-XRF-SO	0	0.25	7440-39-3	Barium	549	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-923SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	13	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-923SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	11	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-929SS-C-SO	0	0.5	7439-92-1	Lead	1390	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-939SS-C-SO	0	0.5	7439-92-1	Lead	1340	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-924SS-L-XRF-SO	0	0.25	7440-39-3	Barium	745	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-924SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-903SS-L-XRF-SO	0	0.25	7439-92-1	Lead	1333	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A955-EFR-D-SO	1	1.5	7439-92-1	Lead	1100	=	21.3	10.6	42.5	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-924SS-R-XRF-SO	0	0.25	7440-39-3	Barium	128	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	19.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-918SS-C-SO	0	0.5	7439-92-1	Lead	1090	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	3.2	=	-	0.69	1.6	1	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	180	=	-	0.079	2.1	1	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.46	J	-	0.043	0.52	1	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.06	2.1	1	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.024	=	-	0.0053	0.016	1	Release Assessment Report Parcel 24
24	2418A-941SS-R-XRF-SO	0	0.25	7439-92-1	Lead	1021	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-952SS-C-SO	0	0.5	7439-92-1	Lead	1020	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A929-EFL-D-SO	1	1.5	7439-92-1	Lead	1010	=	21.2	10.6	42.5	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-915SS-C-SO	0	0.5	7439-92-1	Lead	1000	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-950SS-R-XRF-SO	0	0.25	7439-92-1	Lead	995	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-969SS-C-SO	0	0.5	7439-92-1	Lead	977	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-932SS-L-XRF-SO	0	0.25	7440-39-3	Barium	462	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-932SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	16	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-932SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.85	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-909SS-C-SO	0	0.5	7439-92-1	Lead	954	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-916SS-C-SO	0	0.5	7439-92-1	Lead	948	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-932SS-R-XRF-SO	0	0.25	7440-39-3	Barium	518	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-932SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	18.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A920-EFL-D-SO	1	1.5	7439-92-1	Lead	829	=	21.9	10.9	43.7	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-977SS-L-XRF-SO	0	0.25	7439-92-1	Lead	828	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-933SS-L-XRF-SO	0	0.25	7440-39-3	Barium	287	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-933SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-C-SO	0	0.5	7439-92-1	Lead	824	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-933SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	1.6	=	-	0.67	1.5	1	Release Assessment Report Parcel 24
24	2418A-933SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	150	=	-	0.078	2	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRF-SO	0	0.25	7440-39-3	Barium	448	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	21.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	14	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-955SS-R-XRF-SO	0	0.25	7439-92-1	Lead	784	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	3.6	=	-	0.69	1.6	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	180	=	-	0.08	2.1	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	10	=	-	0.061	2.1	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.022	=	-	0.0059	0.018	1	Release Assessment Report Parcel 24
24	2418A-903SS-C-SO	0	0.5	7439-92-1	Lead	775	=	4.9	1	-	5	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-943SS-L-XRF-SO	0	0.25	7439-92-1	Lead	764	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-939SS-L-XRF-SO	0	0.25	7440-39-3	Barium	267	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-939SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	15.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-925SS-C-SO	0	0.5	7439-92-1	Lead	762	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-439SS-C-SO	0	0.5	7439-92-1	Lead	746	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-939SS-R-XRF-SO	0	0.25	7440-39-3	Barium	355	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-939SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	17.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-941SS-C-SO	0	0.5	7439-92-1	Lead	741	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	740	J	-	0.26	0.86	1	Release Assessment Report Parcel 24
24	2418A-971SS-C-SO	0	0.5	7439-92-1	Lead	720	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-943SS-C-SO	0	0.5	7439-92-1	Lead	669	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRFC-SO	0	0.25	7439-92-1	Lead	660	J	-	0.27	0.9	1	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRF-SO	0	0.25	7440-39-3	Barium	309	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	22.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-299SS-C-SO	0	0.5	7439-92-1	Lead	657	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	4.1	=	-	0.7	1.6	1	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	190	=	-	0.08	2.1	1	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.41	J	-	0.043	0.53	1	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	14	=	-	0.061	2.1	1	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.028	=	-	0.0053	0.016	1	Release Assessment Report Parcel 24
24	24A922-EFR-D-SO	1	1.5	7439-92-1	Lead	644	=	21.6	10.8	43.2	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-914SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	640	=	-	0.26	0.87	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRF-SO	0	0.25	7440-38-2	Arsenic	45.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRF-SO	0	0.25	7440-39-3	Barium	630	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	11.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-922SS-C-SO	0	0.5	7439-92-1	Lead	626	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	3.1	=	-	0.65	1.5	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	200	=	-	0.075	2	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.17	J	-	0.041	0.5	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.057	2	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.025	=	-	0.0064	0.02	1	Release Assessment Report Parcel 24
24	2418A-917SS-C-SO	0	0.5	7439-92-1	Lead	609	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-977SS-C-SO	0	0.5	7439-92-1	Lead	606	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-906SS-L-XRF-SO	0	0.25	7440-39-3	Barium	421	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-906SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	15.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-912SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.18	J	-	0.046	0.57	1	Release Assessment Report Parcel 24
24	2418A-912SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	9.8	=	-	0.066	2.3	1	Release Assessment Report Parcel 24
24	2418A-912SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.02	=	-	0.0056	0.017	1	Release Assessment Report Parcel 24
24	2418A-948SS-C-SO	0	0.5	7439-92-1	Lead	603	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A955-EFL-D-SO2	1.5	2	7439-92-1	Lead	591	=	0.23	0.12	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-913SS-L-XRF-SO	0	0.25	7440-39-3	Barium	429	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-913SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	15.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-913SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-923SS-C-SO	0	0.5	7439-92-1	Lead	582	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-962SS-L-XRF-SO	0	0.25	7439-92-1	Lead	523	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-913SS-R-XRF-SO	0	0.25	7440-39-3	Barium	438	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-913SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	19.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-922SS-R-XRF-SO	0	0.25	7439-92-1	Lead	514	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-927SS-L-XRF-SO	0	0.25	7439-92-1	Lead	512	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-914SS-L-XRF-SO	0	0.25	7440-39-3	Barium	319	=	-	-	-	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-9145S-L-XRF-SO	0	0.25	7440-47-3	Chromium	10588	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9355S-C-SO	0	0.5	7439-92-1	Lead	506	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9145S-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.9	=	-	0.64	1.5	1	Release Assessment Report Parcel 24
24	2418A-9145S-L-XRFC-SO	0	0.25	7440-39-3	Barium	210	=	-	0.074	2	1	Release Assessment Report Parcel 24
24	2418A-9145S-L-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.14	J	-	0.04	0.49	1	Release Assessment Report Parcel 24
24	2418A-9145S-L-XRFC-SO	0	0.25	7440-47-3	Chromium	10	=	-	0.057	2	1	Release Assessment Report Parcel 24
24	2418A-9145S-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.0057	0.018	1	Release Assessment Report Parcel 24
24	2418A-9515S-C-SO	0	0.5	7439-92-1	Lead	499	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9205S-L-XRF-SO	0	0.25	7439-92-1	Lead	497	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9205S-R-XRFC-SO	0	0.25	7440-47-3	Chromium	10	=	-	0.057	2	1	Release Assessment Report Parcel 24
24	2418A-9205S-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0055	0.017	1	Release Assessment Report Parcel 24
24	2418A-9705S-C-SO	0	0.5	7439-92-1	Lead	494	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9695S-R-XRF-SO	0	0.25	7439-92-1	Lead	491	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9765S-C-SO	0	0.5	7439-92-1	Lead	481	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9095S-R-XRFC-SO	0	0.25	7439-92-1	Lead	480	=	-	0.26	0.88	1	Release Assessment Report Parcel 24
24	2418A-9225S-L-XRF-SO	0	0.25	7440-39-3	Barium	344	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9225S-L-XRF-SO	0	0.25	7440-47-3	Chromium	15.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A923-EFR-D-SO	1	1.5	7439-92-1	Lead	478	=	21.3	10.7	42.7	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-9265S-C-SO	0	0.5	7439-92-1	Lead	464	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9225S-R-XRF-SO	0	0.25	7440-39-3	Barium	473	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9225S-R-XRF-SO	0	0.25	7440-47-3	Chromium	8.31	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A948-EFL-D-SO	1	1.5	7439-92-1	Lead	458	=	22.4	11.2	44.7	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFL-D-SO	1	1.5	7439-92-1	Lead	457	=	22.3	11.1	44.6	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-9755S-R-XRF-SO	0	0.25	7439-92-1	Lead	447	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9385S-R-XRF-SO	0	0.25	7439-92-1	Lead	445	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9295S-L-XRF-SO	0	0.25	7440-39-3	Barium	471	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9295S-L-XRF-SO	0	0.25	7440-43-9	Cadmium	18.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9655S-L-XRF-SO	0	0.25	7439-92-1	Lead	444	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9125S-C-SO	0	0.5	7439-92-1	Lead	443	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9295S-R-XRF-SO	0	0.25	7440-39-3	Barium	560	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9295S-R-XRF-SO	0	0.25	7440-43-9	Cadmium	27.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9055S-L-XRFC-SO	0	0.25	7439-92-1	Lead	440	=	-	0.28	0.95	1	Release Assessment Report Parcel 24
24	2418A-9295S-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	4	=	-	0.69	1.6	1	Release Assessment Report Parcel 24
24	2418A-9295S-R-XRFC-SO	0	0.25	7440-39-3	Barium	190	=	-	0.079	2.1	1	Release Assessment Report Parcel 24
24	2418A-9295S-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.83	=	-	0.043	0.52	1	Release Assessment Report Parcel 24
24	2418A-9295S-R-XRFC-SO	0	0.25	7440-47-3	Chromium	15	=	-	0.06	2.1	1	Release Assessment Report Parcel 24
24	2418A-9295S-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.019	=	-	0.0053	0.016	1	Release Assessment Report Parcel 24
24	2418A-9145S-C-SO	0	0.5	7439-92-1	Lead	438	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9445S-C-SO	0	0.5	7439-92-1	Lead	434	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-9305S-L-XRFC-SO	0	0.25	7440-39-3	Barium	640	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9305S-L-XRF-SO	0	0.25	7440-43-9	Cadmium	17.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9305S-L-XRF-SO	0	0.25	7440-47-3	Chromium	19.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9345S-L-XRFC-SO	0	0.25	7439-92-1	Lead	430	J	-	0.28	0.95	1	Release Assessment Report Parcel 24
24	2418A-9425S-C-SO	0	0.5	7439-92-1	Lead	429	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-9305S-R-XRF-SO	0	0.25	7440-39-3	Barium	199	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9305S-R-XRF-SO	0	0.25	7440-47-3	Chromium	13.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-9625S-C-SO	0	0.5	7439-92-1	Lead	428	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-9305S-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.9	=	-	0.69	1.6	1	Release Assessment Report Parcel 24
24	2418A-9305S-R-XRFC-SO	0	0.25	7440-39-3	Barium	210	=	-	0.08	2.1	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-930SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.42	J	-	0.043	0.52	1	Release Assessment Report Parcel 24
24	2418A-930SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	12	=	-	0.061	2.1	1	Release Assessment Report Parcel 24
24	2418A-930SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.029	=	-	0.0057	0.018	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRF-SO	0	0.25	7440-38-2	Arsenic	1088	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRF-SO	0	0.25	7440-39-3	Barium	383	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	21.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-950SS-C-SO	0	0.5	7439-92-1	Lead	423	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.9	=	-	0.6	1.4	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	180	=	-	0.069	1.8	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.26	J	-	0.037	0.46	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	9.7	=	-	0.053	1.8	1	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.022	=	-	0.0058	0.018	1	Release Assessment Report Parcel 24
24	2418A-509SS-C-SO	0	0.5	7439-92-1	Lead	419	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A976-EFR-D-SO	1	1.5	7439-92-1	Lead	416	=	4.15	2.07	8.3	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-937SS-L-XRF-SO	0	0.25	7440-39-3	Barium	536	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-937SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	20.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-913SS-C-SO	0	0.5	7439-92-1	Lead	415	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-955SS-C-SO	0	0.5	7439-92-1	Lead	413	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-937SS-R-XRF-SO	0	0.25	7440-39-3	Barium	240	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-937SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	14.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-964SS-C-SO	0	0.5	7439-92-1	Lead	407	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRF-SO	0	0.25	7439-92-1	Lead	399	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-L-XRF-SO	0	0.25	7439-97-6	Mercury	13.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-L-XRF-SO	0	0.25	7440-39-3	Barium	310	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-C-SO	0	0.5	7439-92-1	Lead	395	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-918SS-R-XRF-SO	0	0.25	7439-92-1	Lead	391	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-902SS-R-XRF-SO	0	0.25	7440-39-3	Barium	406	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-902SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	17	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-919SS-C-SO	0	0.5	7439-92-1	Lead	385	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-905SS-C-SO	0	0.5	7439-92-1	Lead	383	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-903SS-L-XRF-SO	0	0.25	7440-39-3	Barium	292	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-903SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	23.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRF-SO	0	0.25	7439-92-1	Lead	381	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-929SS-R-XRF-SO	0	0.25	7439-92-1	Lead	376	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-903SS-R-XRF-SO	0	0.25	7440-39-3	Barium	286	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-903SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	22.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-C-SO	0	0.5	7439-92-1	Lead	376	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-910SS-C-SO	0	0.5	7439-92-1	Lead	371	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-904SS-L-XRF-SO	0	0.25	7440-39-3	Barium	440	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-904SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	11.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-973SS-C-SO	0	0.5	7439-92-1	Lead	369	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A938-EFR-D-SO	1	1.5	7439-92-1	Lead	365	=	2.21	1.11	4.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-945SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	360	J	-	0.24	0.79	1	Release Assessment Report Parcel 24
24	2418A-906SS-C-SO	0	0.5	7439-92-1	Lead	359	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-910SS-R-XRF-SO	0	0.25	7440-39-3	Barium	511	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-910SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	20.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-910SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	12	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-904SS-C-SO	0	0.5	7439-92-1	Lead	357	=	4.9	1	-	5	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A922-EFL-D-SO	1	1.5	7439-92-1	Lead	353	=	2.3	1.15	4.59	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-918SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	350	=	-	0.26	0.87	1	Release Assessment Report Parcel 24
24	2418A-947SS-C-SO	0	0.5	7439-92-1	Lead	350	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-912SS-L-XRF-SO	0	0.25	7440-39-3	Barium	709	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-912SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	35	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-912SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-912SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	348	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-934SS-C-SO	0	0.5	7439-92-1	Lead	347	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-912SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	13461	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-905SS-R-XRF-SO	0	0.25	7439-92-1	Lead	341	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-912SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	3.5	=	-	0.75	1.7	1	Release Assessment Report Parcel 24
24	2418A-912SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	180	=	-	0.086	2.3	1	Release Assessment Report Parcel 24
24	2418A-918SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.16	J	-	0.04	0.49	1	Release Assessment Report Parcel 24
24	2418A-918SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.056	1.9	1	Release Assessment Report Parcel 24
24	2418A-918SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.016	J	-	0.0057	0.017	1	Release Assessment Report Parcel 24
24	2418A-965SS-C-SO	0	0.5	7439-92-1	Lead	337	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-974SS-C-SO	0	0.5	7439-92-1	Lead	334	J	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-919SS-L-XRF-SO	0	0.25	7440-39-3	Barium	270	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-919SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-968SS-C-SO	0	0.5	7439-92-1	Lead	333	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-936SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	330	J	-	0.25	0.82	1	Release Assessment Report Parcel 24
24	2418A-919SS-R-XRF-SO	0	0.25	7440-39-3	Barium	68.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-919SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	29.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-930SS-C-SO	0	0.5	7439-92-1	Lead	324	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-948SS-R-XRF-SO	0	0.25	7439-92-1	Lead	322	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-L-XRF-SO	0	0.25	7440-39-3	Barium	577	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	15.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	15.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-954SS-L-XRF-SO	0	0.25	7439-92-1	Lead	316	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-949SS-C-SO	0	0.5	7439-92-1	Lead	316	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRF-SO	0	0.25	7440-22-4	Silver	16.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRF-SO	0	0.25	7440-39-3	Barium	672	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	39	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	8.65	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-934SS-L-XRF-SO	0	0.25	7439-92-1	Lead	314	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	3.2	=	-	0.65	1.5	1	Release Assessment Report Parcel 24
24	2418A-920SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	220	=	-	0.074	2	1	Release Assessment Report Parcel 24
24	2418A-924SS-R-XRF-SO	0	0.25	7439-92-1	Lead	302	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRF-SO	0	0.25	7439-92-1	Lead	302	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-927SS-R-XRF-SO	0	0.25	7440-39-3	Barium	358	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-927SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	15.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-958SS-C-SO	0	0.5	7439-92-1	Lead	296	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-908SS-C-SO	0	0.5	7439-92-1	Lead	294	J	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-928SS-L-XRF-SO	0	0.25	7440-39-3	Barium	418	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-928SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	6.97	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-937SS-C-SO	0	0.5	7439-92-1	Lead	294	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-938SS-C-SO	0	0.5	7439-92-1	Lead	292	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-928SS-R-XRF-SO	0	0.25	7440-39-3	Barium	406	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-928SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	20.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A945-EFL-D-SO	1	1.5	7439-92-1	Lead	291	=	2.21	1.1	4.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-905SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	290	=	-	0.27	0.89	1	Release Assessment Report Parcel 24
24	2418A-902SS-C-SO	0	0.5	7439-92-1	Lead	287	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-935SS-L-XRF-SO	0	0.25	7440-39-3	Barium	237	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-935SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-920SS-C-SO	0	0.5	7439-92-1	Lead	286	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-935SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.66	1.5	1	Release Assessment Report Parcel 24
24	2418A-935SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	170	=	-	0.076	2	1	Release Assessment Report Parcel 24
24	2418A-935SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	8.3	=	-	0.058	2	1	Release Assessment Report Parcel 24
24	2418A-935SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.023	=	-	0.0059	0.018	1	Release Assessment Report Parcel 24
24	24A944-EFL-D-SO	1	1.5	7439-92-1	Lead	286	=	2.32	1.16	4.63	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-933SS-L-XRF-SO	0	0.25	7439-92-1	Lead	282	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-935SS-R-XRF-SO	0	0.25	7440-39-3	Barium	577	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-935SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	17.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-935SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	10.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-959SS-M-SO	0	0.5	7439-92-1	Lead	281	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-905SS-L-XRF-SO	0	0.25	7439-92-1	Lead	279	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRF-SO	0	0.25	7440-38-2	Arsenic	20.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRF-SO	0	0.25	7440-39-3	Barium	401	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	12.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRF-SO	0	0.25	7439-92-1	Lead	276	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	1.5	=	-	0.66	1.5	1	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	420	=	-	0.076	2	1	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	12	=	-	0.058	2	1	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0055	0.017	1	Release Assessment Report Parcel 24
24	2418A-907SS-C-SO	0	0.5	7439-92-1	Lead	275	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A962-EFL-D-SO	1	1.5	7439-92-1	Lead	275	=	2.2	1.1	4.4	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A977-EFR-D-SO2	1.5	2	7439-92-1	Lead	275	=	0.26	0.13	0.52	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-927SS-C-SO	0	0.5	7439-92-1	Lead	273	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-948SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	270	=	-	0.33	1.1	1	Release Assessment Report Parcel 24
24	24A925-EFR-D-SO	1	1.5	7439-92-1	Lead	270	=	2.42	1.21	4.85	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-902SS-L-XRF-SO	0	0.25	7440-39-3	Barium	447	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-902SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	19.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-902SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-914SS-R-XRF-SO	0	0.25	7439-92-1	Lead	266	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRF-SO	0	0.25	7439-92-1	Lead	265	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-924SS-C-SO	0	0.5	7439-92-1	Lead	260	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-908SS-R-XRF-SO	0	0.25	7440-39-3	Barium	927	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-908SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	19.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-908SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	10.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-930SS-R-XRF-SO	0	0.25	7439-92-1	Lead	260	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-930SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	260	=	-	0.28	0.94	1	Release Assessment Report Parcel 24
24	2418A-909SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A939-EFL-D-SO	1	1.5	7439-92-1	Lead	258	=	2.19	1.09	4.37	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-928SS-C-SO	0	0.5	7439-92-1	Lead	249	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-909SS-R-XRF-SO	0	0.25	7440-39-3	Barium	96.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-909SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	10.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-962SS-R-XRF-SO	0	0.25	7439-92-1	Lead	248	=	-	-	-	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-909SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	3	=	-	0.65	1.5	1	Release Assessment Report Parcel 24
24	2418A-909SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	160	=	-	0.074	2	1	Release Assessment Report Parcel 24
24	2418A-909SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.35	J	-	0.04	0.49	1	Release Assessment Report Parcel 24
24	2418A-909SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	8.9	=	-	0.057	2	1	Release Assessment Report Parcel 24
24	2418A-909SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.022	=	-	0.0057	0.018	1	Release Assessment Report Parcel 24
24	2418A-932SS-C-SO	0	0.5	7439-92-1	Lead	246	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-938SS-L-XRF-SO	0	0.25	7439-92-1	Lead	246	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-910SS-L-XRF-SO	0	0.25	7440-39-3	Barium	663	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-910SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	21.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-910SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	8.38	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-916SS-R-XRF-SO	0	0.25	7440-39-3	Barium	479	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-916SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	13.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-927SS-R-XRF-SO	0	0.25	7439-92-1	Lead	244	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-917SS-L-XRF-SO	0	0.25	7440-39-3	Barium	352	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-952SS-R-XRF-SO	0	0.25	7439-92-1	Lead	243	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-954SS-C-SO	0	0.5	7439-92-1	Lead	241	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-917SS-R-XRF-SO	0	0.25	7440-39-3	Barium	344	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-917SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	9.73	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-934SS-R-XRF-SO	0	0.25	7439-92-1	Lead	240	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-943SS-R-XRF-SO	0	0.25	7439-92-1	Lead	238	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-918SS-L-XRF-SO	0	0.25	7440-39-3	Barium	277	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-977SS-R-XRF-SO	0	0.25	7439-92-1	Lead	234	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A976-EFL-D-SO	1	1.5	7439-92-1	Lead	227	=	2.17	1.09	4.35	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-918SS-R-XRF-SO	0	0.25	7440-39-3	Barium	398	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-918SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	18.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-902SS-R-XRF-SO	0	0.25	7439-92-1	Lead	223	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-918SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.9	=	-	0.64	1.5	1	Release Assessment Report Parcel 24
24	2418A-918SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	250	=	-	0.074	1.9	1	Release Assessment Report Parcel 24
24	2418A-925SS-L-XRF-SO	0	0.25	7440-39-3	Barium	803	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-925SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	35.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A952-EFR-D-SO	1	1.5	7439-92-1	Lead	223	=	2.12	1.06	4.24	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-963SS-C-SO	0	0.5	7439-92-1	Lead	223	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-925SS-R-XRF-SO	0	0.25	7440-39-3	Barium	955	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-925SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	14.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-932SS-R-XRF-SO	0	0.25	7439-92-1	Lead	217	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A918-EFL-D-SO	1	1.5	7439-92-1	Lead	217	=	2.65	1.33	5.3	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-926SS-L-XRF-SO	0	0.25	7440-39-3	Barium	436	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-926SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.65	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-967SS-C-SO	0	0.5	7439-92-1	Lead	215	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A924-EFR-D-SO	1	1.5	7439-92-1	Lead	214	=	2.64	1.32	5.29	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-926SS-R-XRF-SO	0	0.25	7440-39-3	Barium	440	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-926SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	13.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-918SS-L-XRF-SO	0	0.25	7439-92-1	Lead	212	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-957SS-C-SO	0	0.5	7439-92-1	Lead	208	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-927SS-L-XRF-SO	0	0.25	7440-39-3	Barium	425	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-927SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	16.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-933SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	8.7	=	-	0.059	2	1	Release Assessment Report Parcel 24
24	2418A-933SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.018	=	-	0.0059	0.018	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-975SS-C-SO	0	0.5	7439-92-1	Lead	208	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-941SS-L-XRF-SO	0	0.25	7439-92-1	Lead	207	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-933SS-R-XRF-SO	0	0.25	7440-39-3	Barium	337	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-922SS-L-XRF-SO	0	0.25	7439-92-1	Lead	206	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-954SS-R-XRF-SO	0	0.25	7439-92-1	Lead	204	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-925SS-R-XRF-SO	0	0.25	7439-92-1	Lead	203	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-934SS-L-XRF-SO	0	0.25	7440-39-3	Barium	420	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-922SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	11.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-934SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	200	J	-	0.28	0.94	1	Release Assessment Report Parcel 24
24	2418A-934SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.7	1.6	1	Release Assessment Report Parcel 24
24	2418A-934SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	190	=	-	0.08	2.1	1	Release Assessment Report Parcel 24
24	2418A-934SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	13	=	-	0.061	2.1	1	Release Assessment Report Parcel 24
24	2418A-934SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.019	=	-	0.0057	0.018	1	Release Assessment Report Parcel 24
24	2418A-914SS-L-XRFC-SO	0	0.25	7439-92-1	Lead	200	=	-	0.26	0.88	1	Release Assessment Report Parcel 24
24	24A936-EFL-D-SO	1	1.5	7439-92-1	Lead	196	=	2.11	1.05	4.22	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-934SS-R-XRF-SO	0	0.25	7440-39-3	Barium	407	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-934SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	14.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-940SS-C-SO	0	0.5	7439-92-1	Lead	194	J	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-973SS-R-XRF-SO	0	0.25	7439-92-1	Lead	194	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-968SS-L-XRF-SO	0	0.25	7439-92-1	Lead	194	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-941SS-L-XRF-SO	0	0.25	7440-39-3	Barium	429	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-941SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	11.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-912SS-L-XRF-SO	0	0.25	7439-92-1	Lead	192	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRFC-SO	0	0.25	7439-92-1	Lead	190	J	-	0.29	0.96	1	Release Assessment Report Parcel 24
24	2418A-941SS-R-XRF-SO	0	0.25	7440-39-3	Barium	226	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-941SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	17.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-939SS-R-XRF-SO	0	0.25	7439-92-1	Lead	187	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-919SS-R-XRF-SO	0	0.25	7439-92-1	Lead	187	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-942SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	11	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-921SS-C-SO	0	0.5	7439-92-1	Lead	186	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-915SS-L-XRF-SO	0	0.25	7439-92-1	Lead	184	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-946SS-R-XRF-SO	0	0.25	7440-39-3	Barium	109	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-937SS-R-XRF-SO	0	0.25	7439-92-1	Lead	184	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A939-EFR-D-SO	1	1.5	7439-92-1	Lead	180	=	2.06	1.03	4.11	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-947SS-L-XRF-SO	0	0.25	7440-39-3	Barium	549	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-947SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	18.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-947SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.52	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-972SS-C-SO	0	0.5	7439-92-1	Lead	179	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-936SS-L-XRF-SO	0	0.25	7439-92-1	Lead	178	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-947SS-R-XRF-SO	0	0.25	7440-39-3	Barium	261	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-947SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	10	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-910SS-R-XRF-SO	0	0.25	7439-92-1	Lead	174	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-911SS-C-SO	0	0.5	7439-92-1	Lead	170	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-948SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	14.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A929-EFR-D-SO	1	1.5	7439-92-1	Lead	170	=	2.06	1.03	4.13	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A-EF-D-SO-DUP03	1	1.5	7439-92-1	Lead	170	J	2.2	1.1	4.39	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-948SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	15.6	=	-	-	-	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-769SS-C-SO	0	0.5	7439-92-1	Lead	168	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-948SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	4.3	=	-	0.79	1.8	1	Release Assessment Report Parcel 24
24	2418A-948SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	180	=	-	0.091	2.4	1	Release Assessment Report Parcel 24
24	24A909-EFL-D-SO	1	1.5	7439-92-1	Lead	164	=	2.18	1.09	4.36	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A935-EFL-D-SO	1	1.5	7439-92-1	Lead	162	=	2.2	1.1	4.41	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-955SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	17.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRFC-SO	0	0.25	7439-92-1	Lead	160	J	-	0.26	0.88	1	Release Assessment Report Parcel 24
24	2418A-967SS-R-XRF-SO	0	0.25	7439-92-1	Lead	156	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRF-SO	0	0.25	7440-39-3	Barium	388	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	12.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-916SS-L-XRF-SO	0	0.25	7439-92-1	Lead	155	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	3.1	=	-	0.64	1.5	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	190	=	-	0.074	2	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.057	2	1	Release Assessment Report Parcel 24
24	2418A-956SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.022	=	-	0.0057	0.017	1	Release Assessment Report Parcel 24
24	2418A-976SS-L-XRF-SO	0	0.25	7439-92-1	Lead	155	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-952SS-L-XRF-SO	0	0.25	7439-92-1	Lead	154	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-R-XRF-SO	0	0.25	7440-39-3	Barium	389	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-956SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	19.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-930SS-L-XRF-SO	0	0.25	7439-92-1	Lead	152	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-049SS-C-SO	0	0.5	7439-92-1	Lead	151	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-957SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRF-SO	0	0.25	7440-39-3	Barium	77.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	10	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A936-EFR-D-SO	1	1.5	7439-92-1	Lead	151	=	2.1	1.05	4.21	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-964SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	2.5	=	-	0.63	1.4	1	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	210	=	-	0.073	1.9	1	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.31	J	-	0.039	0.48	1	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	12	=	-	0.056	1.9	1	Release Assessment Report Parcel 24
24	2418A-964SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.028	=	-	0.0059	0.018	1	Release Assessment Report Parcel 24
24	24A947-EFR-D-SO	1	1.5	7439-92-1	Lead	150	=	2.2	1.1	4.39	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-942SS-L-XRF-SO	0	0.25	7439-92-1	Lead	148	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-965SS-L-XRF-SO	0	0.25	7440-39-3	Barium	464	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-965SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	14	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-939SS-L-XRF-SO	0	0.25	7439-92-1	Lead	146	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-907SS-L-XRF-SO	0	0.25	7439-92-1	Lead	145	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-965SS-R-XRF-SO	0	0.25	7440-39-3	Barium	473	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-965SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	12.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-965SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	9.64	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A946-EFR-D-SO	1	1.5	7439-92-1	Lead	145	=	2.13	1.07	4.27	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-931SS-C-SO	0	0.5	7439-92-1	Lead	144	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A934-EFL-D-SO	1	1.5	7439-92-1	Lead	144	=	2.15	1.08	4.31	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A969-EFR-D-SO	1	1.5	7439-92-1	Lead	143	=	3.18	1.59	6.37	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-973SS-R-XRF-SO	0	0.25	7440-39-3	Barium	598	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-973SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	25.4	=	-	-	-	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-973SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	11.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-949SS-R-XRF-SO	0	0.25	7439-92-1	Lead	141	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-954SS-L-XRF-SO	0	0.25	7439-92-1	Lead	140	J	-	0.25	0.83	1	Release Assessment Report Parcel 24
24	2418A-974SS-L-XRF-SO	0	0.25	7440-39-3	Barium	196	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-974SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	12.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-961SS-C-SO	0	0.5	7439-92-1	Lead	140	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-902SS-L-XRF-SO	0	0.25	7439-92-1	Lead	139	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-974SS-R-XRF-SO	0	0.25	7440-39-3	Barium	436	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-906SS-R-XRF-SO	0	0.25	7439-92-1	Lead	135	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-901SS-C-SO	0	0.5	7439-92-1	Lead	134	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-975SS-L-XRF-SO	0	0.25	7440-39-3	Barium	461	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-975SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-971SS-R-XRF-SO	0	0.25	7439-92-1	Lead	133	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-958SS-R-XRF-SO	0	0.25	7439-92-1	Lead	133	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-957SS-L-XRF-SO	0	0.25	7439-92-1	Lead	132	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A964-EFR-D-SO	1	1.5	7439-92-1	Lead	131	=	2.17	1.08	4.34	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-965SS-R-XRF-SO	0	0.25	7439-92-1	Lead	128	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A927-EFL-D-SO	1	1.5	7439-92-1	Lead	127	=	2.44	1.22	4.87	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-913SS-L-XRF-SO	0	0.25	7439-92-1	Lead	126	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A926-EFR-D-SO	1	1.5	7439-92-1	Lead	126	=	2.77	1.38	5.53	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-926SS-R-XRF-SO	0	0.25	7439-92-1	Lead	123	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-973SS-L-XRF-SO	0	0.25	7439-92-1	Lead	123	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-915SS-R-XRF-SO	0	0.25	7439-92-1	Lead	121	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-964SS-L-XRF-SO	0	0.25	7439-92-1	Lead	120	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-949SS-L-XRF-SO	0	0.25	7439-92-1	Lead	119	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-951SS-L-XRF-SO	0	0.25	7439-92-1	Lead	118	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-950SS-L-XRF-SO	0	0.25	7439-92-1	Lead	117	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-944SS-L-XRF-SO	0	0.25	7439-92-1	Lead	116	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A952-EFL-D-SO	1	1.5	7439-92-1	Lead	113	=	2.18	1.09	4.35	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-924SS-L-XRF-SO	0	0.25	7439-92-1	Lead	111	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-969SS-L-XRF-SO	0	0.25	7439-92-1	Lead	110	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A939-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.42	=	0.21	0.1	0.41	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A939-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.02	=	0.012	0.005	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-937SS-L-XRF-SO	0	0.25	7439-92-1	Lead	108	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A941-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.22	J	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A941-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.011	J	0.012	0.0047	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-919SS-L-XRF-SO	0	0.25	7439-92-1	Lead	105	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A941-EFR-D-SO	1	1.5	7440-38-2	Arsenic	6.55	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A941-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.028	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-935SS-R-XRF-SO	0	0.25	7439-92-1	Lead	104	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A941-EFR-D-SO2	3	3.5	7440-38-2	Arsenic	3.79	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A941-EFR-D-SO2	3	3.5	7439-97-6	Mercury	0.042	=	0.014	0.0055	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A951-EFL-D-SO	1	1.5	7439-92-1	Lead	104	=	2.19	1.09	4.38	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A942-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.65	J	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A942-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A925-EFL-D-SO	1	1.5	7439-92-1	Lead	104	=	2.5	1.25	5	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A942-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.24	J	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A942-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.014	0.0055	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-916SS-R-XRF-SO	0	0.25	7439-92-1	Lead	102	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A943-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.66	J	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A943-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.027	=	0.014	0.0054	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-963SS-L-XRF-SO	0	0.25	7439-92-1	Lead	102	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A943-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.65	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A943-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-933SS-L-XRFC-SO	0	0.25	7439-92-1	Lead	100	J	-	0.28	0.92	1	Release Assessment Report Parcel 24
24	24A943-EFR-D-SO2	3.5	4	7440-38-2	Arsenic	4.55	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A943-EFR-D-SO2	3.5	4	7439-97-6	Mercury	0.045	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-935SS-L-XRFC-SO	0	0.25	7439-92-1	Lead	100	J	-	0.27	0.9	1	Release Assessment Report Parcel 24
24	24A944-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.01	J	0.23	0.12	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A944-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-956SS-R-XRF-SO	0	0.25	7439-92-1	Lead	98.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A944-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.73	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A944-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.028	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A905-EFR-D-SO	1	1.5	7439-92-1	Lead	96.8	=	2.26	1.13	4.51	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A944-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	4.03	=	0.23	0.12	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A944-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.028	=	0.012	0.0046	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-953SS-C-SO	0	0.5	7439-92-1	Lead	94.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A945-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.98	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A945-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.029	=	0.013	0.005	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-947SS-L-XRF-SO	0	0.25	7439-92-1	Lead	94	=	-	-	-	1	Release Assessment Report Parcel 24

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FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A946-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.58	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A946-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.04	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A975-EFR-D-SO	1	1.5	7439-92-1	Lead	93.7	=	2.09	1.05	4.18	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A946-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.99	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A946-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.038	=	0.012	0.0048	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-912SS-R-XRFC-SO	0	0.25	7439-92-1	Lead	93	=	-	0.31	1	1	Release Assessment Report Parcel 24
24	24A947-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.53	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A947-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.048	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-929SS-L-XRF-SO	0	0.25	7439-92-1	Lead	92.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A948-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.49	=	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A948-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.032	=	0.011	0.0045	0.011	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-968SS-R-XRF-SO	0	0.25	7439-92-1	Lead	92	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A948-EFL-D-SO2	1.5	2	7440-38-2	Arsenic	4.26	=	0.28	0.14	0.56	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A948-EFL-D-SO2	1.5	2	7439-97-6	Mercury	0.046	=	0.016	0.0066	0.016	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-908SS-L-XRF-SO	0	0.25	7439-92-1	Lead	90.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A948-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.38	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A948-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A970-EFR-D-SO	1	1.5	7439-92-1	Lead	90.7	=	2.21	1.11	4.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A950-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.13	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A950-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-963SS-R-XRF-SO	0	0.25	7439-92-1	Lead	87.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A950-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.56	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A950-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.018	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-917SS-R-XRF-SO	0	0.25	7439-92-1	Lead	87	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A951-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.96	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A951-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.018	=	0.012	0.0048	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-966SS-C-SO	0	0.5	7439-92-1	Lead	84.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A951-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.47	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A951-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.017	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A977-EFR-D-SO	1	1.5	7439-92-1	Lead	83	=	2.16	1.08	4.33	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A951-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	2.76	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A951-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.015	=	0.012	0.005	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-928SS-R-XRF-SO	0	0.25	7439-92-1	Lead	82.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A952-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.32	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A952-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-948SS-L-XRF-SO	0	0.25	7439-92-1	Lead	82.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A952-EFR-D-SO	1	1.5	7440-38-2	Arsenic	1.82	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A952-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A971-EFL-D-SO	1	1.5	7439-92-1	Lead	81.2	=	2.23	1.12	4.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.86	J	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.032	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A965-EFL-D-SO	1	1.5	7439-92-1	Lead	81	=	2.16	1.08	4.33	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFL-D-SO2	1.5	2	7440-38-2	Arsenic	3.64	=	0.23	0.12	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFL-D-SO2	1.5	2	7439-97-6	Mercury	0.026	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A923-EFL-D-SO	1	1.5	7439-92-1	Lead	79	=	2.25	1.13	4.51	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFL-D-SO3	2	2.5	7440-38-2	Arsenic	3.42	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFL-D-SO3	2	2.5	7439-97-6	Mercury	0.031	=	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-914SS-L-XRF-SO	0	0.25	7439-92-1	Lead	76.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A955-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.72	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.03	=	0.013	0.005	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-912SS-R-XRF-SO	0	0.25	7439-92-1	Lead	75.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A955-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	4.53	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.026	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-923SS-L-XRF-SO	0	0.25	7439-92-1	Lead	73.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A962-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.92	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A962-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.027	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-928SS-L-XRF-SO	0	0.25	7439-92-1	Lead	71.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A962-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.09	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A962-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.023	=	0.011	0.0043	0.011	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-910SS-L-XRF-SO	0	0.25	7439-92-1	Lead	70.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-933SS-R-XRF-SO	0	0.25	7439-92-1	Lead	68.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-913SS-R-XRF-SO	0	0.25	7439-92-1	Lead	68.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRF-SO	0	0.25	7440-38-2	Arsenic	43.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	25.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A942-EFL-D-SO	1	1.5	7439-92-1	Lead	66.6	=	2.26	1.13	4.52	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-945SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	3	=	-	0.7	1.6	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	170	=	-	0.081	2.1	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.22	J	-	0.044	0.53	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	12	=	-	0.062	2.1	1	Release Assessment Report Parcel 24
24	2418A-945SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.024	=	-	0.0056	0.017	1	Release Assessment Report Parcel 24
24	2418A-974SS-L-XRF-SO	0	0.25	7439-92-1	Lead	65.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-951SS-R-XRF-SO	0	0.25	7439-92-1	Lead	64.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRF-SO	0	0.25	7440-39-3	Barium	527	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	22.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	9.35	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-906SS-L-XRF-SO	0	0.25	7439-92-1	Lead	63.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRFC-SO	0	0.25	7440-38-2	Arsenic	3.8	=	-	0.58	1.3	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRFC-SO	0	0.25	7440-39-3	Barium	190	=	-	0.067	1.8	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	12	=	-	0.051	1.8	1	Release Assessment Report Parcel 24
24	2418A-945SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.023	=	-	0.0056	0.017	1	Release Assessment Report Parcel 24
24	2418A-974SS-R-XRF-SO	0	0.25	7439-92-1	Lead	62.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A917-EFR-D-SO	1	1.5	7439-92-1	Lead	62.7	J	2.23	1.12	4.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-946SS-L-XRF-SO	0	0.25	7440-39-3	Barium	313	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-946SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	16	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A903-EFL-D-SO	1	1.5	7439-92-1	Lead	61.7	=	2.26	1.13	4.52	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-926SS-L-XRF-SO	0	0.25	7439-92-1	Lead	61.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-904SS-L-XRF-SO	0	0.25	7439-92-1	Lead	61.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A933-EFR-D-SO	1	1.5	7439-92-1	Lead	61.2	=	2.16	1.08	4.32	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A-EF-D-SO-DUP04	1	1.5	7439-92-1	Lead	60.5	=	2.25	1.12	4.49	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A977-EFL-D-SO	1	1.5	7439-92-1	Lead	60.3	=	2.27	1.13	4.53	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-954SS-L-XRF-SO	0	0.25	7440-39-3	Barium	541	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-954SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	17.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-954SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A942-EFR-D-SO	1	1.5	7439-92-1	Lead	58.7	=	2.27	1.14	4.54	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-954SS-L-XRFC-SO	0	0.25	7440-38-2	Arsenic	2	=	-	0.61	1.4	1	Release Assessment Report Parcel 24
24	2418A-954SS-L-XRFC-SO	0	0.25	7440-39-3	Barium	230	=	-	0.07	1.8	1	Release Assessment Report Parcel 24
24	2418A-954SS-L-XRFC-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.053	1.8	1	Release Assessment Report Parcel 24
24	2418A-954SS-L-XRFC-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.0053	0.016	1	Release Assessment Report Parcel 24
24	24A920-EFR-D-SO	1	1.5	7439-92-1	Lead	58.5	=	2.12	1.06	4.23	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A907-EFR-D-SO	1	1.5	7439-92-1	Lead	57.9	=	2.17	1.09	4.34	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-954SS-R-XRF-SO	0	0.25	7440-39-3	Barium	403	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-954SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	17.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-957SS-R-XRF-SO	0	0.25	7439-92-1	Lead	57.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-942SS-R-XRF-SO	0	0.25	7439-92-1	Lead	56.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-955SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-971SS-L-XRF-SO	0	0.25	7439-92-1	Lead	56	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A970-EFL-D-SO	1	1.5	7439-92-1	Lead	55.7	=	2.12	1.06	4.23	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-962SS-R-XRF-SO	0	0.25	7440-39-3	Barium	324	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-962SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	17.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-923SS-R-XRF-SO	0	0.25	7439-92-1	Lead	55	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A905-EFL-D-SO	1	1.5	7439-92-1	Lead	55	=	2.18	1.09	4.36	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-963SS-L-XRF-SO	0	0.25	7440-38-2	Arsenic	26.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-963SS-L-XRF-SO	0	0.25	7440-39-3	Barium	255	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-963SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	26.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-970SS-L-XRF-SO	0	0.25	7439-92-1	Lead	54.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A971-EFR-D-SO	1	1.5	7439-92-1	Lead	53.4	=	2.12	1.06	4.24	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-963SS-R-XRF-SO	0	0.25	7440-39-3	Barium	292	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-963SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	14.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-958SS-L-XRF-SO	0	0.25	7439-92-1	Lead	51.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-975SS-L-XRF-SO	0	0.25	7439-92-1	Lead	50.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-964SS-L-XRF-SO	0	0.25	7440-39-3	Barium	360	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-964SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	18.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A-EF-D-SO-DUP01	1	1.5	7439-92-1	Lead	48.7	J	2.17	1.08	4.33	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A950-EFL-D-SO	1	1.5	7439-92-1	Lead	47.7	=	2.21	1.11	4.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A935-EFR-D-SO	1	1.5	7439-92-1	Lead	47.2	=	2.13	1.07	4.26	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A903-EFR-D-SO	1	1.5	7439-92-1	Lead	47.1	J	2.14	1.07	4.28	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-971SS-L-XRF-SO	0	0.25	7440-39-3	Barium	276	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-971SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.88	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-967SS-L-XRF-SO	0	0.25	7439-92-1	Lead	46.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A962SS-M-SO	0	0.5	7439-92-1	Lead	46	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-971SS-R-XRF-SO	0	0.25	7440-39-3	Barium	464	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-971SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	26.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-971SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	9.31	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-941SS-M-SO	0	0.5	7439-92-1	Lead	45.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A915-EFR-D-SO	1	1.5	7439-92-1	Lead	44.2	=	2.17	1.09	4.35	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A913-EFR-D-SO	1	1.5	7439-92-1	Lead	41.9	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A941-EFL-D-SO	1	1.5	7439-92-1	Lead	40	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-973SS-L-XRF-SO	0	0.25	7440-39-3	Barium	285	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-973SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A912-EFR-D-SO	1	1.5	7439-92-1	Lead	39.5	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A912-EFL-D-SO	1	1.5	7439-92-1	Lead	39.2	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-970SS-R-XRF-SO	0	0.25	7439-92-1	Lead	38.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A943-EFL-D-SO	1	1.5	7439-92-1	Lead	37.4	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A950-EFR-D-SO	1	1.5	7439-92-1	Lead	35.6	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-944SS-M-SO	0	0.5	7439-92-1	Lead	35.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-946SS-L-XRF-SO	0	0.25	7439-92-1	Lead	35.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A962-EFR-D-SO	1	1.5	7439-92-1	Lead	33.6	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-901SS-M-SO	0	0.5	7439-92-1	Lead	32.2	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-904SS-R-XRF-SO	0	0.25	7439-92-1	Lead	32	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A-EF-D-SO-DUP02	1	1.5	7439-92-1	Lead	31	=	2.24	1.12	4.49	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A917-EFL-D-SO	1	1.5	7439-92-1	Lead	30.5	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A916-EFR-D-SO	1	1.5	7439-92-1	Lead	29.8	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-944SS-R-XRF-SO	0	0.25	7439-92-1	Lead	28.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A914-EFR-D-SO	1	1.5	7439-92-1	Lead	28.6	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-968SS-M-SO	0	0.5	7439-92-1	Lead	28.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-908SS-M-SO	0	0.5	7439-92-1	Lead	26.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-925SS-L-XRF-SO	0	0.25	7439-92-1	Lead	26.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-947SS-M-SO	0	0.5	7439-92-1	Lead	26.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A909-EFR-D-SO	1	1.5	7439-92-1	Lead	25.3	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A917-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.75	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A917-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.025	=	0.014	0.0054	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-932SS-L-XRF-SO	0	0.25	7439-92-1	Lead	25	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A-EF-D-SO-DUP01	1	1.5	7440-38-2	Arsenic	2.68	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A-EF-D-SO-DUP01	1	1.5	7439-97-6	Mercury	0.032	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-914SS-M-SO	0	0.5	7439-92-1	Lead	24.9	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A917-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.09	J	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A917-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-945SS-M-SO	0	0.5	7439-92-1	Lead	23.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A918-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.89	=	0.27	0.13	0.53	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A918-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.043	=	0.016	0.0062	0.016	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-921SS-M-SO	0	0.5	7439-92-1	Lead	23.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A918-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.25	=	0.26	0.13	0.52	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A918-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.015	0.0061	0.015	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A948-EFL-D-SO2	1.5	2	7439-92-1	Lead	23.8	=	0.28	0.14	0.56	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A918-EFR-D-SO2	1.5	2	7440-38-2	Arsenic	3.4	=	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A918-EFR-D-SO2	1.5	2	7439-97-6	Mercury	0.023	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A915-EFL-D-SO	1	1.5	7439-92-1	Lead	23.8	=	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A920-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.73	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A920-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.026	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-912SS-M-SO	0	0.5	7439-92-1	Lead	23.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A920-EFL-D-SO2	1.5	2	7440-38-2	Arsenic	4.99	=	0.24	0.12	0.48	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A920-EFL-D-SO2	1.5	2	7439-97-6	Mercury	0.044	=	0.015	0.0058	0.015	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-976SS-R-XRF-SO	0	0.25	7439-92-1	Lead	23.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A920-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.69	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A920-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.012	0.0048	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-926SS-M-SO	0	0.5	7439-92-1	Lead	22.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A922-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.33	=	0.23	0.11	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A922-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.039	=	0.014	0.0056	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A955-EFR-D-SO2	2	2.5	7439-92-1	Lead	22.6	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A922-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.51	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A922-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-903SS-R-XRF-SO	0	0.25	7439-92-1	Lead	22.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A922-EFR-D-SO2	4	4.5	7440-38-2	Arsenic	5.02	=	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A922-EFR-D-SO2	4	4.5	7439-97-6	Mercury	0.06	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-903SS-M-SO	0	0.5	7439-92-1	Lead	22.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A923-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.14	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A923-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.005	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A946-EFL-D-SO	1	1.5	7439-92-1	Lead	22.1	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A923-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.95	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A923-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A963-EFL-D-SO	1	1.5	7439-92-1	Lead	22.1	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A923-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	3.51	=	0.21	0.1	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A923-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.014	=	0.012	0.0047	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-902SS-M-SO	0	0.5	7439-92-1	Lead	20.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A924-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.17	=	0.26	0.13	0.53	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A924-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.058	=	0.016	0.0062	0.016	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-943SS-M-SO	0	0.5	7439-92-1	Lead	20.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A925-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.52	=	0.25	0.12	0.5	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A925-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.014	0.0057	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-910SS-M-SO	0	0.5	7439-92-1	Lead	20.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A925-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.02	=	0.24	0.12	0.48	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A925-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.024	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-971SS-M-SO	0	0.5	7439-92-1	Lead	19.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A926-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.48	=	0.24	0.12	0.49	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A926-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.037	=	0.014	0.0056	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-974SS-M-SO	0	0.5	7439-92-1	Lead	19.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A926-EFL-D-SO2	2	2.5	7440-38-2	Arsenic	3.52	=	0.23	0.11	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A926-EFL-D-SO2	2	2.5	7439-97-6	Mercury	0.027	=	0.014	0.0055	0.014	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-920SS-M-SO	0	0.5	7439-92-1	Lead	19.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A926-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.39	=	0.28	0.14	0.55	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A926-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.015	0.0061	0.015	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-904SS-M-SO	0	0.5	7439-92-1	Lead	19.5	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A927-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.35	=	0.24	0.12	0.49	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A927-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.039	=	0.015	0.0059	0.015	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-917SS-M-SO	0	0.5	7439-92-1	Lead	19.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A929-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.1	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A929-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-909SS-M-SO	0	0.5	7439-92-1	Lead	19.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A929-EFL-D-SO2	1	1.5	7440-38-2	Arsenic	3.72	=	0.24	0.12	0.47	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A929-EFL-D-SO2	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-930SS-M-SO	0	0.5	7439-92-1	Lead	19.2	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A929-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.13	=	0.21	0.1	0.41	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A929-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.032	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-954SS-M-SO	0	0.5	7439-92-1	Lead	19.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A933-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.81	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A933-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.02	=	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-932SS-M-SO	0	0.5	7439-92-1	Lead	19	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A933-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.95	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A933-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.012	0.0047	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A914-EFL-D-SO	1	1.5	7439-92-1	Lead	18.9	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A934-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.98	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A934-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A922-EFR-D-SO2	4	4.5	7439-92-1	Lead	18.7	=	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A935-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.29	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A935-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.012	0.0048	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A913-EFL-D-SO	1	1.5	7439-92-1	Lead	18.7	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A935-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.99	=	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A935-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.042	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-927SS-M-SO	0	0.5	7439-92-1	Lead	18.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A936-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.99	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A936-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-942SS-M-SO	0	0.5	7439-92-1	Lead	18.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A936-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.41	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A936-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-955SS-M-SO	0	0.5	7439-92-1	Lead	18	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A938-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.37	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A938-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A943-EFR-D-SO2	3.5	4	7439-92-1	Lead	18	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A939-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.76	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A939-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.027	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-942SS-R-XRF-SO	0	0.25	7440-39-3	Barium	473	=	-	-	-	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A955-EFL-D-SO3	2	2.5	7439-92-1	Lead	18	=	0.23	0.12	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-970SS-M-SO	0	0.5	7439-92-1	Lead	17.9	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-943SS-L-XRF-SO	0	0.25	7440-39-3	Barium	530	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-943SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	13.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-905SS-M-SO	0	0.5	7439-92-1	Lead	17.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-949SS-M-SO	0	0.5	7439-92-1	Lead	17.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-943SS-R-XRF-SO	0	0.25	7440-39-3	Barium	143	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-916SS-M-SO	0	0.5	7439-92-1	Lead	17.6	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-906SS-M-SO	0	0.5	7439-92-1	Lead	17.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-944SS-L-XRF-SO	0	0.25	7440-39-3	Barium	498	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-944SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	22.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-944SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A941SS-M-SO	0	0.5	7439-92-1	Lead	17.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-922SS-M-SO	0	0.5	7439-92-1	Lead	17.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-944SS-R-XRF-SO	0	0.25	7440-39-3	Barium	679	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-944SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	14.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-944SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	12	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-923SS-M-SO	0	0.5	7439-92-1	Lead	17.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-953SS-M-SO	0	0.5	7439-92-1	Lead	17.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-951SS-L-XRF-SO	0	0.25	7440-39-3	Barium	658	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-951SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	22.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-951SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A958SS-M-SO	0	0.5	7439-92-1	Lead	16.9	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-931SS-M-SO	0	0.5	7439-92-1	Lead	16.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-951SS-R-XRF-SO	0	0.25	7440-39-3	Barium	248	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-951SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	11	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-958SS-M-SO	0	0.5	7439-92-1	Lead	16.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A921SS-M-SO	0	0.5	7439-92-1	Lead	16.5	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-952SS-L-XRF-SO	0	0.25	7439-97-6	Mercury	11.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-952SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	17.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-924SS-M-SO	0	0.5	7439-92-1	Lead	16.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A969-EFL-D-SO2	2	2.5	7439-92-1	Lead	16.3	=	0.24	0.12	0.47	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-952SS-R-XRF-SO	0	0.25	7440-39-3	Barium	309	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-952SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	14.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-937SS-M-SO	0	0.5	7439-92-1	Lead	16.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A926-EFL-D-SO2	2	2.5	7439-92-1	Lead	16.2	=	0.23	0.11	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-969SS-M-SO	0	0.5	7439-92-1	Lead	16.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A849SS-M-SO	0	0.5	7439-92-1	Lead	16.1	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-957SS-M-SO	0	0.5	7439-92-1	Lead	16.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A956SS-M-SO	0	0.5	7439-92-1	Lead	16	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-962SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	15.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A944-EFR-D-SO2	2	2.5	7439-92-1	Lead	15.9	=	0.23	0.12	0.46	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A970SS-M-SO	0	0.5	7439-92-1	Lead	15.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-969SS-L-XRF-SO	0	0.25	7440-39-3	Barium	514	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-969SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	16.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-969SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	9.09	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-913SS-M-SO	0	0.5	7439-92-1	Lead	15.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A961SS-M-SO	0	0.5	7439-92-1	Lead	15.8	=	4.9	1	-	5	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-969SS-R-XRF-SO	0	0.25	7440-39-3	Barium	329	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-969SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	7.75	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-951SS-M-SO	0	0.5	7439-92-1	Lead	15.8	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A918-EFR-D-SO2	1.5	2	7439-92-1	Lead	15.7	=	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-970SS-L-XRF-SO	0	0.25	7439-97-6	Mercury	17	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-970SS-L-XRF-SO	0	0.25	7440-39-3	Barium	373	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-970SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	10.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A916-EFL-D-SO	1	1.5	7439-92-1	Lead	15.7	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-977SS-M-SO	0	0.5	7439-92-1	Lead	15.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-970SS-R-XRF-SO	0	0.25	7440-39-3	Barium	555	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-970SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	18.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-970SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	12.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-977SS-R-XRF-SO	0	0.25	7440-39-3	Barium	475	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-977SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	16.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-935SS-M-SO	0	0.5	7439-92-1	Lead	15.6	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A901SS-M-SO	0	0.5	7439-92-1	Lead	15.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-915SS-M-SO	0	0.5	7439-92-1	Lead	15.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-934SS-M-SO	0	0.5	7439-92-1	Lead	15.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-973SS-M-SO	0	0.5	7439-92-1	Lead	15.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A941-EFR-D-SO2	3	3.5	7439-92-1	Lead	15.3	=	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-976SS-M-SO	0	0.5	7439-92-1	Lead	15	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-925SS-M-SO	0	0.5	7439-92-1	Lead	14.9	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-929SS-M-SO	0	0.5	7439-92-1	Lead	14.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A908SS-M-SO	0	0.5	7439-92-1	Lead	14.8	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A933SS-M-SO	0	0.5	7439-92-1	Lead	14.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-919SS-M-SO	0	0.5	7439-92-1	Lead	14.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-962SS-M-SO	0	0.5	7439-92-1	Lead	14.5	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A920-EFL-D-SO2	1.5	2	7439-92-1	Lead	14.5	=	0.24	0.12	0.48	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A920ASS-M-SO	0	0.5	7439-92-1	Lead	14.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A973SS-M-SO	0	0.5	7439-92-1	Lead	14.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A905SS-M-SO	0	0.5	7439-92-1	Lead	14.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A079SS-M-SO	0	0.5	7439-92-1	Lead	14.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A929SS-M-SO	0	0.5	7439-92-1	Lead	14.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A930SS-M-SO	0	0.5	7439-92-1	Lead	14.4	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A901ASS-M-SO	0	0.5	7439-92-1	Lead	14.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A-EF-D-SO-DUP04	1	1.5	7440-38-2	Arsenic	4.1	J	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A-EF-D-SO-DUP04	1	1.5	7439-97-6	Mercury	0.034	=	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A914SS-M-SO	0	0.5	7439-92-1	Lead	14.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A903-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.09	J	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A903-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.029	=	0.012	0.0048	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-918SS-M-SO	0	0.5	7439-92-1	Lead	14.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A-EF-D-SO-DUP03	1	1.5	7440-38-2	Arsenic	2.27	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A-EF-D-SO-DUP03	1	1.5	7439-97-6	Mercury	0.031	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A929-EFL-D-SO2	1	1.5	7439-92-1	Lead	14.3	=	0.24	0.12	0.47	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A903-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.33	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A903-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.0072	J	0.012	0.0046	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-960SS-M-SO	0	0.5	7439-92-1	Lead	14.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A905-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.09	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A905-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-950SS-M-SO	0	0.5	7439-92-1	Lead	14.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A905-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.5	J	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A905-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.025	=	0.013	0.005	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A954SS-M-SO	0	0.5	7439-92-1	Lead	14.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A907-EFR-D-SO	1	1.5	7440-38-2	Arsenic	1.7	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A907-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.011	J	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-975SS-M-SO	0	0.5	7439-92-1	Lead	14.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A909-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.3	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A909-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.01	J	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A957SS-M-SO	0	0.5	7439-92-1	Lead	14.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A909-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.11	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A909-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.019	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-948SS-M-SO	0	0.5	7439-92-1	Lead	14	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A912-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.19	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A912-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.0091	J	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A903SS-M-SO	0	0.5	7439-92-1	Lead	14	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A912-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.08	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A912-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.019	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A945SS-M-SO	0	0.5	7439-92-1	Lead	14	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A913-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.86	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A913-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.0055	J	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A920SS-M-SO	0	0.5	7439-92-1	Lead	13.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A913-EFR-D-SO	1	1.5	7440-38-2	Arsenic	1.77	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A913-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.01	J	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A944SS-M-SO	0	0.5	7439-92-1	Lead	13.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A914-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.33	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A914-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.0072	J	0.011	0.0044	0.011	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A964-EFL-D-SO	1	1.5	7439-92-1	Lead	13.9	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A914-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.68	J	0.21	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A914-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.014	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A931SS-M-SO	0	0.5	7439-92-1	Lead	13.8	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A915-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.02	J	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A915-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.018	=	0.013	0.005	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-911SS-M-SO	0	0.5	7439-92-1	Lead	13.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A915-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.28	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A915-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.012	0.005	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-928SS-M-SO	0	0.5	7439-92-1	Lead	13.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A916-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.75	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A916-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.019	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A907SS-M-SO	0	0.5	7439-92-1	Lead	13.6	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A916-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.12	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A916-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-964SS-M-SO	0	0.5	7439-92-1	Lead	13.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A-EF-D-SO-DUP02	1	1.5	7440-38-2	Arsenic	3.78	J	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A-EF-D-SO-DUP02	1	1.5	7439-97-6	Mercury	0.033	=	0.013	0.0054	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-948SS-R-XRFC-SO	0	0.25	7440-43-9	Cadmium	0.28	J	-	0.049	0.6	1	Release Assessment Report Parcel 24
24	2418A-948SS-R-XRFC-SO	0	0.25	7440-47-3	Chromium	12	=	-	0.07	2.4	1	Release Assessment Report Parcel 24
24	2418A-948SS-R-XRFC-SO	0	0.25	7439-97-6	Mercury	0.03	=	-	0.006	0.019	1	Release Assessment Report Parcel 24
24	2418A-907SS-M-SO	0	0.5	7439-92-1	Lead	13.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A904SS-M-SO	0	0.5	7439-92-1	Lead	13.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-949SS-L-XRF-SO	0	0.25	7440-39-3	Barium	328	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-949SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	11	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-949SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	15.6	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A901BSS-M-SO	0	0.5	7439-92-1	Lead	13.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A968SS-M-SO	0	0.5	7439-92-1	Lead	13.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-949SS-R-XRF-SO	0	0.25	7440-39-3	Barium	454	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-949SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	18.4	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A913SS-M-SO	0	0.5	7439-92-1	Lead	13.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A937SS-M-SO	0	0.5	7439-92-1	Lead	13.1	=	5	1	-	5	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418A-950SS-L-XRF-SO	0	0.25	7440-39-3	Barium	462	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-950SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	14.1	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A927SS-M-SO	0	0.5	7439-92-1	Lead	13.1	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-960SS-C-SO	0	0.5	7439-92-1	Lead	13.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-950SS-R-XRF-SO	0	0.25	7440-39-3	Barium	428	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-950SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	12.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A918SS-M-SO	0	0.5	7439-92-1	Lead	13.1	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A935ASS-M-SO	0	0.5	7439-92-1	Lead	13	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-957SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	15.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A919SS-M-SO	0	0.5	7439-92-1	Lead	12.9	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-939SS-M-SO	0	0.5	7439-92-1	Lead	12.8	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-958SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	11.5	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-936SS-M-SO	0	0.5	7439-92-1	Lead	12.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-956SS-M-SO	0	0.5	7439-92-1	Lead	12.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-958SS-R-XRF-SO	0	0.25	7440-39-3	Barium	180	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-958SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	12.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A948-EFR-D-SO	1	1.5	7439-92-1	Lead	12.7	=	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A923-EFR-D-SO2	2	2.5	7439-92-1	Lead	12.7	=	0.21	0.1	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A902SS-M-SO	0	0.5	7439-92-1	Lead	12.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A948SS-M-SO	0	0.5	7439-92-1	Lead	12.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A971SS-M-SO	0	0.5	7439-92-1	Lead	12.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-967SS-L-XRF-SO	0	0.25	7440-39-3	Barium	362	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-967SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	11.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	24A976-EFR-D-SO2	3	3.5	7439-92-1	Lead	12.7	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-965SS-M-SO	0	0.5	7439-92-1	Lead	12.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-967SS-R-XRF-SO	0	0.25	7440-39-3	Barium	168	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-967SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	15.9	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-967SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	8.62	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-940SS-M-SO	0	0.5	7439-92-1	Lead	12.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A922SS-M-SO	0	0.5	7439-92-1	Lead	12.4	=	0.98	0.21	-	1	Release Assessment Report Parcel 24
24	2418A-968SS-L-XRF-SO	0	0.25	7440-39-3	Barium	361	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-968SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	20	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-963SS-M-SO	0	0.5	7439-92-1	Lead	12.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A926SS-M-SO	0	0.5	7439-92-1	Lead	12.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-968SS-R-XRF-SO	0	0.25	7440-39-3	Barium	516	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-968SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	12.2	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A379SS-M-SO	0	0.5	7439-92-1	Lead	11.9	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A943SS-M-SO	0	0.5	7439-92-1	Lead	11.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-975SS-R-XRF-SO	0	0.25	7440-39-3	Barium	376	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-975SS-R-XRF-SO	0	0.25	7440-47-3	Chromium	8.58	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-938SS-M-SO	0	0.5	7439-92-1	Lead	11.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-946SS-M-SO	0	0.5	7439-92-1	Lead	11.7	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-976SS-L-XRF-SO	0	0.25	7440-39-3	Barium	678	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-976SS-L-XRF-SO	0	0.25	7440-43-9	Cadmium	18.7	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-976SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	14.3	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A912SS-M-SO	0	0.5	7439-92-1	Lead	11.6	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A928SS-M-SO	0	0.5	7439-92-1	Lead	11.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-976SS-R-XRF-SO	0	0.25	7440-39-3	Barium	395	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-976SS-R-XRF-SO	0	0.25	7440-43-9	Cadmium	17.6	=	-	-	-	1	Release Assessment Report Parcel 24

Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	2418Y-A976SS-M-SO	0	0.5	7439-92-1	Lead	11.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-959SS-C-SO	0	0.5	7439-92-1	Lead	11.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-977SS-L-XRF-SO	0	0.25	7440-39-3	Barium	188	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418A-977SS-L-XRF-SO	0	0.25	7440-47-3	Chromium	15.8	=	-	-	-	1	Release Assessment Report Parcel 24
24	2418Y-A938SS-M-SO	0	0.5	7439-92-1	Lead	11.6	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A949SS-M-SO	0	0.5	7439-92-1	Lead	11.5	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A963SS-M-SO	0	0.5	7439-92-1	Lead	11.4	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-961SS-M-SO	0	0.5	7439-92-1	Lead	11.4	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A951SS-M-SO	0	0.5	7439-92-1	Lead	11.4	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A917SS-M-SO	0	0.5	7439-92-1	Lead	11.4	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A936SS-M-SO	0	0.5	7439-92-1	Lead	11.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-972SS-M-SO	0	0.5	7439-92-1	Lead	11.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418A-952SS-M-SO	0	0.5	7439-92-1	Lead	11.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A924SS-M-SO	0	0.5	7439-92-1	Lead	11.2	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-967SS-M-SO	0	0.5	7439-92-1	Lead	11.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A955SS-M-SO	0	0.5	7439-92-1	Lead	11.1	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A916SS-M-SO	0	0.5	7439-92-1	Lead	11.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A960SS-M-SO	0	0.5	7439-92-1	Lead	11	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A917ASS-M-SO	0	0.5	7439-92-1	Lead	11	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418A-933SS-M-SO	0	0.5	7439-92-1	Lead	10.9	=	5	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A950SS-M-SO	0	0.5	7439-92-1	Lead	10.9	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A951-EFR-D-SO2	2	2.5	7439-92-1	Lead	10.8	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A902ASS-M-SO	0	0.5	7439-92-1	Lead	10.8	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	2418Y-A940SS-M-SO	0	0.5	7439-92-1	Lead	10.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A963-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.64	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A963-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.028	=	0.012	0.0048	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A942SS-M-SO	0	0.5	7439-92-1	Lead	10.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A964-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.89	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A964-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.025	=	0.013	0.005	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A935SS-M-SO	0	0.5	7439-92-1	Lead	10.5	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A964-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.72	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A964-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.029	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A197SS-M-SO	0	0.5	7439-92-1	Lead	10.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A965-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.19	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A965-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A952SS-M-SO	0	0.5	7439-92-1	Lead	10.2	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A969-EFL-D-SO	1	1.5	7440-38-2	Arsenic	7.1	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A969-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.041	=	0.011	0.0044	0.011	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418A-966SS-M-SO	0	0.5	7439-92-1	Lead	10.1	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A969-EFL-D-SO2	2	2.5	7440-38-2	Arsenic	4.46	=	0.24	0.12	0.47	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

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FWDA, McKinley County, New Mexico

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A969-EFL-D-SO2	2	2.5	7439-97-6	Mercury	0.034	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A911SS-M-SO	0	0.5	7439-92-1	Lead	10.1	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A969-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.69	J	0.32	0.16	0.64	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A969-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.04	=	0.019	0.0077	0.019	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A974SS-M-SO	0	0.5	7439-92-1	Lead	10.1	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A970-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.43	J	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A970-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.023	=	0.013	0.0051	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A910SS-M-SO	0	0.5	7439-92-1	Lead	10	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A970-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.75	J	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A970-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.031	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A933-EFL-D-SO	1	1.5	7439-92-1	Lead	10	=	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A971-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.05	J	0.22	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A971-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.053	=	0.012	0.005	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A911ASS-M-SO	0	0.5	7439-92-1	Lead	9.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A971-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.7	J	0.21	0.11	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A971-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.045	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A932SS-M-SO	0	0.5	7439-92-1	Lead	9.5	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A975-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.34	J	0.21	0.1	0.42	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A975-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.012	0.005	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A964SS-M-SO	0	0.5	7439-92-1	Lead	9.5	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A976-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.7	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A976-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.024	=	0.013	0.005	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A969SS-M-SO	0	0.5	7439-92-1	Lead	9.3	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A976-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3	J	0.21	0.1	0.41	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A976-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.023	=	0.012	0.0049	0.012	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A966SS-M-SO	0	0.5	7439-92-1	Lead	8.8	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A976-EFR-D-SO2	3	3.5	7440-38-2	Arsenic	4.2	=	0.22	0.11	0.44	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A976-EFR-D-SO2	3	3.5	7439-97-6	Mercury	0.017	=	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A909SS-M-SO	0	0.5	7439-92-1	Lead	8.7	=	5	1	-	5	Release Assessment Report Parcel 24
24	24A977-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.61	J	0.23	0.11	0.45	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

**Appendix C Table 1: Summary of RCRA 8 Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution	Document
24	24A977-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.013	J	0.013	0.0053	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A953SS-M-SO	0	0.5	7439-92-1	Lead	8	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A977-EFR-D-SO	1	1.5	7440-38-2	Arsenic	0.964	J	0.22	0.11	0.43	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A977-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.014	=	0.013	0.0052	0.013	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	2418Y-A359SS-M-SO	0	0.5	7439-92-1	Lead	7.3	=	4.9	1	-	5	Release Assessment Report Parcel 24
24	24A977-EFR-D-SO2	1.5	2	7440-38-2	Arsenic	1.58	=	0.26	0.13	0.52	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A
24	24A977-EFR-D-SO2	1.5	2	7439-97-6	Mercury	0.0086	J	0.015	0.006	0.015	1	Final Revision 2 Permittee-Initiated Interim Measures report Parcel 24- Igloos Block A

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1051-SS-C-SO	0	0.5	7439-92-1	Lead	540	J	0.91	0.27	-	1
6	0628B-1004-SS-C-SO	0	0.5	7439-92-1	Lead	490	J	0.96	0.29	-	1
6	0628B-1021-SS-C-SO	0	0.5	7439-92-1	Lead	450	=	0.9	0.27	-	1
6	0628B-1005-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.4	=	2.6	0.68	-	1
6	0628B-1005-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2	0.078	-	1
6	0628B-1005-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.51	0.042	-	1
6	0628B-1005-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.6	0.059	-	1
6	0628B-1005-SS-C-SO	0	0.5	7439-97-6	Mercury	0.031	=	0.016	0.0053	-	1
6	0628B-1009-SS-C-SO	0	0.5	7439-92-1	Lead	450	J	0.92	0.28	-	1
6	1641K-1524LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	432	=	0.147	0.294	0.979	0.943
6	0628B-1032-SS-C-SO	0	0.5	7439-92-1	Lead	390	J	0.91	0.27	-	1
6	0628B-1058-SS-C-SO	0	0.5	7439-92-1	Lead	380	J	0.97	0.29	-	1
6	0628B-1002-SS-C-SO	0	0.5	7439-92-1	Lead	360	J	0.87	0.26	-	1
6	0628B-1006-SS-C-SO	0	0.5	7440-38-2	Arsenic	5.6	=	2.5	0.67	-	1
6	0628B-1006-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	2	0.077	-	1
6	0628B-1006-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.45	J	0.51	0.041	-	1
6	0628B-1006-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.5	0.059	-	1
6	0628B-1006-SS-C-SO	0	0.5	7439-97-6	Mercury	0.034	=	0.017	0.0055	-	1
6	0628B-1001-SS-C-SO	0	0.5	7439-92-1	Lead	350	J	0.88	0.26	-	1
6	0628B-1006-SS-C-SO	0	0.5	7439-92-1	Lead	340	J	0.91	0.27	-	1
6	0628B-1031-SS-C-SO	0	0.5	7439-92-1	Lead	310	J	0.94	0.28	-	1
6	0628B-1054-SS-C-SO	0	0.5	7439-92-1	Lead	300	J	0.88	0.27	-	1
6	0628B-1013-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.1	=	2.4	0.64	-	1
6	0628B-1013-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2	0.074	-	1
6	0628B-1013-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.32	J	0.49	0.04	-	1
6	0628B-1013-SS-C-SO	0	0.5	7440-47-3	Chromium	8.6	=	3.4	0.057	-	1
6	0628B-1013-SS-C-SO	0	0.5	7439-97-6	Mercury	0.025	=	0.017	0.0055	-	1
6	0628B-1017-SS-C-SO	0	0.5	7439-92-1	Lead	290	=	0.9	0.27	-	1
6	0628B-1008-SS-C-SO	0	0.5	7439-92-1	Lead	260	J	0.93	0.28	-	1
6	0628B-1014-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.8	=	2.2	0.59	-	1
6	0628B-1014-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	1.8	0.068	-	1
6	0628B-1014-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.19	J	0.45	0.037	-	1
6	0628B-1014-SS-C-SO	0	0.5	7440-47-3	Chromium	8.6	=	3.1	0.052	-	1
6	0628B-1014-SS-C-SO	0	0.5	7439-97-6	Mercury	0.022	=	0.017	0.0055	-	1
6	0628B-1072-SS-C-SO	0	0.5	7439-92-1	Lead	260	J	0.94	0.28	-	1
6	0628B-1005-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.92	0.28	-	1
6	0628B-1007-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.94	0.28	-	1
6	0628B-1015-SS-C-SO	0	0.5	7439-92-1	Lead	250	=	0.84	0.25	-	1
6	0628B-1034-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.93	0.28	-	1
6	0628B-1059-SS-C-SO	0	0.5	7439-92-1	Lead	250	J	0.97	0.29	-	1
6	1641K-1545LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	242	=	0.139	0.278	0.927	0.901
6	0628B-1022-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.5	=	2.4	0.63	-	1
6	0628B-1022-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	1.9	0.072	-	1
6	0628B-1022-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.47	0.039	-	1
6	0628B-1022-SS-C-SO	0	0.5	7440-47-3	Chromium	9.7	=	3.3	0.055	-	1
6	0628B-1022-SS-C-SO	0	0.5	7439-97-6	Mercury	0.03	=	0.016	0.0052	-	1
6	0628B-1031-SS-C-SODUP	0	0.5	7439-92-1	Lead	220	J	0.96	0.29	-	1
6	0628B-1060-SS-C-SO	0	0.5	7439-92-1	Lead	200	J	0.96	0.29	-	1
6	0628B-1023-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.3	0.61	-	1
6	0628B-1023-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	1.8	0.07	-	1
6	0628B-1023-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.46	0.038	-	1
6	0628B-1023-SS-C-SO	0	0.5	7440-47-3	Chromium	7.1	=	3.2	0.054	-	1
6	0628B-1023-SS-C-SO	0	0.5	7439-97-6	Mercury	0.023	=	0.017	0.0056	-	1
6	0628B-1048-SS-C-SO	0	0.5	7439-92-1	Lead	190	J	0.9	0.27	-	1
6	0628B-1074-SS-C-SO	0	0.5	7439-92-1	Lead	180	J	0.97	0.29	-	1
6	0628B-1013-SS-C-SO	0	0.5	7439-92-1	Lead	170	=	0.88	0.26	-	1
6	0628B-1022-SS-C-SO	0	0.5	7439-92-1	Lead	170	=	0.85	0.26	-	1
6	0628B-1003-SS-C-SO	0	0.5	7440-38-2	Arsenic	5.2	=	2.3	0.6	-	1
6	0628B-1003-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	1.8	0.069	-	1
6	0628B-1003-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.21	J	0.45	0.037	-	1
6	0628B-1003-SS-C-SO	0	0.5	7440-47-3	Chromium	7.3	=	3.2	0.052	-	1
6	0628B-1003-SS-C-SO	0	0.5	7439-97-6	Mercury	0.021	=	0.017	0.0054	-	1
6	0628B-1066-SS-C-SO	0	0.5	7439-92-1	Lead	160	J	0.99	0.3	-	1
6	0628B-1055-SS-C-SO	0	0.5	7439-92-1	Lead	160	J	1	0.3	-	1
6	0628B-1004-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.7	=	2.7	0.7	-	1
6	0628B-1004-SS-C-SO	0	0.5	7440-39-3	Barium	130	=	2.1	0.081	-	1
6	0628B-1004-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.33	J	0.53	0.044	-	1
6	0628B-1004-SS-C-SO	0	0.5	7440-47-3	Chromium	9.9	J	3.7	0.062	-	1
6	0628B-1004-SS-C-SO	0	0.5	7439-97-6	Mercury	0.034	=	0.019	0.0061	-	1
6	0628B-1035-SS-C-SO	0	0.5	7439-92-1	Lead	150	J	0.83	0.25	-	1
6	0628B-1045-SS-C-SO	0	0.5	7439-92-1	Lead	140	J	1	0.3	-	1
6	0628B-1011-SS-C-SO	0	0.5	7440-38-2	Arsenic	3	=	2.3	0.6	-	1
6	0628B-1011-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	1.8	0.069	-	1
6	0628B-1011-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.25	J	0.45	0.037	-	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1011-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.2	0.053	-	1
6	0628B-1011-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0056	-	1
6	0628B-1036-SS-C-SO	0	0.5	7439-92-1	Lead	140	J	0.81	0.24	-	1
6	0628B-1073-SS-C-SO	0	0.5	7439-92-1	Lead	140	J	0.99	0.3	-	1
6	0628B-1012-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.6	0.68	-	1
6	0628B-1012-SS-C-SO	0	0.5	7440-39-3	Barium	130	=	2	0.078	-	1
6	0628B-1012-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.51	0.042	-	1
6	0628B-1012-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.6	0.059	-	1
6	0628B-1012-SS-C-SO	0	0.5	7439-97-6	Mercury	0.026	=	0.018	0.006	-	1
6	0628B-1006REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	131	=	0.291	0.145	0.97	0.901
6	1641K-1525LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	131	=	0.145	0.29	0.968	0.926
6	1641K-1525LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	131	=	0.134	0.267	0.891	0.862
6	0628B-1018-SS-C-SO	0	0.5	7439-92-1	Lead	130	=	0.97	0.29	-	1
6	0628B-1020-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.8	=	2.4	0.64	-	1
6	0628B-1020-SS-C-SO	0	0.5	7440-39-3	Barium	140	=	1.9	0.073	-	1
6	0628B-1020-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.35	J	0.48	0.04	-	1
6	0628B-1020-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.4	0.056	-	1
6	0628B-1020-SS-C-SO	0	0.5	7439-97-6	Mercury	0.025	=	0.018	0.0058	-	1
6	0628B-1053-SS-C-SO	0	0.5	7439-92-1	Lead	130	J	0.99	0.3	-	1
6	0628B-1012-SS-C-SO	0	0.5	7439-92-1	Lead	120	=	0.92	0.28	-	1
6	0628B-1021-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.7	=	2.5	0.66	-	1
6	0628B-1021-SS-C-SO	0	0.5	7440-39-3	Barium	140	=	2	0.076	-	1
6	0628B-1021-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.5	0.041	-	1
6	0628B-1021-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.5	0.058	-	1
6	0628B-1021-SS-C-SO	0	0.5	7439-97-6	Mercury	0.027	=	0.016	0.0052	-	1
6	0628B-1010-SS-C-SO	0	0.5	7439-92-1	Lead	120	J	0.95	0.28	-	1
6	0628B-1001-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.7	=	2.4	0.64	-	1
6	0628B-1001-SS-C-SO	0	0.5	7440-39-3	Barium	110	=	2	0.074	-	1
6	0628B-1001-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.34	J	0.49	0.04	-	1
6	0628B-1001-SS-C-SO	0	0.5	7440-47-3	Chromium	8.6	=	3.4	0.057	-	1
6	0628B-1001-SS-C-SO	0	0.5	7439-97-6	Mercury	0.027	=	0.018	0.0057	-	1
6	0628B-1071-SS-C-SO	0	0.5	7439-92-1	Lead	120	J	1	0.3	-	1
6	0628B-1050-SS-C-SO	0	0.5	7439-92-1	Lead	120	J	0.84	0.25	-	1
6	0628B-1003-SS-C-SO	0	0.5	7439-92-1	Lead	110	J	0.81	0.24	-	1
6	0628B-1090-SS-C-SO	0	0.5	7439-92-1	Lead	110	=	0.92	0.28	-	1
6	0628B-1002-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.1	=	2.4	0.64	-	1
6	0628B-1002-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	1.9	0.073	-	1
6	0628B-1002-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.48	0.039	-	1
6	0628B-1002-SS-C-SO	0	0.5	7440-47-3	Chromium	7.7	=	3.4	0.056	-	1
6	0628B-1002-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.016	0.0051	-	1
6	1641K-1543REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	104	=	0.143	0.285	0.951	0.926
6	0628B-1009-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.3	=	2.6	0.68	-	1
6	0628B-1009-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2	0.078	-	1
6	0628B-1009-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.79	=	0.51	0.042	-	1
6	0628B-1009-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.6	0.059	-	1
6	0628B-1009-SS-C-SO	0	0.5	7439-97-6	Mercury	0.047	=	0.018	0.0057	-	1
6	0628B-1009REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	101	=	0.313	0.156	1.04	0.926
6	0628B-1044-SS-C-SO	0	0.5	7439-92-1	Lead	100	J	0.91	0.27	-	1
6	0628B-1037-SS-C-SO	0	0.5	7439-92-1	Lead	100	J	0.9	0.27	-	1
6	0628B-1006LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	98.2	=	0.303	0.151	1.01	0.909
6	0628B-1030-SS-C-SO	0	0.5	7439-92-1	Lead	97	J	0.82	0.25	-	1
6	0628B-1010-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.2	=	2.6	0.7	-	1
6	0628B-1010-SS-C-SO	0	0.5	7440-39-3	Barium	130	=	2.1	0.08	-	1
6	0628B-1010-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.37	J	0.53	0.043	-	1
6	0628B-1010-SS-C-SO	0	0.5	7440-47-3	Chromium	8.9	=	3.7	0.061	-	1
6	0628B-1010-SS-C-SO	0	0.5	7439-97-6	Mercury	0.028	=	0.017	0.0056	-	1
6	0628B-1005LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	94.8	J	0.319	0.16	1.06	0.971
6	0628B-1017-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0054	-	1
6	0628B-1014-SS-C-SO	0	0.5	7439-92-1	Lead	93	=	0.8	0.24	-	1
6	0628B-1052-SS-C-SODUP	0	0.5	7439-92-1	Lead	89	J	0.86	0.26	-	1
6	0628B-1033-SS-C-SO	0	0.5	7439-92-1	Lead	88	J	0.8	0.24	-	1
6	0628B-1018-SS-C-SO	0	0.5	7440-38-2	Arsenic	8.1	=	2.7	0.71	-	1
6	0628B-1018-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	2.2	0.082	-	1
6	0628B-1018-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.27	J	0.54	0.044	-	1
6	0628B-1018-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.8	0.063	-	1
6	0628B-1070-SS-C-SO	0	0.5	7439-92-1	Lead	86	J	0.92	0.28	-	1
6	0628B-1057-SS-C-SO	0	0.5	7439-92-1	Lead	83	J	1.1	0.32	-	1
6	0628B-1019-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.6	=	2.4	0.63	-	1
6	0628B-1019-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.9	0.072	-	1
6	0628B-1019-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.48	0.039	-	1
6	0628B-1019-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.3	0.055	-	1
6	0628B-1019-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.017	0.0055	-	1
6	0628B-1008LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	78.5	=	0.296	0.148	0.988	0.909
6	0628B-1007-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.6	0.69	-	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1007-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2.1	0.079	-	1
6	0628B-1007-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.34	J	0.52	0.043	-	1
6	0628B-1007-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.6	0.06	-	1
6	0628B-1007-SS-C-SO	0	0.5	7439-97-6	Mercury	0.027	=	0.018	0.0058	-	1
6	0628B-1023-SS-C-SO	0	0.5	7439-92-1	Lead	78	=	0.83	0.25	-	1
6	0628B-1004LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	77.1	=	0.299	0.15	0.998	0.917
6	0628B-1094-SS-C-SO	0	0.5	7439-92-1	Lead	76	=	0.99	0.3	-	1
6	0628B-1052-SS-C-SO	0	0.5	7439-92-1	Lead	69	J	0.92	0.28	-	1
6	0628B-1008-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.1	=	2.6	0.68	-	1
6	0628B-1008-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2.1	0.079	-	1
6	0628B-1008-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.24	J	0.52	0.042	-	1
6	0628B-1008-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.6	0.06	-	1
6	0628B-1008-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0059	-	1
6	0628B-1058REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	66.1	J	0.31	0.155	1.03	0.971
6	0628B-1062-SS-C-SO	0	0.5	7439-92-1	Lead	64	J	0.86	0.26	-	1
6	0628B-1100-SS-C-SO	0	0.5	7439-92-1	Lead	64	=	0.97	0.29	-	1
6	0628B-1011-SS-C-SO	0	0.5	7439-92-1	Lead	63	=	0.82	0.25	-	1
6	0628B-1015-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.6	=	2.3	0.61	-	1
6	0628B-1015-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.9	0.071	-	1
6	0628B-1015-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.42	J	0.46	0.038	-	1
6	0628B-1015-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.3	0.054	-	1
6	0628B-1015-SS-C-SO	0	0.5	7439-97-6	Mercury	0.022	=	0.018	0.0058	-	1
6	0628B-1024-SS-C-SO	0	0.5	7439-92-1	Lead	63	=	0.89	0.27	-	1
6	0628B-1049-SS-C-SO	0	0.5	7439-92-1	Lead	63	J	0.93	0.28	-	1
6	0628B-1065-SS-C-SO	0	0.5	7439-92-1	Lead	63	J	0.94	0.28	-	1
6	0628B-1008REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	61.8	=	0.328	0.164	1.09	0.971
6	0628B-1016-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.4	0.63	-	1
6	0628B-1016-SS-C-SO	0	0.5	7440-39-3	Barium	230	=	1.9	0.073	-	1
6	0628B-1016-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.17	J	0.48	0.039	-	1
6	0628B-1016-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.4	0.056	-	1
6	0628B-1016-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0059	-	1
6	0628B-1069-SS-C-SO	0	0.5	7439-92-1	Lead	61	J	0.92	0.28	-	1
6	0628B-1007LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	57	=	0.338	0.169	1.13	0.935
6	0628B-1017-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.5	0.66	-	1
6	0628B-1017-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2	0.076	-	1
6	0628B-1017-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.38	J	0.5	0.041	-	1
6	0628B-1017-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.5	0.058	-	1
6	0628B-1086-SS-C-SO	0	0.5	7439-92-1	Lead	57	J	0.95	0.28	-	1
6	0628B-1005LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	55.3	J	0.289	0.144	0.963	0.893
6	0628B-1024-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.4	=	2.5	0.65	-	1
6	0628B-1024-SS-C-SO	0	0.5	7440-39-3	Barium	120	=	2	0.075	-	1
6	0628B-1024-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.49	0.041	-	1
6	0628B-1024-SS-C-SO	0	0.5	7440-47-3	Chromium	8.4	=	3.5	0.057	-	1
6	0628B-1024-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.017	0.0056	-	1
6	0628B-1001LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	54.9	=	0.288	0.144	0.962	0.901
6	0628B-1061-SS-C-SO	0	0.5	7439-92-1	Lead	54	J	0.98	0.29	-	1
6	0628B-1025-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.3	0.59	-	1
6	0628B-1025-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	1.8	0.069	-	1
6	0628B-1025-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.18	J	0.45	0.037	-	1
6	0628B-1025-SS-C-SO	0	0.5	7440-47-3	Chromium	9.2	=	3.2	0.052	-	1
6	0628B-1025-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.015	0.005	-	1
6	0628B-1007REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	53.1	=	0.312	0.156	1.04	0.926
6	0628B-1032-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.5	0.67	-	1
6	0628B-1032-SS-C-SO	0	0.5	7440-39-3	Barium	270	=	2	0.077	-	1
6	0628B-1032-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.39	J	0.51	0.041	-	1
6	0628B-1032-SS-C-SO	0	0.5	7440-47-3	Chromium	22	=	3.5	0.059	-	1
6	0628B-1032-SS-C-SO	0	0.5	7439-97-6	Mercury	0.022	=	0.017	0.0055	-	1
6	0628B-1087-SS-C-SO	0	0.5	7439-92-1	Lead	52	J	0.94	0.28	-	1
6	0628B-1083-SS-C-SO	0	0.5	7439-92-1	Lead	52	J	1	0.3	-	1
6	1641K-1528REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	52	=	0.144	0.287	0.958	0.935
6	0628B-1079-SS-C-SO	0	0.5	7439-92-1	Lead	50	J	1	0.3	-	1
6	0628B-1033-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.3	=	2.2	0.59	-	1
6	0628B-1033-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	1.8	0.067	-	1
6	0628B-1033-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.41	J	0.44	0.036	-	1
6	0628B-1033-SS-C-SO	0	0.5	7440-47-3	Chromium	9.2	=	3.1	0.052	-	1
6	0628B-1033-SS-C-SO	0	0.5	7439-97-6	Mercury	0.018	=	0.017	0.0055	-	1
6	0628B-1067-SS-C-SO	0	0.5	7439-92-1	Lead	50	J	0.92	0.28	-	1
6	0628B-1078-SS-C-SO	0	0.5	7439-92-1	Lead	49	J	0.87	0.26	-	1
6	0628B-1047-SS-C-SO	0	0.5	7439-92-1	Lead	48	J	0.91	0.27	-	1
6	0628B-1045-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.8	0.74	-	1
6	0628B-1045-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2.3	0.086	-	1
6	0628B-1045-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.21	J	0.56	0.046	-	1
6	0628B-1045-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.9	0.065	-	1
6	0628B-1045-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.019	0.0063	-	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1020-SS-C-SO	0	0.5	7439-92-1	Lead	47	=	0.87	0.26	-	1
6	0628B-1063-SS-C-SO	0	0.5	7439-92-1	Lead	47	J	0.93	0.28	-	1
6	0628B-1046-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.4	0.63	-	1
6	0628B-1046-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.9	0.073	-	1
6	0628B-1046-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.069	J	0.48	0.039	-	1
6	0628B-1046-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.3	0.055	-	1
6	0628B-1046-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.017	0.0054	-	1
6	0628B-1096-SS-C-SO	0	0.5	7439-92-1	Lead	46	=	0.99	0.3	-	1
6	0628B-1027-SS-C-SO	0	0.5	7439-92-1	Lead	46	J	0.91	0.27	-	1
6	0628B-1025-SS-C-SO	0	0.5	7439-92-1	Lead	45	=	0.81	0.24	-	1
6	0628B-1053-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.7	0.72	-	1
6	0628B-1053-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2.2	0.083	-	1
6	0628B-1053-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.41	J	0.55	0.045	-	1
6	0628B-1053-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.8	0.064	-	1
6	0628B-1053-SS-C-SO	0	0.5	7439-97-6	Mercury	0.018	J	0.019	0.0062	-	1
6	0628B-1093-SS-C-SO	0	0.5	7439-92-1	Lead	45	=	0.99	0.3	-	1
6	0628B-1075-SS-C-SO	0	0.5	7439-92-1	Lead	45	J	0.95	0.28	-	1
6	0628B-1054-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.97	J	2.5	0.65	-	1
6	0628B-1054-SS-C-SO	0	0.5	7440-39-3	Barium	200	=	2	0.075	-	1
6	0628B-1054-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.49	0.04	-	1
6	0628B-1054-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.4	0.057	-	1
6	0628B-1054-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.018	0.0059	-	1
6	0628B-1005REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	40	=	0.315	0.157	1.05	0.962
6	0628B-1061-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.3	J	2.7	0.72	-	1
6	0628B-1061-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2.2	0.083	-	1
6	0628B-1061-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.067	J	0.55	0.045	-	1
6	0628B-1061-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.8	0.063	-	1
6	0628B-1061-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.018	0.0059	-	1
6	0628B-1080-SS-C-SO	0	0.5	7439-92-1	Lead	40	J	0.93	0.28	-	1
6	0628B-1088-SS-C-SO	0	0.5	7439-92-1	Lead	39	=	1	0.3	-	1
6	0628B-1062-SS-C-SO	0	0.5	7440-38-2	Arsenic	3	=	2.4	0.63	-	1
6	0628B-1062-SS-C-SO	0	0.5	7440-39-3	Barium	350	=	1.9	0.073	-	1
6	0628B-1062-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.4	0.056	-	1
6	0628B-1062-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.017	0.0057	-	1
6	0628B-1085-SS-C-SO	0	0.5	7439-92-1	Lead	38	J	0.97	0.29	-	1
6	0628B-1063-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.6	0.68	-	1
6	0628B-1063-SS-C-SO	0	0.5	7440-39-3	Barium	370	=	2.1	0.079	-	1
6	0628B-1063-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.091	J	0.52	0.042	-	1
6	0628B-1063-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.6	0.06	-	1
6	0628B-1063-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.018	0.006	-	1
6	0628B-1089-SS-C-SO	0	0.5	7439-92-1	Lead	38	=	0.87	0.26	-	1
6	0628B-1070-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.74	J	2.6	0.67	-	1
6	0628B-1070-SS-C-SO	0	0.5	7440-39-3	Barium	270	=	2	0.078	-	1
6	0628B-1070-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1
6	0628B-1070-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.019	0.0061	-	1
6	0628B-1001REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	37.3	=	0.282	0.141	0.941	0.901
6	0628B-1058REC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	36.5	J	0.299	0.15	0.997	0.935
6	0628B-1047-SS-C-SODUP	0	0.5	7439-92-1	Lead	35	J	0.92	0.28	-	1
6	0628B-1071-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.92	J	2.8	0.74	-	1
6	0628B-1071-SS-C-SO	0	0.5	7440-39-3	Barium	310	=	2.2	0.085	-	1
6	0628B-1071-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.56	0.046	-	1
6	0628B-1071-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.9	0.065	-	1
6	0628B-1071-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.018	0.0058	-	1
6	0628B-1078-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.4	0.64	-	1
6	0628B-1078-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	1.9	0.073	-	1
6	0628B-1078-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.48	0.039	-	1
6	0628B-1078-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.4	0.056	-	1
6	0628B-1078-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.019	0.0063	-	1
6	0628B-1016-SS-C-SO	0	0.5	7439-92-1	Lead	34	=	0.86	0.26	-	1
6	0628B-1046-SS-C-SO	0	0.5	7439-92-1	Lead	34	J	0.86	0.26	-	1
6	0628B-1079-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.8	0.73	-	1
6	0628B-1079-SS-C-SO	0	0.5	7440-39-3	Barium	250	=	2.2	0.084	-	1
6	0628B-1079-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.55	0.045	-	1
6	0628B-1079-SS-C-SO	0	0.5	7440-47-3	Chromium	19	=	3.9	0.064	-	1
6	0628B-1079-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0086	J	0.017	0.0055	-	1
6	0628B-1099-SS-C-SO	0	0.5	7439-92-1	Lead	34	=	0.97	0.29	-	1
6	0628B-1080-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.6	0.68	-	1
6	0628B-1080-SS-C-SO	0	0.5	7440-39-3	Barium	280	=	2.1	0.079	-	1
6	0628B-1080-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.099	J	0.52	0.042	-	1
6	0628B-1087-SS-C-SO	0	0.5	7440-38-2	Arsenic	7.2	=	2.6	0.69	-	1
6	0628B-1087-SS-C-SO	0	0.5	7440-39-3	Barium	1600	J	2.1	0.079	-	1
6	0628B-1087-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.19	J	0.52	0.043	-	1
6	0628B-1087-SS-C-SO	0	0.5	7440-47-3	Chromium	4.8	=	3.6	0.06	-	1
6	0628B-1087-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.018	0.006	-	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1068-SS-C-SO	0	0.5	7439-92-1	Lead	33	J	0.88	0.27	-	1
6	0628B-1097-SS-C-SO	0	0.5	7439-92-1	Lead	33	=	0.93	0.28	-	1
6	0628B-1088-SS-C-SO	0	0.5	7440-38-2	Arsenic	2	J	2.8	0.73	-	1
6	0628B-1088-SS-C-SO	0	0.5	7440-39-3	Barium	270	J	2.2	0.085	-	1
6	0628B-1088-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.56	0.046	-	1
6	0628B-1088-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.9	0.065	-	1
6	0628B-1088-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0081	J	0.017	0.0055	-	1
6	0628B-1021LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	32.6	=	0.305	0.152	1.02	0.952
6	0628B-1095-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.2	J	2.5	0.65	-	1
6	0628B-1095-SS-C-SO	0	0.5	7440-39-3	Barium	410	J	2	0.075	-	1
6	0628B-1095-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.094	J	0.49	0.04	-	1
6	0628B-1095-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.4	0.057	-	1
6	0628B-1095-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0067	J	0.02	0.0064	-	1
6	0628B-1064-SS-C-SO	0	0.5	7439-92-1	Lead	32	J	0.87	0.26	-	1
6	0628B-1095-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	1.6	J	2.7	0.72	-	1
6	0628B-1095-SS-C-SODUP	0	0.5	7440-39-3	Barium	410	J	2.2	0.083	-	1
6	0628B-1095-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.11	J	0.54	0.045	-	1
6	0628B-1095-SS-C-SODUP	0	0.5	7440-47-3	Chromium	12	=	3.8	0.063	-	1
6	0628B-1009LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	31.6	=	0.316	0.158	1.05	0.935
6	0628B-1096-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.5	J	2.7	0.73	-	1
6	0628B-1096-SS-C-SO	0	0.5	7440-39-3	Barium	450	J	2.2	0.084	-	1
6	0628B-1096-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.24	J	0.55	0.045	-	1
6	0628B-1096-SS-C-SO	0	0.5	7440-47-3	Chromium	17	=	3.8	0.064	-	1
6	0628B-1096-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.017	0.0056	-	1
6	0628B-1030-SS-C-SO	0	0.5	7439-97-6	Mercury	0.021	=	0.016	0.0053	-	1
6	0628B-1056-SS-C-SO	0	0.5	7439-92-1	Lead	30	J	0.84	0.25	-	1
6	0628B-1031-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.1	=	2.6	0.69	-	1
6	0628B-1031-SS-C-SO	0	0.5	7440-39-3	Barium	200	=	2.1	0.079	-	1
6	0628B-1031-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.52	0.043	-	1
6	0628B-1031-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.7	0.061	-	1
6	0628B-1031-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.016	0.0052	-	1
6	0628B-1098-SS-C-SO	0	0.5	7439-92-1	Lead	30	=	0.98	0.29	-	1
6	0628B-1031-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	3.1	=	2.7	0.7	-	1
6	0628B-1031-SS-C-SODUP	0	0.5	7440-39-3	Barium	200	=	2.1	0.081	-	1
6	0628B-1031-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.21	J	0.53	0.044	-	1
6	0628B-1031-SS-C-SODUP	0	0.5	7440-47-3	Chromium	14	=	3.7	0.062	-	1
6	0628B-1031-SS-C-SODUP	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0054	-	1
6	0628B-1076-SS-C-SO	0	0.5	7439-92-1	Lead	29	J	1	0.3	-	1
6	0628B-1009LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	28.3	=	0.326	0.163	1.09	0.971
6	0628B-1021REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	28.2	=	0.28	0.14	0.933	0.885
6	0628B-1021REC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	28	=	0.275	0.138	0.917	0.87
6	0628B-1038-SS-C-SO	0	0.5	7440-39-3	Barium	300	=	2	0.074	-	1
6	0628B-1038-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.093	J	0.49	0.04	-	1
6	0628B-1038-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.4	0.057	-	1
6	0628B-1038-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.019	0.0063	-	1
6	0628B-1044-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.5	0.67	-	1
6	0628B-1044-SS-C-SO	0	0.5	7440-39-3	Barium	240	J	2	0.077	-	1
6	0628B-1044-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.51	0.041	-	1
6	0628B-1044-SS-C-SO	0	0.5	7440-47-3	Chromium	17	=	3.5	0.059	-	1
6	0628B-1044-SS-C-SO	0	0.5	7782-49-2	Selenium	0.95	J	3	0.87	-	1
6	0628B-1044-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.019	0.0061	-	1
6	0628B-1017REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	27.5	=	0.3	0.15	1	0.917
6	1641K-1547REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	25.4	=	0.133	0.266	0.887	0.87
6	0628B-1019-SS-C-SO	0	0.5	7439-92-1	Lead	25	=	0.86	0.26	-	1
6	0628B-1051-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.92	J	2.5	0.67	-	1
6	0628B-1051-SS-C-SO	0	0.5	7440-39-3	Barium	220	=	2	0.077	-	1
6	0628B-1051-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.23	J	0.5	0.041	-	1
6	0628B-1051-SS-C-SO	0	0.5	7440-47-3	Chromium	18	=	3.5	0.058	-	1
6	0628B-1051-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.017	0.0055	-	1
6	0628B-1084-SS-C-SO	0	0.5	7439-92-1	Lead	24	J	0.91	0.27	-	1
6	0628B-1052-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.6	0.68	-	1
6	0628B-1052-SS-C-SO	0	0.5	7440-39-3	Barium	500	=	2	0.078	-	1
6	0628B-1052-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.51	0.042	-	1
6	0628B-1052-SS-C-SO	0	0.5	7440-47-3	Chromium	9.8	=	3.6	0.059	-	1
6	0628B-1052-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.018	0.0059	-	1
6	0628B-1052-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	1	J	2.4	0.63	-	1
6	0628B-1052-SS-C-SODUP	0	0.5	7440-39-3	Barium	200	=	1.9	0.073	-	1
6	0628B-1052-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.15	J	0.48	0.039	-	1
6	0628B-1052-SS-C-SODUP	0	0.5	7440-47-3	Chromium	11	=	3.3	0.055	-	1
6	0628B-1052-SS-C-SODUP	0	0.5	7439-97-6	Mercury	0.017	J	0.018	0.006	-	1
6	0628B-1059-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.7	0.71	-	1
6	0628B-1059-SS-C-SO	0	0.5	7440-39-3	Barium	250	J	2.2	0.082	-	1
6	0628B-1059-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.54	0.044	-	1
6	0628B-1059-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.8	0.063	-	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1059-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	J	0.02	0.0067	-	1
6	0628B-1051LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	22.5	=	0.298	0.149	0.994	0.926
6	0628B-1017LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	21.6	=	0.315	0.157	1.05	0.962
6	0628B-1060-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.4	J	2.7	0.7	-	1
6	0628B-1060-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	2.1	0.081	-	1
6	0628B-1060-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.094	J	0.53	0.044	-	1
6	0628B-1060-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.7	0.062	-	1
6	0628B-1060-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	J	0.02	0.0064	-	1
6	0628B-1068-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.5	0.65	-	1
6	0628B-1068-SS-C-SO	0	0.5	7440-39-3	Barium	400	=	2	0.075	-	1
6	0628B-1068-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.057	J	0.49	0.04	-	1
6	0628B-1068-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.4	0.057	-	1
6	0628B-1068-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0062	-	1
6	0628B-1069-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.6	0.68	-	1
6	0628B-1069-SS-C-SO	0	0.5	7440-39-3	Barium	250	=	2	0.078	-	1
6	0628B-1069-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.51	0.042	-	1
6	0628B-1069-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1
6	0628B-1069-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.017	0.0056	-	1
6	1641K-1524REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.9	=	0.137	0.273	0.91	0.87
6	0628B-1031REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.7	=	0.303	0.152	1.01	0.952
6	0628B-1076-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.8	0.73	-	1
6	0628B-1076-SS-C-SO	0	0.5	7440-39-3	Barium	660	=	2.2	0.085	-	1
6	0628B-1076-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.56	0.046	-	1
6	0628B-1076-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.065	-	1
6	0628B-1076-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0089	J	0.019	0.0062	-	1
6	0628B-1002REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.6	=	0.291	0.146	0.97	0.952
6	0628B-1032LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.6	=	0.3	0.15	1	0.943
6	0628B-1077-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.7	J	2.6	0.67	-	1
6	0628B-1077-SS-C-SO	0	0.5	7440-39-3	Barium	320	=	2	0.078	-	1
6	0628B-1077-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.065	J	0.51	0.042	-	1
6	0628B-1077-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1
6	0628B-1077-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.019	0.0063	-	1
6	0628B-1091-SS-C-SO	0	0.5	7439-92-1	Lead	19	=	0.96	0.29	-	1
6	0628B-1085-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.5	J	2.7	0.71	-	1
6	0628B-1085-SS-C-SO	0	0.5	7440-39-3	Barium	380	=	2.2	0.082	-	1
6	0628B-1085-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.54	0.044	-	1
6	0628B-1085-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.8	0.063	-	1
6	0628B-1085-SS-C-SO	0	0.5	7439-97-6	Mercury	0.01	J	0.018	0.0058	-	1
6	1641K-1527REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	18.9	=	0.145	0.291	0.968	0.952
6	0628B-1002LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	18.6	=	0.324	0.162	1.08	0.962
6	0628B-1086-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.2	J	2.6	0.69	-	1
6	0628B-1086-SS-C-SO	0	0.5	7440-39-3	Barium	260	=	2.1	0.08	-	1
6	0628B-1086-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.32	J	0.53	0.043	-	1
6	0628B-1086-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.7	0.061	-	1
6	0628B-1086-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0094	J	0.019	0.0062	-	1
6	0628B-1093-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.3	J	2.8	0.73	-	1
6	0628B-1093-SS-C-SO	0	0.5	7440-39-3	Barium	220	J	2.2	0.084	-	1
6	0628B-1093-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.16	J	0.55	0.045	-	1
6	0628B-1093-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.064	-	1
6	0628B-1093-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0089	J	0.018	0.0058	-	1
6	0628B-1094-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.1	J	2.8	0.73	-	1
6	0628B-1094-SS-C-SO	0	0.5	7440-39-3	Barium	340	J	2.2	0.084	-	1
6	0628B-1094-SS-C-SO	0	0.5	7440-43-9	Cadmium	1.5	=	0.55	0.045	-	1
6	0628B-1094-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.064	-	1
6	0628B-1094-SS-C-SO	0	0.5	7439-97-6	Mercury	0.01	J	0.018	0.006	-	1
6	0628B-1081-SS-C-SO	0	0.5	7439-92-1	Lead	18	J	0.95	0.28	-	1
6	0628B-1054LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	17.3	J	0.29	0.145	0.967	0.917
6	0628B-1027-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.5	0.67	-	1
6	0628B-1027-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2	0.077	-	1
6	0628B-1027-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.51	0.041	-	1
6	0628B-1027-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.5	0.059	-	1
6	0628B-1027-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.016	0.0051	-	1
6	0628B-1038-SS-C-SO	0	0.5	7439-92-1	Lead	17	J	0.88	0.26	-	1
6	0628B-1030-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.9	=	2.3	0.6	-	1
6	0628B-1030-SS-C-SO	0	0.5	7440-39-3	Barium	260	=	1.8	0.069	-	1
6	0628B-1030-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.39	J	0.46	0.037	-	1
6	0628B-1030-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.2	0.053	-	1
6	0628B-1072REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	16.7	=	0.316	0.158	1.05	0.971
6	0628B-1004REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	16.1	=	0.308	0.154	1.03	0.952
6	0628B-1037-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.5	0.66	-	1
6	0628B-1037-SS-C-SO	0	0.5	7440-39-3	Barium	310	=	2	0.076	-	1
6	0628B-1037-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.19	J	0.5	0.041	-	1
6	0628B-1037-SS-C-SO	0	0.5	7440-47-3	Chromium	17	=	3.5	0.058	-	1
6	0628B-1037-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0061	-	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1049-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.6	0.68	-	1
6	0628B-1049-SS-C-SO	0	0.5	7440-39-3	Barium	250	=	2.1	0.078	-	1
6	0628B-1049-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.51	0.042	-	1
6	0628B-1049-SS-C-SO	0	0.5	7440-47-3	Chromium	9.5	=	3.6	0.06	-	1
6	0628B-1049-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.016	0.0051	-	1
6	0628B-1050-SS-C-SO	0	0.5	7440-38-2	Arsenic	1	J	2.3	0.62	-	1
6	0628B-1050-SS-C-SO	0	0.5	7440-39-3	Barium	210	=	1.9	0.071	-	1
6	0628B-1050-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.3	J	0.47	0.038	-	1
6	0628B-1050-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.3	0.054	-	1
6	0628B-1057-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.4	J	2.9	0.77	-	1
6	0628B-1057-SS-C-SO	0	0.5	7440-39-3	Barium	340	=	2.3	0.089	-	1
6	0628B-1057-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.58	0.048	-	1
6	0628B-1057-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	4.1	0.068	-	1
6	0628B-1057-SS-C-SO	0	0.5	7439-97-6	Mercury	0.023	=	0.02	0.0065	-	1
6	0628B-1058-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.7	0.71	-	1
6	0628B-1058-SS-C-SO	0	0.5	7440-39-3	Barium	270	=	2.2	0.082	-	1
6	0628B-1058-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.54	0.044	-	1
6	0628B-1058-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.8	0.063	-	1
6	0628B-1058-SS-C-SO	0	0.5	7439-97-6	Mercury	0.023	=	0.019	0.0062	-	1
6	1641K-1549REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	15.2	=	0.138	0.275	0.918	0.901
6	0628B-1066-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.8	0.73	-	1
6	0628B-1066-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2.2	0.084	-	1
6	0628B-1066-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.49	J	0.55	0.045	-	1
6	0628B-1066-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.064	-	1
6	0628B-1066-SS-C-SO	0	0.5	7439-97-6	Mercury	0.015	J	0.02	0.0065	-	1
6	0628B-1095-SS-C-SODUP	0	0.5	7439-92-1	Lead	15	=	0.98	0.29	-	1
6	0628B-1067-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.6	0.68	-	1
6	0628B-1067-SS-C-SO	0	0.5	7440-39-3	Barium	340	=	2.1	0.078	-	1
6	0628B-1067-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.51	0.042	-	1
6	0628B-1067-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.059	-	1
6	0628B-1067-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.017	0.0056	-	1
6	0628B-1074-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.2	=	2.7	0.71	-	1
6	0628B-1074-SS-C-SO	0	0.5	7440-39-3	Barium	360	=	2.2	0.082	-	1
6	0628B-1074-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.2	J	0.54	0.044	-	1
6	0628B-1074-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.8	0.063	-	1
6	0628B-1074-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0062	-	1
6	0628B-1059REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	14.8	=	0.298	0.149	0.993	0.935
6	0628B-1075-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.6	0.69	-	1
6	0628B-1075-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2.1	0.08	-	1
6	0628B-1075-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.53	0.043	-	1
6	0628B-1075-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.7	0.061	-	1
6	0628B-1075-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0093	J	0.018	0.006	-	1
6	0628B-1015REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	14.4	=	0.294	0.147	0.98	0.893
6	0628B-1051REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	14.1	=	0.306	0.153	1.02	0.962
6	0628B-1083-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.4	J	2.8	0.73	-	1
6	0628B-1083-SS-C-SO	0	0.5	7440-39-3	Barium	280	=	2.2	0.085	-	1
6	0628B-1083-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.22	J	0.56	0.046	-	1
6	0628B-1083-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.065	-	1
6	0628B-1083-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.02	0.0065	-	1
6	0628B-1084-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.5	0.66	-	1
6	0628B-1084-SS-C-SO	0	0.5	7440-39-3	Barium	240	=	2	0.076	-	1
6	0628B-1084-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.5	0.041	-	1
6	0628B-1084-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.5	0.058	-	1
6	0628B-1084-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0094	J	0.02	0.0065	-	1
6	0628B-1091-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.3	J	2.7	0.7	-	1
6	0628B-1091-SS-C-SO	0	0.5	7440-39-3	Barium	140	J	2.1	0.081	-	1
6	0628B-1091-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.073	J	0.53	0.044	-	1
6	0628B-1091-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.7	0.062	-	1
6	0628B-1091-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0065	J	0.019	0.0061	-	1
6	0628B-1092-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.7	J	2.7	0.71	-	1
6	0628B-1092-SS-C-SO	0	0.5	7440-39-3	Barium	270	J	2.1	0.081	-	1
6	0628B-1092-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.087	J	0.54	0.044	-	1
6	0628B-1092-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.7	0.062	-	1
6	0628B-1095-SS-C-SO	0	0.5	7439-92-1	Lead	14	=	0.89	0.27	-	1
6	0628B-1034-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.9	=	2.6	0.68	-	1
6	0628B-1034-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	2.1	0.078	-	1
6	0628B-1034-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.29	J	0.52	0.042	-	1
6	0628B-1034-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.6	0.06	-	1
6	0628B-1034-SS-C-SO	0	0.5	7439-97-6	Mercury	0.018	=	0.017	0.0055	-	1
6	0628B-1035-SS-C-SO	0	0.5	7440-38-2	Arsenic	4.5	=	2.3	0.61	-	1
6	0628B-1035-SS-C-SO	0	0.5	7440-39-3	Barium	150	=	1.8	0.07	-	1
6	0628B-1035-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.26	J	0.46	0.038	-	1
6	0628B-1035-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.2	0.053	-	1
6	0628B-1035-SS-C-SO	0	0.5	7439-97-6	Mercury	0.02	=	0.016	0.0052	-	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	1641K-1527LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.8	=	0.137	0.275	0.916	0.901
6	0628B-1036-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.2	0.59	-	1
6	0628B-1036-SS-C-SO	0	0.5	7440-39-3	Barium	190	=	1.8	0.068	-	1
6	0628B-1036-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.24	J	0.45	0.037	-	1
6	0628B-1036-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.1	0.052	-	1
6	0628B-1036-SS-C-SO	0	0.5	7439-97-6	Mercury	0.013	J	0.016	0.0051	-	1
6	1641K-1533LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.6	=	0.136	0.273	0.91	0.885
6	0628B-1047-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.5	0.67	-	1
6	0628B-1047-SS-C-SO	0	0.5	7440-39-3	Barium	180	=	2	0.077	-	1
6	0628B-1047-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.51	0.042	-	1
6	0628B-1047-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.6	0.059	-	1
6	0628B-1047-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.019	0.006	-	1
6	1641K-1531REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.5	=	0.145	0.29	0.967	0.952
6	0628B-1047-SS-C-SODUP	0	0.5	7440-38-2	Arsenic	1.7	J	2.6	0.67	-	1
6	0628B-1047-SS-C-SODUP	0	0.5	7440-39-3	Barium	180	=	2	0.078	-	1
6	0628B-1047-SS-C-SODUP	0	0.5	7440-43-9	Cadmium	0.083	J	0.51	0.042	-	1
6	0628B-1047-SS-C-SODUP	0	0.5	7440-47-3	Chromium	13	=	3.6	0.059	-	1
6	0628B-1047-SS-C-SODUP	0	0.5	7439-97-6	Mercury	0.012	J	0.017	0.0054	-	1
6	0628B-1054REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.2	=	0.293	0.147	0.978	0.935
6	0628B-1048-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.6	J	2.5	0.66	-	1
6	0628B-1048-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	2	0.076	-	1
6	0628B-1048-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.13	J	0.5	0.041	-	1
6	0628B-1048-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.5	0.058	-	1
6	0628B-1048-SS-C-SO	0	0.5	7439-97-6	Mercury	0.012	J	0.018	0.0058	-	1
6	0628B-1055-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.3	J	2.8	0.74	-	1
6	0628B-1055-SS-C-SO	0	0.5	7440-39-3	Barium	240	=	2.2	0.085	-	1
6	0628B-1055-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.56	0.046	-	1
6	0628B-1055-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.9	0.065	-	1
6	0628B-1055-SS-C-SO	0	0.5	7439-97-6	Mercury	0.017	J	0.018	0.0057	-	1
6	0628B-1082-SS-C-SO	0	0.5	7439-92-1	Lead	13	J	0.96	0.29	-	1
6	0628B-1056-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.3	0.62	-	1
6	0628B-1056-SS-C-SO	0	0.5	7440-39-3	Barium	360	=	1.9	0.071	-	1
6	0628B-1056-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.055	J	0.47	0.038	-	1
6	0628B-1056-SS-C-SO	0	0.5	7440-47-3	Chromium	13	=	3.3	0.054	-	1
6	0628B-1056-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0057	-	1
6	1641K-1541LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13	=	0.15	0.299	0.997	0.971
6	1641K-1546LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.8	=	0.145	0.291	0.968	0.952
6	1641K-1529LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.4	=	0.144	0.287	0.957	0.935
6	0628B-1064-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.4	0.64	-	1
6	0628B-1064-SS-C-SO	0	0.5	7440-39-3	Barium	290	=	1.9	0.073	-	1
6	0628B-1064-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.48	0.039	-	1
6	0628B-1064-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.4	0.056	-	1
6	0628B-1064-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0085	J	0.018	0.0059	-	1
6	0628B-1034LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.3	=	0.285	0.143	0.951	0.885
6	0628B-1065-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.8	J	2.6	0.69	-	1
6	0628B-1065-SS-C-SO	0	0.5	7440-39-3	Barium	160	=	2.1	0.079	-	1
6	0628B-1065-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.11	J	0.52	0.043	-	1
6	0628B-1065-SS-C-SO	0	0.5	7440-47-3	Chromium	6.9	=	3.6	0.06	-	1
6	0628B-1065-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.016	0.0054	-	1
6	0628B-1072-SS-C-SO	0	0.5	7440-22-4	Silver	0.61	J	1.6	0.17	-	1
6	0628B-1072-SS-C-SO	0	0.5	7440-39-3	Barium	320	J	2.1	0.08	-	1
6	0628B-1072-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.35	J	0.52	0.043	-	1
6	0628B-1072-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.7	0.061	-	1
6	0628B-1072-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.018	0.0059	-	1
6	0628B-1073-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.2	J	2.8	0.73	-	1
6	0628B-1073-SS-C-SO	0	0.5	7440-39-3	Barium	290	=	2.2	0.084	-	1
6	0628B-1073-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.38	J	0.55	0.045	-	1
6	0628B-1073-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.9	0.064	-	1
6	0628B-1073-SS-C-SO	0	0.5	7439-97-6	Mercury	0.019	=	0.018	0.0058	-	1
6	0628B-1080-SS-C-SO	0	0.5	7440-47-3	Chromium	14	=	3.6	0.06	-	1
6	0628B-1080-SS-C-SO	0	0.5	7439-97-6	Mercury	0.016	J	0.017	0.0056	-	1
6	0628B-1081-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.5	J	2.6	0.7	-	1
6	0628B-1081-SS-C-SO	0	0.5	7440-39-3	Barium	330	=	2.1	0.08	-	1
6	0628B-1081-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.53	0.043	-	1
6	0628B-1081-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.7	0.061	-	1
6	0628B-1081-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.017	0.0057	-	1
6	0628B-1034REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	11.9	=	0.271	0.136	0.905	0.855
6	0628B-1015LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	11.3	=	0.287	0.144	0.957	0.877
6	0628B-1082-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.7	J	2.7	0.71	-	1
6	0628B-1082-SS-C-SO	0	0.5	7440-39-3	Barium	260	=	2.1	0.081	-	1
6	0628B-1082-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.056	J	0.54	0.044	-	1
6	0628B-1082-SS-C-SO	0	0.5	7440-47-3	Chromium	16	=	3.8	0.062	-	1
6	0628B-1082-SS-C-SO	0	0.5	7439-97-6	Mercury	0.014	J	0.019	0.0061	-	1
6	0628B-1072LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	11.1	=	0.306	0.153	1.02	0.935

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
6	0628B-1089-SS-C-SO	0	0.5	7440-38-2	Arsenic	0.91	J	2.4	0.64	-	1
6	0628B-1089-SS-C-SO	0	0.5	7440-39-3	Barium	160	J	1.9	0.073	-	1
6	0628B-1089-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.14	J	0.48	0.04	-	1
6	0628B-1089-SS-C-SO	0	0.5	7440-47-3	Chromium	8.9	=	3.4	0.056	-	1
6	0628B-1089-SS-C-SO	0	0.5	7439-97-6	Mercury	0.011	J	0.019	0.0061	-	1
6	0628B-1090-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.1	J	2.6	0.67	-	1
6	0628B-1090-SS-C-SO	0	0.5	7440-39-3	Barium	250	J	2	0.078	-	1
6	0628B-1090-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.27	J	0.51	0.042	-	1
6	0628B-1090-SS-C-SO	0	0.5	7440-47-3	Chromium	12	=	3.6	0.059	-	1
6	0628B-1090-SS-C-SO	0	0.5	7439-97-6	Mercury	0.0089	J	0.019	0.0062	-	1
6	0628B-1097-SS-C-SO	0	0.5	7440-38-2	Arsenic	1.9	J	2.6	0.68	-	1
6	0628B-1097-SS-C-SO	0	0.5	7440-39-3	Barium	240	J	2.1	0.078	-	1
6	0628B-1097-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.12	J	0.51	0.042	-	1
6	0628B-1097-SS-C-SO	0	0.5	7440-47-3	Chromium	9.5	=	3.6	0.06	-	1
6	0628B-1097-SS-C-SO	0	0.5	7439-97-6	Mercury	0.03	=	0.018	0.006	-	1
6	0628B-1098-SS-C-SO	0	0.5	7440-38-2	Arsenic	2.4	J	2.7	0.72	-	1
6	0628B-1098-SS-C-SO	0	0.5	7440-39-3	Barium	340	J	2.2	0.082	-	1
6	0628B-1098-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.13	J	0.54	0.044	-	1
6	0628B-1098-SS-C-SO	0	0.5	7440-47-3	Chromium	15	=	3.8	0.063	-	1
6	0628B-1098-SS-C-SO	0	0.5	7439-97-6	Mercury	0.01	J	0.018	0.0058	-	1
6	1641K-1524LEC-1.0-1.5D-SO	1	1.5	7439-92-1	Lead	10.8	J	0.162	0.324	1.08	0.971
6	1641K-1547LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.86	=	0.137	0.275	0.917	0.901
6	0628B-1059LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.79	=	0.303	0.151	1.01	0.943
6	0628B-1031LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.55	=	0.31	0.155	1.03	0.971
6	0628B-1032REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.44	=	0.289	0.144	0.963	0.926
6	0628B-1092-SS-C-SO	0	0.5	7439-92-1	Lead	9.1	=	0.96	0.29	-	1
6	0628B-1077-SS-C-SO	0	0.5	7439-92-1	Lead	8.5	J	0.92	0.28	-	1
6	0628B-1099-SS-C-SO	0	0.5	7440-38-2	Arsenic	3.9	=	2.7	0.71	-	1
6	0628B-1099-SS-C-SO	0	0.5	7440-39-3	Barium	160	J	2.1	0.081	-	1
6	0628B-1099-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.15	J	0.54	0.044	-	1
6	0628B-1099-SS-C-SO	0	0.5	7440-47-3	Chromium	10	=	3.8	0.062	-	1
6	0628B-1099-SS-C-SO	0	0.5	7439-97-6	Mercury	0.017	J	0.019	0.0063	-	1
6	0628B-1100-SS-C-SO	0	0.5	7440-22-4	Silver	0.31	J	1.6	0.17	-	1
6	0628B-1100-SS-C-SO	0	0.5	7440-38-2	Arsenic	8.7	=	2.7	0.71	-	1
6	0628B-1100-SS-C-SO	0	0.5	7440-39-3	Barium	440	J	2.2	0.082	-	1
6	0628B-1100-SS-C-SO	0	0.5	7440-43-9	Cadmium	0.37	J	0.54	0.044	-	1
6	0628B-1100-SS-C-SO	0	0.5	7440-47-3	Chromium	11	=	3.8	0.063	-	1
6	1641K-1540LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	7.53	=	0.142	0.284	0.948	0.926
6	1641K-1540LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	7.37	=	0.132	0.264	0.88	0.862
6	0628B-1058LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	6.78	=	0.292	0.146	0.973	0.926
9	0918A-979SS-C-SO	0	0.5	7439-92-1	Lead	2650	J	5	1	-	5
9	0918A-981SS-C-SO	0	0.5	7439-92-1	Lead	1110	J	4.9	1	-	5
9	0918A-999SS-C-SO	0	0.5	7439-92-1	Lead	1110	J	5	1	-	5
9	0918A-1000SS-C-SO	0	0.5	7439-92-1	Lead	1070	J	4.8	1	-	5
9	0918A-994SS-C-SO	0	0.5	7439-92-1	Lead	860	J	4.9	1	-	5
9	0918A-998SS-C-SO	0	0.5	7439-92-1	Lead	703	J	5	1	-	5
9	0918A-989SS-C-SO	0	0.5	7439-92-1	Lead	645	J	5	1	-	5
9	0918A-980SS-C-SO	0	0.5	7439-92-1	Lead	577	J	4.9	1	-	5
9	0918A-993SS-C-SO	0	0.5	7439-92-1	Lead	536	J	4.9	1	-	5
9	0918A-992SS-C-SO	0	0.5	7439-92-1	Lead	476	J	5	1	-	5
9	0918A-988SS-C-SO	0	0.5	7439-92-1	Lead	440	J	5	1	-	5
9	0918A-986SS-C-SO	0	0.5	7439-92-1	Lead	429	J	5	1	-	5
9	0918A-983SS-C-SO	0	0.5	7439-92-1	Lead	427	J	4.9	1	-	5
9	0918A-996SS-C-SO	0	0.5	7439-92-1	Lead	413	J	4.9	1	-	5
9	0918A-987SS-C-SO	0	0.5	7439-92-1	Lead	322	J	5	1	-	5
9	0918A-985SS-C-SO	0	0.5	7439-92-1	Lead	321	J	5	1	-	5
9	0918A-991SS-C-SO	0	0.5	7439-92-1	Lead	307	J	4.9	1	-	5
9	0918A-984SS-C-SO	0	0.5	7439-92-1	Lead	300	J	5	1	-	5
9	0918A-990SS-C-SO	0	0.5	7439-92-1	Lead	242	J	4.9	1	-	5
9	0918A-978SS-C-SO	0	0.5	7439-92-1	Lead	165	J	5	1	-	5
9	0918A-997SS-C-SO	0	0.5	7439-92-1	Lead	148	=	0.98	0.21	-	1
9	0918A-799SS-C-SO	0	0.5	7439-92-1	Lead	139	=	0.98	0.21	-	1
9	0918A-995SS-C-SO	0	0.5	7439-92-1	Lead	119	J	5	1	-	5
9	0918A-982SS-C-SO	0	0.5	7439-92-1	Lead	72.6	J	4.9	1	-	5
16	1641-K1525R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.018	=	-	0.006	0.018	1
16	1641-K1545L-SS-D-SO	0	0.25	7439-92-1	Lead	4200	J	-	1.5	5.1	5
16	1641-K1540L-SS-D-SO	0	0.25	7439-92-1	Lead	960	J	-	0.27	0.9	1
16	1641-K1526L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.9	J	-	0.61	2.3	1
16	1641-K1526L-SS-D-SO	0	0.25	7440-39-3	Barium	250	=	-	0.07	1.9	1
16	1641-K1526L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.21	J	-	0.038	0.46	1
16	1641-K1526L-SS-D-SO	0	0.25	7440-47-3	Chromium	11	J	-	0.054	3.2	1
16	1641-K1526L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.014	J	-	0.0064	0.02	1
16	1641-K1528R-SS-D-SO	0	0.25	7439-92-1	Lead	960	J	-	0.28	0.93	1
16	1641-K1526R-SS-D-SO	0	0.25	7440-22-4	Silver	0.14	J	-	0.14	1.3	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
16	1641-K1526R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.59	2.2	1
16	1641-K1526R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.068	1.8	1
16	1641-K1526R-SS-D-SO	0	0.25	7440-43-9	Cadmium	1.1	=	-	0.037	0.45	1
16	1641-K1526R-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.052	3.1	1
16	1641-K1526R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.019	J	-	0.0069	0.021	1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	830	J	-	0.24	0.8	1
16	1641-K1527R-SS-D-SO	0	0.25	7439-92-1	Lead	810	J	-	0.25	0.82	1
16	1641-K1533L-SS-D-SO	0	0.25	7439-92-1	Lead	780	J	-	0.28	0.95	1
16	1641-K1531L-SS-D-SO	0	0.25	7440-39-3	Barium	262	=	-	0.0098	0.054	1
16	1641-K1531L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.082	=	-	0.0065	0.044	1
16	1641-K1531L-SS-D-SO	0	0.25	7440-47-3	Chromium	7.5	=	-	0.025	0.15	1
16	1641-K1531L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0037	0.015	1
16	1641-K1525L-SS-D-SO	0	0.25	7439-92-1	Lead	640	J	-	0.27	0.88	1
16	1641-K1531R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.5	=	-	0.66	2.5	1
16	1641-K1531R-SS-D-SO	0	0.25	7440-39-3	Barium	220	J	-	0.076	2	1
16	1641-K1531R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.62	=	-	0.041	0.5	1
16	1641-K1531R-SS-D-SO	0	0.25	7440-47-3	Chromium	10	J	-	0.058	3.5	1
16	1641-K1531R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.0072	0.022	1
16	1641-K1546L-SS-D-SO	0	0.25	7439-92-1	Lead	540	=	-	0.29	0.97	1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	1.1	J	-	0.64	2.4	1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	110	J	-	0.074	1.9	1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.23	J	-	0.04	0.49	1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	5.4	J	-	0.056	3.4	1
16	1641-K1524L-SS-D-SO	0	0.25	7439-92-1	Lead	530	J	-	0.26	0.87	1
16	1641-K1524R-SS-D-SO	0	0.25	7439-92-1	Lead	530	J	-	0.28	0.92	1
16	1641-K1536L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.2	J	-	0.67	2.6	1
16	1641-K1536L-SS-D-SO	0	0.25	7440-39-3	Barium	410	=	-	0.078	2	1
16	1641-K1536L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.23	J	-	0.042	0.51	1
16	1641-K1536L-SS-D-SO	0	0.25	7440-47-3	Chromium	22	J	-	0.059	3.6	1
16	1641-K1536L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.016	J	-	0.0068	0.021	1
16	1641-K1529L-SS-D-SO	0	0.25	7439-92-1	Lead	530	J	-	0.28	0.94	1
16	1641-K1536R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.6	J	-	0.7	2.6	1
16	1641-K1536R-SS-D-SO	0	0.25	7440-39-3	Barium	490	=	-	0.08	2.1	1
16	1641-K1536R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.043	0.53	1
16	1641-K1536R-SS-D-SO	0	0.25	7440-47-3	Chromium	22	J	-	0.061	3.7	1
16	1641-K1536R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0066	0.02	1
16	1641-K1543R-SS-D-SO	0	0.25	7439-92-1	Lead	510	J	-	0.28	0.94	1
16	1641-K1540R-SS-D-SO	0	0.25	7440-39-3	Barium	320	=	-	0.07	1.8	1
16	1641-K1540R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.37	J	-	0.038	0.46	1
16	1641-K1540R-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.053	3.2	1
16	1641-K1540R-SS-D-SO	0	0.25	7782-49-2	Selenium	0.98	J	-	0.79	2.8	1
16	1641-K1540R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.023	=	-	0.0063	0.019	1
16	1641-K1531R-SS-D-SO	0	0.25	7439-92-1	Lead	490	J	-	0.27	0.9	1
16	1641-K1547L-SS-D-SO	0	0.25	7439-92-1	Lead	490	=	-	0.25	0.84	1
16	1641-K1541L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.63	2.4	1
16	1641-K1541L-SS-D-SO	0	0.25	7440-39-3	Barium	330	J	-	0.072	1.9	1
16	1641-K1541L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.4	J	-	0.039	0.47	1
16	1641-K1541L-SS-D-SO	0	0.25	7440-47-3	Chromium	15	J	-	0.055	3.3	1
16	1641-K1541L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0068	0.021	1
16	1641-K1541L-SS-D-SO	0	0.25	7439-92-1	Lead	480	J	-	0.26	0.85	1
16	1641-K1541R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.59	2.3	1
16	1641-K1541R-SS-D-SO	0	0.25	7440-39-3	Barium	380	=	-	0.068	1.8	1
16	1641-K1541R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.41	J	-	0.037	0.45	1
16	1641-K1541R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.052	3.2	1
16	1641-K1541R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0098	J	-	0.0064	0.02	1
16	1641-K1547R-SS-D-SO	0	0.25	7439-92-1	Lead	470	=	-	0.26	0.88	1
16	1641-K1549R-SS-D-SO	0	0.25	7439-92-1	Lead	450	J	-	0.24	0.8	1
16	1641-K1545R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.71	2.7	1
16	1641-K1545R-SS-D-SO	0	0.25	7440-39-3	Barium	370	=	-	0.082	2.2	1
16	1641-K1545R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.044	0.54	1
16	1641-K1545R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.062	3.8	1
16	1641-K1545R-SS-D-SO	0	0.25	7782-49-2	Selenium	1.1	J	-	0.93	3.2	1
16	1641K-1524LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	432	=	0.147	0.294	0.979	0.943
16	1641-K1544R-SS-D-SO	0	0.25	7439-92-1	Lead	350	J	-	0.28	0.95	1
16	1641-K1546L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.6	J	-	0.71	2.7	1
16	1641-K1546L-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.082	2.2	1
16	1641-K1546L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.46	J	-	0.044	0.54	1
16	1641-K1546L-SS-D-SO	0	0.25	7440-47-3	Chromium	14	=	-	0.063	3.8	1
16	1641-K1546L-SS-D-SO	0	0.25	7782-49-2	Selenium	1.1	J	-	0.93	3.2	1
16	1641-K1546L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.007	0.022	1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	350	J	-	0.26	0.86	1
16	1641-K1546R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.6	J	-	0.62	2.4	1
16	1641-K1546R-SS-D-SO	0	0.25	7440-39-3	Barium	470	=	-	0.072	1.9	1
16	1641-K1546R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.039	0.47	1

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FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
16	1641-K1546R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	=	-	0.055	3.3	1
16	1641-K1524R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	J	-	0.68	2.6	1
16	1641-K1524R-SS-D-SO	0	0.25	7440-39-3	Barium	320	=	-	0.078	2.1	1
16	1641-K1524R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.41	J	-	0.042	0.51	1
16	1641-K1524R-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.06	3.6	1
16	1641-K1524R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0064	0.02	1
16	1641-K1543L-SS-D-SO	0	0.25	7439-92-1	Lead	340	J	-	0.27	0.9	1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2.1	J	-	0.6	2.3	1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	320	J	-	0.069	1.8	1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.36	J	-	0.037	0.45	1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	12	J	-	0.053	3.2	1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7782-49-2	Selenium	0.97	J	-	0.78	2.7	1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.011	J	-	0.0065	0.02	1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	330	J	-	0.25	0.83	1
16	1641-K1538R-SS-D-SO	0	0.25	7439-92-1	Lead	280	J	-	0.25	0.83	1
16	1641-K1525L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.1	=	-	0.65	2.5	1
16	1641-K1525L-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.075	2	1
16	1641-K1525L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.4	J	-	0.04	0.49	1
16	1641-K1525L-SS-D-SO	0	0.25	7440-47-3	Chromium	15	J	-	0.057	3.4	1
16	1641-K1525L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.0069	0.021	1
16	1641-K1526R-SS-D-SO	0	0.25	7439-92-1	Lead	260	J	-	0.24	0.81	1
16	1641-K1525R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.6	2.3	1
16	1641-K1525R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.069	1.8	1
16	1641-K1525R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.037	0.45	1
16	1641-K1525R-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.053	3.2	1
16	1641-K1539R-SS-D-SO	0	0.25	7439-92-1	Lead	260	J	-	0.26	0.87	1
16	1641-K1529R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.65	2.5	1
16	1641-K1529R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.075	2	1
16	1641-K1529R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.04	0.49	1
16	1641-K1529R-SS-D-SO	0	0.25	7440-47-3	Chromium	29	J	-	0.057	3.5	1
16	1641-K1529R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.019	J	-	0.0068	0.021	1
16	1641-K1549L-SS-D-SO	0	0.25	7439-92-1	Lead	260	J	-	0.29	0.96	1
16	1641-K1534L-SS-D-SO	0	0.25	7439-92-1	Lead	250	J	-	0.27	0.91	1
16	1641-K1530L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.5	J	-	0.62	2.3	1
16	1641-K1530L-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.071	1.9	1
16	1641-K1530L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.24	J	-	0.038	0.47	1
16	1641-K1530L-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.054	3.3	1
16	1641-K1530L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.014	J	-	0.0063	0.019	1
16	1641K-1545LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	242	=	0.139	0.278	0.927	0.901
16	1641-K1530R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.5	J	-	0.58	2.2	1
16	1641-K1530R-SS-D-SO	0	0.25	7440-39-3	Barium	260	=	-	0.067	1.8	1
16	1641-K1530R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.24	J	-	0.036	0.44	1
16	1641-K1530R-SS-D-SO	0	0.25	7440-47-3	Chromium	19	J	-	0.051	3.1	1
16	1641-K1530R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.006	0.019	1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	240	=	-	0.3	0.99	1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2	J	-	0.55	2.1	1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	350	=	-	0.064	1.7	1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	3.8	=	-	0.034	0.42	1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	10	J	-	0.049	2.9	1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0075	J	-	0.0063	0.019	1
16	1641-K1542L-SS-D-SO	0	0.25	7439-92-1	Lead	230	J	-	0.24	0.81	1
16	1641-K1529R-SS-D-SO	0	0.25	7439-92-1	Lead	210	J	-	0.27	0.89	1
16	1641-K1535L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.9	=	-	0.65	2.5	1
16	1641-K1535L-SS-D-SO	0	0.25	7440-39-3	Barium	380	=	-	0.075	2	1
16	1641-K1535L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.26	J	-	0.041	0.49	1
16	1641-K1535L-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.057	3.5	1
16	1641-K1535L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.018	J	-	0.0062	0.019	1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	210	J	-	0.27	0.9	1
16	1641-K1535R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.6	=	-	0.65	2.4	1
16	1641-K1535R-SS-D-SO	0	0.25	7440-39-3	Barium	500	=	-	0.074	2	1
16	1641-K1535R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.42	J	-	0.04	0.49	1
16	1641-K1535R-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.057	3.4	1
16	1641-K1535R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.02	=	-	0.006	0.018	1
16	1641-K1532R-SS-D-SO	0	0.25	7439-92-1	Lead	210	J	-	0.27	0.91	1
16	1641-K1539R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.4	=	-	0.64	2.4	1
16	1641-K1539R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.073	1.9	1
16	1641-K1539R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.57	=	-	0.04	0.48	1
16	1641-K1539R-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.056	3.4	1
16	1641-K1539R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.023	=	-	0.0066	0.02	1
16	1641-K1538L-SS-D-SO	0	0.25	7439-92-1	Lead	200	J	-	0.26	0.86	1
16	1641-K1550R-SS-D-SO	0	0.25	7439-92-1	Lead	200	J	-	0.28	0.92	1
16	1641-K1540L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.7	=	-	0.66	2.5	1
16	1641-K1540L-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.076	2	1
16	1641-K1540L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.58	=	-	0.041	0.5	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
16	1641-K1540L-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.058	3.5	1
16	1641-K1540L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.018	=	-	0.006	0.018	1
16	1641-K1535R-SS-D-SO	0	0.25	7439-92-1	Lead	190	J	-	0.26	0.88	1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2.2	J	-	0.66	2.5	1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	310	=	-	0.076	2	1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.34	J	-	0.041	0.5	1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	13	J	-	0.058	3.5	1
16	1641-K1540L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0069	J	-	0.0065	0.02	1
16	1641-K1542R-SS-D-SO	0	0.25	7439-92-1	Lead	190	J	-	0.25	0.83	1
16	1641-K1540R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.5	=	-	0.61	2.3	1
16	1641-K1524R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	180	J	-	0.25	0.82	1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2	J	-	0.61	2.3	1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	370	=	-	0.07	1.8	1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.31	J	-	0.038	0.46	1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	14	J	-	0.053	3.2	1
16	1641-K1544L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0057	0.018	1
16	1641-K1535L-SS-D-SO	0	0.25	7439-92-1	Lead	180	J	-	0.27	0.89	1
16	1641-K1544R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.8	J	-	0.7	2.6	1
16	1641-K1544R-SS-D-SO	0	0.25	7440-39-3	Barium	400	=	-	0.08	2.1	1
16	1641-K1544R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.37	J	-	0.043	0.53	1
16	1641-K1544R-SS-D-SO	0	0.25	7440-47-3	Chromium	22	J	-	0.061	3.7	1
16	1641-K1544R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.01	J	-	0.0063	0.019	1
16	1641-K1534R-SS-D-SO	0	0.25	7439-92-1	Lead	180	J	-	0.24	0.79	1
16	1641-K1548L-SS-D-SO	0	0.25	7439-92-1	Lead	180	J	-	0.26	0.87	1
16	1641-K1545L-SS-D-SO	0	0.25	7440-39-3	Barium	550	J	-	0.43	11	5
16	1641-K1545L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.046	0.57	1
16	1641-K1545L-SS-D-SO	0	0.25	7440-47-3	Chromium	900	J	-	0.066	4	1
16	1641-K1545L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0078	J	-	0.0076	0.023	1
16	1641-K1545R-SS-D-SO	0	0.25	7439-92-1	Lead	170	J	-	0.29	0.97	1
16	1641-K1534R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	170	J	-	0.23	0.76	1
16	1641-K1524L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.64	2.4	1
16	1641-K1524L-SS-D-SO	0	0.25	7440-39-3	Barium	300	=	-	0.073	1.9	1
16	1641-K1524L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.04	0.48	1
16	1641-K1524L-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.056	3.4	1
16	1641-K1524L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0068	0.021	1
16	1641-K1539L-SS-D-SO	0	0.25	7439-92-1	Lead	170	J	-	0.25	0.84	1
16	1641-K1527L-SS-D-SO	0	0.25	7439-92-1	Lead	170	J	-	0.28	0.92	1
16	1641-K1528L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.2	J	-	0.63	2.4	1
16	1641-K1528L-SS-D-SO	0	0.25	7440-39-3	Barium	350	J	-	0.072	1.9	1
16	1641-K1528L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.31	J	-	0.039	0.48	1
16	1641-K1528L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.055	3.3	1
16	1641-K1528L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0068	0.021	1
16	1641-K1541R-SS-D-SO	0	0.25	7439-92-1	Lead	160	J	-	0.24	0.81	1
16	1641-K1528R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.68	2.6	1
16	1641-K1528R-SS-D-SO	0	0.25	7440-39-3	Barium	370	=	-	0.079	2.1	1
16	1641-K1528R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.53	=	-	0.043	0.52	1
16	1641-K1528R-SS-D-SO	0	0.25	7440-47-3	Chromium	10	J	-	0.06	3.6	1
16	1641-K1528R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.022	=	-	0.0063	0.019	1
16	1641-K1525R-SS-D-SO	0	0.25	7439-92-1	Lead	160	J	-	0.25	0.82	1
16	1641-K1546R-SS-D-SO	0	0.25	7439-92-1	Lead	150	=	-	0.25	0.85	1
16	1641-K1529L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.8	J	-	0.69	2.6	1
16	1641-K1529L-SS-D-SO	0	0.25	7440-39-3	Barium	300	=	-	0.079	2.1	1
16	1641-K1529L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.4	J	-	0.043	0.52	1
16	1641-K1529L-SS-D-SO	0	0.25	7440-47-3	Chromium	19	J	-	0.06	3.6	1
16	1641-K1529L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.014	J	-	0.0064	0.02	1
16	1641-K1533L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.44	J	-	0.043	0.53	1
16	1641-K1533L-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.061	3.7	1
16	1641-K1533L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.019	J	-	0.0064	0.02	1
16	1641K-1525LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	131	=	0.145	0.29	0.968	0.926
16	1641-K1533R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	=	-	0.61	2.3	1
16	1641-K1533R-SS-D-SO	0	0.25	7440-39-3	Barium	290	=	-	0.07	1.8	1
16	1641-K1533R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.28	J	-	0.038	0.46	1
16	1641-K1533R-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.053	3.2	1
16	1641-K1533R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.0059	0.018	1
16	1641K-1525LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	131	=	0.134	0.267	0.891	0.862
16	1641-K1530L-SS-D-SO	0	0.25	7439-92-1	Lead	130	J	-	0.25	0.84	1
16	1641-K1534L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.6	J	-	0.67	2.5	1
16	1641-K1534L-SS-D-SO	0	0.25	7440-39-3	Barium	290	=	-	0.077	2	1
16	1641-K1534L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.36	J	-	0.041	0.51	1
16	1641-K1534L-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.059	3.5	1
16	1641-K1534L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.007	0.021	1
16	1641-K1550L-SS-D-SO	0	0.25	7439-92-1	Lead	130	J	-	0.27	0.89	1
16	1641-K1534R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.5	=	-	0.58	2.2	1
16	1641-K1534R-SS-D-SO	0	0.25	7440-39-3	Barium	460	=	-	0.067	1.8	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
16	1641-K1534R-SS-D-SO	0	0.25	7440-43-9	Cadmium	4.8	=	-	0.036	0.44	1
16	1641-K1534R-SS-D-SO	0	0.25	7440-47-3	Chromium	11	J	-	0.051	3.1	1
16	1641-K1534R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.016	J	-	0.006	0.018	1
16	1641-K1540R-SS-D-SO	0	0.25	7439-92-1	Lead	120	J	-	0.25	0.83	1
16	1641-K1538L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.5	J	-	0.63	2.4	1
16	1641-K1538L-SS-D-SO	0	0.25	7440-39-3	Barium	310	J	-	0.073	1.9	1
16	1641-K1538L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.33	J	-	0.039	0.48	1
16	1641-K1538L-SS-D-SO	0	0.25	7440-47-3	Chromium	21	J	-	0.055	3.3	1
16	1641-K1538L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.015	J	-	0.0071	0.022	1
16	1641-K1533R-SS-D-SO	0	0.25	7439-92-1	Lead	120	J	-	0.25	0.83	1
16	1641-K1538R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.61	2.3	1
16	1641-K1538R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.07	1.8	1
16	1641-K1538R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.35	J	-	0.038	0.46	1
16	1641-K1538R-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.053	3.2	1
16	1641-K1538R-SS-D-SO	0	0.25	7782-49-2	Selenium	0.8	J	-	0.79	2.8	1
16	1641-K1538R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.037	=	-	0.007	0.021	1
16	1641-K1536R-SS-D-SO	0	0.25	7439-92-1	Lead	110	J	-	0.28	0.95	1
16	1641-K1532L-SS-D-SO	0	0.25	7439-92-1	Lead	110	J	-	0.28	0.93	1
16	1641-K1539L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.61	2.3	1
16	1641-K1539L-SS-D-SO	0	0.25	7440-39-3	Barium	350	=	-	0.071	1.9	1
16	1641-K1539L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.038	0.47	1
16	1641-K1539L-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.054	3.3	1
16	1641-K1539L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0061	0.019	1
16	1641K-1543REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	104	=	0.143	0.285	0.951	0.926
16	1641-K1543L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.1	J	-	0.66	2.5	1
16	1641-K1543L-SS-D-SO	0	0.25	7440-39-3	Barium	480	J	-	0.076	2	1
16	1641-K1543L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.38	J	-	0.041	0.5	1
16	1641-K1543L-SS-D-SO	0	0.25	7440-47-3	Chromium	20	J	-	0.058	3.5	1
16	1641-K1543L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0098	J	-	0.0061	0.019	1
16	1641-K1548R-SS-D-SO	0	0.25	7439-92-1	Lead	100	J	-	0.28	0.95	1
16	1641-K1543R-SS-D-SO	0	0.25	7440-38-2	Arsenic	6.1	=	-	0.69	2.6	1
16	1641-K1543R-SS-D-SO	0	0.25	7440-39-3	Barium	400	=	-	0.079	2.1	1
16	1641-K1543R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.5	J	-	0.043	0.52	1
16	1641-K1543R-SS-D-SO	0	0.25	7440-47-3	Chromium	30	J	-	0.061	3.7	1
16	1641-K1543R-SS-D-SO	0	0.25	7782-49-2	Selenium	1.1	J	-	0.9	3.1	1
16	1641-K1531R-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	87	J	-	0.26	0.87	1
16	1641-K1528L-SS-D-SO	0	0.25	7439-92-1	Lead	74	J	-	0.26	0.86	1
16	1641-K1544L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.69	2.6	1
16	1641-K1544L-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.079	2.1	1
16	1641-K1544L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.26	J	-	0.043	0.52	1
16	1641-K1544L-SS-D-SO	0	0.25	7440-47-3	Chromium	18	J	-	0.06	3.6	1
16	1641-K1544L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0062	0.019	1
16	1641-K1544L-SS-D-SO	0	0.25	7439-92-1	Lead	73	J	-	0.28	0.93	1
16	1641-K1527L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.4	=	-	0.67	2.6	1
16	1641-K1527L-SS-D-SO	0	0.25	7440-39-3	Barium	260	=	-	0.078	2	1
16	1641-K1527L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.54	=	-	0.042	0.51	1
16	1641-K1527L-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.059	3.6	1
16	1641-K1527L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0061	0.019	1
16	1641-K1530R-SS-D-SO	0	0.25	7439-92-1	Lead	66	J	-	0.24	0.8	1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2.8	=	-	0.59	2.2	1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	270	=	-	0.068	1.8	1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.54	=	-	0.037	0.45	1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	15	J	-	0.052	3.1	1
16	1641-K1527L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0095	J	-	0.0057	0.018	1
16	1641-K1531L-SS-D-SO	0	0.25	7439-92-1	Lead	59.1	=	-	0.044	0.27	1
16	1641-K1527R-SS-D-SO	0	0.25	7440-38-2	Arsenic	4	=	-	0.6	2.3	1
16	1641-K1527R-SS-D-SO	0	0.25	7440-39-3	Barium	280	=	-	0.069	1.8	1
16	1641-K1527R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.64	=	-	0.037	0.46	1
16	1641-K1527R-SS-D-SO	0	0.25	7440-47-3	Chromium	15	J	-	0.053	3.2	1
16	1641-K1527R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.016	J	-	0.006	0.018	1
16	1641-K1526L-SS-D-SO	0	0.25	7439-92-1	Lead	58	J	-	0.25	0.83	1
16	1641K-1528REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	52	=	0.144	0.287	0.958	0.935
16	1641-K1532L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.68	2.6	1
16	1641-K1532L-SS-D-SO	0	0.25	7440-39-3	Barium	330	=	-	0.079	2.1	1
16	1641-K1532L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.23	J	-	0.042	0.52	1
16	1641-K1532L-SS-D-SO	0	0.25	7440-47-3	Chromium	18	J	-	0.06	3.6	1
16	1641-K1532L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.007	0.021	1
16	1641-K1537R-SS-D-SO	0	0.25	7439-92-1	Lead	45	J	-	0.24	0.79	1
16	1641-K1532R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.67	2.5	1
16	1641-K1532R-SS-D-SO	0	0.25	7440-39-3	Barium	260	=	-	0.077	2	1
16	1641-K1532R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.43	J	-	0.042	0.51	1
16	1641-K1532R-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.059	3.5	1
16	1641-K1532R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0069	0.021	1
16	1641-K1537L-SS-D-SO	0	0.25	7439-92-1	Lead	41	J	-	0.26	0.86	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
16	1641-K1536L-SS-D-SO	0	0.25	7439-92-1	Lead	37	J	-	0.28	0.92	1
16	1641-K1533L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.6	=	-	0.69	2.6	1
16	1641-K1533L-SS-D-SO	0	0.25	7440-39-3	Barium	270	=	-	0.08	2.1	1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7439-92-1	Lead	37	J	-	0.24	0.8	1
16	1641-K1537L-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.1	J	-	0.63	2.4	1
16	1641-K1537L-SS-D-SO	0	0.25	7440-39-3	Barium	220	=	-	0.073	1.9	1
16	1641-K1537L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.19	J	-	0.039	0.48	1
16	1641-K1537L-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.056	3.4	1
16	1641-K1537L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.013	J	-	0.0059	0.018	1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	1.4	J	-	0.59	2.2	1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	260	=	-	0.068	1.8	1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.16	J	-	0.037	0.45	1
16	1641-K1537L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	9.5	J	-	0.052	3.1	1
16	1641-K1537R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.3	J	-	0.58	2.2	1
16	1641-K1537R-SS-D-SO	0	0.25	7440-39-3	Barium	310	=	-	0.067	1.8	1
16	1641-K1537R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.28	J	-	0.036	0.44	1
16	1641-K1537R-SS-D-SO	0	0.25	7440-47-3	Chromium	17	J	-	0.051	3.1	1
16	1641-K1537R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0061	0.019	1
16	1641K-1547REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	25.4	=	0.133	0.266	0.887	0.87
16	1641-K1542L-SS-D-SO	0	0.25	7440-38-2	Arsenic	3.2	=	-	0.6	2.3	1
16	1641-K1542L-SS-D-SO	0	0.25	7440-39-3	Barium	250	=	-	0.069	1.8	1
16	1641-K1542L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.49	=	-	0.037	0.45	1
16	1641-K1542L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.052	3.2	1
16	1641-K1542L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.007	J	-	0.0064	0.02	1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	3.2	=	-	0.63	2.4	1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	240	=	-	0.072	1.9	1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.52	=	-	0.039	0.48	1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	10	J	-	0.055	3.3	1
16	1641-K1542L-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0083	J	-	0.0058	0.018	1
16	1641-K1542R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.61	2.3	1
16	1641-K1542R-SS-D-SO	0	0.25	7440-39-3	Barium	140	=	-	0.071	1.9	1
16	1641-K1542R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.31	J	-	0.038	0.46	1
16	1641-K1542R-SS-D-SO	0	0.25	7440-47-3	Chromium	8.1	J	-	0.054	3.2	1
16	1641-K1547L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.1	J	-	0.62	2.3	1
16	1641-K1547L-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.071	1.9	1
16	1641-K1547L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.57	J	-	0.038	0.47	1
16	1641-K1547L-SS-D-SO	0	0.25	7440-47-3	Chromium	11	=	-	0.054	3.3	1
16	1641-K1547L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0069	J	-	0.0062	0.019	1
16	1641-K1547R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.65	2.4	1
16	1641-K1547R-SS-D-SO	0	0.25	7440-39-3	Barium	410	=	-	0.074	2	1
16	1641-K1547R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.61	J	-	0.04	0.49	1
16	1641-K1547R-SS-D-SO	0	0.25	7440-47-3	Chromium	17	=	-	0.057	3.4	1
16	1641-K1547R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.012	J	-	0.0067	0.021	1
16	1641K-1524REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	19.9	=	0.137	0.273	0.91	0.87
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-38-2	Arsenic	2	J	-	0.73	2.8	1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-39-3	Barium	420	=	-	0.084	2.2	1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-43-9	Cadmium	0.48	J	-	0.045	0.55	1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7440-47-3	Chromium	20	=	-	0.064	3.9	1
16	1641-K1547R-SS-D-SO-DUP	0	0.25	7439-97-6	Mercury	0.0088	J	-	0.0063	0.019	1
16	1641-K1550R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.01	J	-	0.0061	0.019	1
16	1641K-1527REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	18.9	=	0.145	0.291	0.968	0.952
16	1641K-1549REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	15.2	=	0.138	0.275	0.918	0.901
16	1641-K1549L-SS-D-SO	0	0.25	7440-39-3	Barium	370	=	-	0.081	2.1	1
16	1641-K1549L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.044	0.53	1
16	1641-K1549L-SS-D-SO	0	0.25	7440-47-3	Chromium	13	J	-	0.062	3.7	1
16	1641-K1549L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0095	J	-	0.0063	0.019	1
16	1641-K1549R-SS-D-SO	0	0.25	7440-38-2	Arsenic	1.7	J	-	0.59	2.2	1
16	1641-K1549R-SS-D-SO	0	0.25	7440-39-3	Barium	430	=	-	0.068	1.8	1
16	1641-K1549R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.3	J	-	0.036	0.44	1
16	1641-K1549R-SS-D-SO	0	0.25	7440-47-3	Chromium	19	J	-	0.052	3.1	1
16	1641-K1549R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.017	J	-	0.0064	0.02	1
16	1641-K1550L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.65	2.5	1
16	1641-K1550L-SS-D-SO	0	0.25	7440-39-3	Barium	330	=	-	0.075	2	1
16	1641-K1550L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.39	J	-	0.041	0.5	1
16	1641-K1550L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.057	3.5	1
16	1641-K1550L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.0079	J	-	0.0062	0.019	1
16	1641-K1550R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.3	J	-	0.68	2.6	1
16	1641-K1550R-SS-D-SO	0	0.25	7440-39-3	Barium	300	=	-	0.078	2	1
16	1641-K1550R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.58	=	-	0.042	0.51	1
16	1641-K1550R-SS-D-SO	0	0.25	7440-47-3	Chromium	14	J	-	0.059	3.6	1
16	1641K-1527LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.8	=	0.137	0.275	0.916	0.901
16	1641K-1533LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.6	=	0.136	0.273	0.91	0.885
16	1641K-1531REC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13.5	=	0.145	0.29	0.967	0.952
16	1641K-1541LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	13	=	0.15	0.299	0.997	0.971

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
16	1641K-1546LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.8	=	0.145	0.291	0.968	0.952
16	1641K-1529LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	12.4	=	0.144	0.287	0.957	0.935
16	1641-K1548L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.64	2.4	1
16	1641-K1548L-SS-D-SO	0	0.25	7440-39-3	Barium	350	=	-	0.074	1.9	1
16	1641-K1548L-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.34	J	-	0.04	0.49	1
16	1641-K1548L-SS-D-SO	0	0.25	7440-47-3	Chromium	12	J	-	0.056	3.4	1
16	1641-K1548L-SS-D-SO	0	0.25	7439-97-6	Mercury	0.024	=	-	0.0066	0.02	1
16	1641-K1548R-SS-D-SO	0	0.25	7440-38-2	Arsenic	2.1	J	-	0.69	2.6	1
16	1641-K1548R-SS-D-SO	0	0.25	7440-39-3	Barium	360	=	-	0.08	2.1	1
16	1641-K1548R-SS-D-SO	0	0.25	7440-43-9	Cadmium	0.32	J	-	0.043	0.53	1
16	1641-K1548R-SS-D-SO	0	0.25	7440-47-3	Chromium	16	J	-	0.061	3.7	1
16	1641-K1548R-SS-D-SO	0	0.25	7439-97-6	Mercury	0.008	J	-	0.0067	0.02	1
16	1641-K1549L-SS-D-SO	0	0.25	7440-38-2	Arsenic	2	J	-	0.71	2.7	1
16	1641K-1524LEC-1.0-1.5D-SO	1	1.5	7439-92-1	Lead	10.8	J	0.162	0.324	1.08	0.971
16	1641K-1547LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	9.86	=	0.137	0.275	0.917	0.901
16	1641K-1540LEC-0.0-0.5D-SO	0	0.5	7439-92-1	Lead	7.53	=	0.142	0.284	0.948	0.926
16	1641K-1540LEC-0.0-0.5D-DUP	0	0.5	7439-92-1	Lead	7.37	=	0.132	0.264	0.88	0.862
24	24A941-EFR-D-SO	1	1.5	7439-92-1	Lead	6350	=	44.4	22.2	88.7	1
24	24A918-EFR-D-SO	1	1.5	7439-92-1	Lead	2870	=	26	13	51.9	1
24	24A943-EFR-D-SO	1	1.5	7439-92-1	Lead	2540	=	21.6	10.8	43.1	1
24	2418A-933SS-C-SO	0	0.5	7439-92-1	Lead	1790	=	5	1	-	5
24	24A969-EFL-D-SO	1	1.5	7439-92-1	Lead	1630	=	22.1	11.1	44.3	1
24	24A944-EFR-D-SO	1	1.5	7439-92-1	Lead	1590	=	21.4	10.7	42.8	1
24	24A926-EFL-D-SO	1	1.5	7439-92-1	Lead	1490	=	24.4	12.2	48.9	1
24	24A951-EFR-D-SO	1	1.5	7439-92-1	Lead	1470	=	22.1	11.1	44.3	1
24	2418A-946SS-C-SO	0	0.5	7439-92-1	Lead	1460	=	4.9	1	-	5
24	2418A-929SS-C-SO	0	0.5	7439-92-1	Lead	1390	=	5	1	-	5
24	2418A-939SS-C-SO	0	0.5	7439-92-1	Lead	1340	=	5	1	-	5
24	24A955-EFR-D-SO	1	1.5	7439-92-1	Lead	1100	=	21.3	10.6	42.5	1
24	2418A-918SS-C-SO	0	0.5	7439-92-1	Lead	1090	=	4.9	1	-	5
24	2418A-952SS-C-SO	0	0.5	7439-92-1	Lead	1020	=	4.9	1	-	5
24	24A929-EFL-D-SO	1	1.5	7439-92-1	Lead	1010	=	21.2	10.6	42.5	1
24	2418A-915SS-C-SO	0	0.5	7439-92-1	Lead	1000	=	5	1	-	5
24	2418A-969SS-C-SO	0	0.5	7439-92-1	Lead	977	=	4.9	1	-	5
24	2418A-909SS-C-SO	0	0.5	7439-92-1	Lead	954	=	5	1	-	5
24	2418A-916SS-C-SO	0	0.5	7439-92-1	Lead	948	=	5	1	-	5
24	24A920-EFL-D-SO	1	1.5	7439-92-1	Lead	829	=	21.9	10.9	43.7	1
24	2418A-936SS-C-SO	0	0.5	7439-92-1	Lead	824	=	4.9	1	-	5
24	2418A-903SS-C-SO	0	0.5	7439-92-1	Lead	775	=	4.9	1	-	5
24	2418A-925SS-C-SO	0	0.5	7439-92-1	Lead	762	=	5	1	-	5
24	2418A-439SS-C-SO	0	0.5	7439-92-1	Lead	746	=	5	1	-	5
24	2418A-941SS-C-SO	0	0.5	7439-92-1	Lead	741	=	5	1	-	5
24	2418A-971SS-C-SO	0	0.5	7439-92-1	Lead	720	=	4.9	1	-	5
24	2418A-943SS-C-SO	0	0.5	7439-92-1	Lead	669	=	5	1	-	5
24	2418A-299SS-C-SO	0	0.5	7439-92-1	Lead	657	=	4.9	1	-	5
24	24A922-EFR-D-SO	1	1.5	7439-92-1	Lead	644	=	21.6	10.8	43.2	1
24	2418A-922SS-C-SO	0	0.5	7439-92-1	Lead	626	=	5	1	-	5
24	2418A-917SS-C-SO	0	0.5	7439-92-1	Lead	609	=	4.9	1	-	5
24	2418A-977SS-C-SO	0	0.5	7439-92-1	Lead	606	=	5	1	-	5
24	2418A-948SS-C-SO	0	0.5	7439-92-1	Lead	603	=	5	1	-	5
24	24A955-EFL-D-SO2	1.5	2	7439-92-1	Lead	591	=	0.23	0.12	0.46	1
24	2418A-923SS-C-SO	0	0.5	7439-92-1	Lead	582	=	4.9	1	-	5
24	2418A-935SS-C-SO	0	0.5	7439-92-1	Lead	506	=	4.9	1	-	5
24	2418A-951SS-C-SO	0	0.5	7439-92-1	Lead	499	=	4.9	1	-	5
24	2418A-970SS-C-SO	0	0.5	7439-92-1	Lead	494	=	4.9	1	-	5
24	2418A-976SS-C-SO	0	0.5	7439-92-1	Lead	481	=	4.9	1	-	5
24	24A923-EFR-D-SO	1	1.5	7439-92-1	Lead	478	=	21.3	10.7	42.7	1
24	2418A-926SS-C-SO	0	0.5	7439-92-1	Lead	464	=	4.9	1	-	5
24	24A948-EFL-D-SO	1	1.5	7439-92-1	Lead	458	=	22.4	11.2	44.7	1
24	24A955-EFL-D-SO	1	1.5	7439-92-1	Lead	457	=	22.3	11.1	44.6	1
24	2418A-912SS-C-SO	0	0.5	7439-92-1	Lead	443	=	4.9	1	-	5
24	2418A-914SS-C-SO	0	0.5	7439-92-1	Lead	438	=	4.9	1	-	5
24	2418A-944SS-C-SO	0	0.5	7439-92-1	Lead	434	=	4.9	1	-	5
24	2418A-942SS-C-SO	0	0.5	7439-92-1	Lead	429	=	5	1	-	5
24	2418A-962SS-C-SO	0	0.5	7439-92-1	Lead	428	=	5	1	-	5
24	2418A-950SS-C-SO	0	0.5	7439-92-1	Lead	423	=	5	1	-	5
24	2418A-509SS-C-SO	0	0.5	7439-92-1	Lead	419	=	5	1	-	5
24	24A976-EFR-D-SO	1	1.5	7439-92-1	Lead	416	=	4.15	2.07	8.3	1
24	2418A-913SS-C-SO	0	0.5	7439-92-1	Lead	415	=	4.9	1	-	5
24	2418A-955SS-C-SO	0	0.5	7439-92-1	Lead	413	=	5	1	-	5
24	2418A-964SS-C-SO	0	0.5	7439-92-1	Lead	407	=	4.9	1	-	5
24	2418A-956SS-C-SO	0	0.5	7439-92-1	Lead	395	=	4.9	1	-	5
24	2418A-919SS-C-SO	0	0.5	7439-92-1	Lead	385	=	4.9	1	-	5
24	2418A-905SS-C-SO	0	0.5	7439-92-1	Lead	383	=	5	1	-	5

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
24	2418A-945SS-C-SO	0	0.5	7439-92-1	Lead	376	=	4.9	1	-	5
24	2418A-910SS-C-SO	0	0.5	7439-92-1	Lead	371	=	5	1	-	5
24	2418A-973SS-C-SO	0	0.5	7439-92-1	Lead	369	=	5	1	-	5
24	24A938-EFR-D-SO	1	1.5	7439-92-1	Lead	365	=	2.21	1.11	4.43	1
24	2418A-906SS-C-SO	0	0.5	7439-92-1	Lead	359	=	5	1	-	5
24	2418A-904SS-C-SO	0	0.5	7439-92-1	Lead	357	=	4.9	1	-	5
24	24A922-EFL-D-SO	1	1.5	7439-92-1	Lead	353	=	2.3	1.15	4.59	1
24	2418A-947SS-C-SO	0	0.5	7439-92-1	Lead	350	=	4.9	1	-	5
24	2418A-934SS-C-SO	0	0.5	7439-92-1	Lead	347	=	4.9	1	-	5
24	2418A-965SS-C-SO	0	0.5	7439-92-1	Lead	337	=	4.9	1	-	5
24	2418A-924SS-C-SO	0	0.5	7439-92-1	Lead	334	J	5	1	-	5
24	2418A-968SS-C-SO	0	0.5	7439-92-1	Lead	333	=	4.9	1	-	5
24	2418A-930SS-C-SO	0	0.5	7439-92-1	Lead	324	=	4.9	1	-	5
24	2418A-949SS-C-SO	0	0.5	7439-92-1	Lead	316	=	4.9	1	-	5
24	2418A-958SS-C-SO	0	0.5	7439-92-1	Lead	296	=	5	1	-	5
24	2418A-908SS-C-SO	0	0.5	7439-92-1	Lead	294	J	5	1	-	5
24	2418A-937SS-C-SO	0	0.5	7439-92-1	Lead	294	=	5	1	-	5
24	2418A-938SS-C-SO	0	0.5	7439-92-1	Lead	292	=	5	1	-	5
24	24A945-EFL-D-SO	1	1.5	7439-92-1	Lead	291	=	2.21	1.1	4.42	1
24	2418A-902SS-C-SO	0	0.5	7439-92-1	Lead	287	=	5	1	-	5
24	2418A-920SS-C-SO	0	0.5	7439-92-1	Lead	286	=	4.9	1	-	5
24	24A944-EFL-D-SO	1	1.5	7439-92-1	Lead	286	=	2.32	1.16	4.63	1
24	2418A-907SS-C-SO	0	0.5	7439-92-1	Lead	275	=	5	1	-	5
24	24A962-EFL-D-SO	1	1.5	7439-92-1	Lead	275	=	2.2	1.1	4.4	1
24	24A977-EFR-D-SO2	1.5	2	7439-92-1	Lead	275	=	0.26	0.13	0.52	1
24	2418A-927SS-C-SO	0	0.5	7439-92-1	Lead	273	=	5	1	-	5
24	24A925-EFR-D-SO	1	1.5	7439-92-1	Lead	270	=	2.42	1.21	4.85	1
24	2418A-924SS-C-SO	0	0.5	7439-92-1	Lead	260	=	5	1	-	5
24	24A939-EFL-D-SO	1	1.5	7439-92-1	Lead	258	=	2.19	1.09	4.37	1
24	2418A-928SS-C-SO	0	0.5	7439-92-1	Lead	249	=	5	1	-	5
24	2418A-932SS-C-SO	0	0.5	7439-92-1	Lead	246	=	5	1	-	5
24	2418A-954SS-C-SO	0	0.5	7439-92-1	Lead	241	=	4.9	1	-	5
24	24A976-EFL-D-SO	1	1.5	7439-92-1	Lead	227	=	2.17	1.09	4.35	1
24	24A952-EFR-D-SO	1	1.5	7439-92-1	Lead	223	=	2.12	1.06	4.24	1
24	2418A-963SS-C-SO	0	0.5	7439-92-1	Lead	223	=	5	1	-	5
24	24A918-EFL-D-SO	1	1.5	7439-92-1	Lead	217	=	2.65	1.33	5.3	1
24	2418A-967SS-C-SO	0	0.5	7439-92-1	Lead	215	=	5	1	-	5
24	24A924-EFR-D-SO	1	1.5	7439-92-1	Lead	214	=	2.64	1.32	5.29	1
24	2418A-957SS-C-SO	0	0.5	7439-92-1	Lead	208	=	4.9	1	-	5
24	2418A-975SS-C-SO	0	0.5	7439-92-1	Lead	208	=	5	1	-	5
24	24A936-EFL-D-SO	1	1.5	7439-92-1	Lead	196	=	2.11	1.05	4.22	1
24	2418A-940SS-C-SO	0	0.5	7439-92-1	Lead	194	J	4.9	1	-	5
24	2418A-921SS-C-SO	0	0.5	7439-92-1	Lead	186	=	4.9	1	-	5
24	24A939-EFR-D-SO	1	1.5	7439-92-1	Lead	180	=	2.06	1.03	4.11	1
24	2418A-972SS-C-SO	0	0.5	7439-92-1	Lead	179	=	4.9	1	-	5
24	2418A-911SS-C-SO	0	0.5	7439-92-1	Lead	170	=	4.9	1	-	5
24	24A929-EFR-D-SO	1	1.5	7439-92-1	Lead	170	=	2.06	1.03	4.13	1
24	24A-EF-D-SO-DUP03	1	1.5	7439-92-1	Lead	170	J	2.2	1.1	4.39	1
24	2418A-769SS-C-SO	0	0.5	7439-92-1	Lead	168	=	4.9	1	-	5
24	24A909-EFL-D-SO	1	1.5	7439-92-1	Lead	164	=	2.18	1.09	4.36	1
24	24A935-EFL-D-SO	1	1.5	7439-92-1	Lead	162	=	2.2	1.1	4.41	1
24	2418A-049SS-C-SO	0	0.5	7439-92-1	Lead	151	=	4.9	1	-	5
24	24A936-EFR-D-SO	1	1.5	7439-92-1	Lead	151	=	2.1	1.05	4.21	1
24	24A947-EFR-D-SO	1	1.5	7439-92-1	Lead	150	=	2.2	1.1	4.39	1
24	24A946-EFR-D-SO	1	1.5	7439-92-1	Lead	145	=	2.13	1.07	4.27	1
24	2418A-931SS-C-SO	0	0.5	7439-92-1	Lead	144	=	4.9	1	-	5
24	24A934-EFL-D-SO	1	1.5	7439-92-1	Lead	144	=	2.15	1.08	4.31	1
24	24A969-EFR-D-SO	1	1.5	7439-92-1	Lead	143	=	3.18	1.59	6.37	1
24	2418A-961SS-C-SO	0	0.5	7439-92-1	Lead	140	=	5	1	-	5
24	2418A-901SS-C-SO	0	0.5	7439-92-1	Lead	134	=	5	1	-	5
24	24A964-EFR-D-SO	1	1.5	7439-92-1	Lead	131	=	2.17	1.08	4.34	1
24	24A927-EFL-D-SO	1	1.5	7439-92-1	Lead	127	=	2.44	1.22	4.87	1
24	24A926-EFR-D-SO	1	1.5	7439-92-1	Lead	126	=	2.77	1.38	5.53	1
24	24A952-EFL-D-SO	1	1.5	7439-92-1	Lead	113	=	2.18	1.09	4.35	1
24	24A939-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.42	=	0.21	0.1	0.41	1
24	24A939-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.02	=	0.012	0.005	0.012	1
24	24A941-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.22	J	0.21	0.11	0.42	1
24	24A941-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.011	J	0.012	0.0047	0.012	1
24	24A941-EFR-D-SO	1	1.5	7440-38-2	Arsenic	6.55	J	0.22	0.11	0.44	1
24	24A941-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.028	=	0.013	0.0053	0.013	1
24	24A941-EFR-D-SO2	3	3.5	7440-38-2	Arsenic	3.79	=	0.23	0.11	0.45	1
24	24A941-EFR-D-SO2	3	3.5	7439-97-6	Mercury	0.042	=	0.014	0.0055	0.014	1
24	24A951-EFL-D-SO	1	1.5	7439-92-1	Lead	104	=	2.19	1.09	4.38	1
24	24A942-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.65	J	0.23	0.11	0.45	1

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FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
24	24A942-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.013	0.0051	0.013	1
24	24A925-EFL-D-SO	1	1.5	7439-92-1	Lead	104	=	2.5	1.25	5	1
24	24A942-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.24	J	0.23	0.11	0.45	1
24	24A942-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.014	0.0055	0.014	1
24	24A943-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.66	J	0.23	0.11	0.45	1
24	24A943-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.027	=	0.014	0.0054	0.014	1
24	24A943-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.65	J	0.22	0.11	0.43	1
24	24A943-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.013	0.0053	0.013	1
24	24A943-EFR-D-SO2	3.5	4	7440-38-2	Arsenic	4.55	=	0.23	0.11	0.45	1
24	24A943-EFR-D-SO2	3.5	4	7439-97-6	Mercury	0.045	=	0.013	0.0051	0.013	1
24	24A944-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.01	J	0.23	0.12	0.46	1
24	24A944-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.013	0.0052	0.013	1
24	24A944-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.73	J	0.21	0.11	0.43	1
24	24A944-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.028	=	0.013	0.0052	0.013	1
24	24A905-EFR-D-SO	1	1.5	7439-92-1	Lead	96.8	=	2.26	1.13	4.51	1
24	24A944-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	4.03	=	0.23	0.12	0.46	1
24	24A944-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.028	=	0.012	0.0046	0.012	1
24	2418A-953SS-C-SO	0	0.5	7439-92-1	Lead	94.3	=	5	1	-	5
24	24A945-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.98	J	0.22	0.11	0.44	1
24	24A945-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.029	=	0.013	0.005	0.013	1
24	24A946-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.58	J	0.21	0.11	0.43	1
24	24A946-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.04	=	0.013	0.0051	0.013	1
24	24A975-EFR-D-SO	1	1.5	7439-92-1	Lead	93.7	=	2.09	1.05	4.18	1
24	24A946-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.99	J	0.21	0.11	0.43	1
24	24A946-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.038	=	0.012	0.0048	0.012	1
24	24A947-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.53	J	0.22	0.11	0.44	1
24	24A947-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.048	=	0.013	0.0053	0.013	1
24	24A948-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.49	=	0.22	0.11	0.45	1
24	24A948-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.032	=	0.011	0.0045	0.011	1
24	24A948-EFL-D-SO2	1.5	2	7440-38-2	Arsenic	4.26	=	0.28	0.14	0.56	1
24	24A948-EFL-D-SO2	1.5	2	7439-97-6	Mercury	0.046	=	0.016	0.0066	0.016	1
24	24A948-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.38	=	0.22	0.11	0.43	1
24	24A948-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0051	0.013	1
24	24A970-EFR-D-SO	1	1.5	7439-92-1	Lead	90.7	=	2.21	1.11	4.42	1
24	24A950-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.13	=	0.22	0.11	0.44	1
24	24A950-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0052	0.013	1
24	24A950-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.56	=	0.21	0.11	0.43	1
24	24A950-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.018	=	0.013	0.0052	0.013	1
24	24A951-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.96	=	0.22	0.11	0.44	1
24	24A951-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.018	=	0.012	0.0048	0.012	1
24	2418A-966SS-C-SO	0	0.5	7439-92-1	Lead	84.7	=	5	1	-	5
24	24A951-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.47	=	0.22	0.11	0.44	1
24	24A951-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.017	=	0.013	0.0053	0.013	1
24	24A977-EFR-D-SO	1	1.5	7439-92-1	Lead	83	=	2.16	1.08	4.33	1
24	24A951-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	2.76	=	0.22	0.11	0.44	1
24	24A951-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.015	=	0.012	0.005	0.012	1
24	24A952-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.32	=	0.22	0.11	0.44	1
24	24A952-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0052	0.013	1
24	24A952-EFR-D-SO	1	1.5	7440-38-2	Arsenic	1.82	=	0.21	0.11	0.42	1
24	24A952-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.013	0.0051	0.013	1
24	24A971-EFL-D-SO	1	1.5	7439-92-1	Lead	81.2	=	2.23	1.12	4.46	1
24	24A955-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.86	J	0.22	0.11	0.45	1
24	24A955-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.032	=	0.013	0.0053	0.013	1
24	24A965-EFL-D-SO	1	1.5	7439-92-1	Lead	81	=	2.16	1.08	4.33	1
24	24A955-EFL-D-SO2	1.5	2	7440-38-2	Arsenic	3.64	=	0.23	0.12	0.46	1
24	24A955-EFL-D-SO2	1.5	2	7439-97-6	Mercury	0.026	=	0.013	0.0053	0.013	1
24	24A923-EFL-D-SO	1	1.5	7439-92-1	Lead	79	=	2.25	1.13	4.51	1
24	24A955-EFL-D-SO3	2	2.5	7440-38-2	Arsenic	3.42	=	0.21	0.11	0.43	1
24	24A955-EFL-D-SO3	2	2.5	7439-97-6	Mercury	0.031	=	0.012	0.0049	0.012	1
24	24A955-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.72	J	0.21	0.11	0.43	1
24	24A955-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.03	=	0.013	0.005	0.013	1
24	24A955-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	4.53	=	0.23	0.11	0.45	1
24	24A955-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.026	=	0.013	0.0051	0.013	1
24	24A962-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.92	J	0.22	0.11	0.44	1
24	24A962-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.027	=	0.013	0.0053	0.013	1
24	24A962-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.09	J	0.21	0.11	0.43	1
24	24A962-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.023	=	0.011	0.0043	0.011	1
24	24A942-EFL-D-SO	1	1.5	7439-92-1	Lead	66.6	=	2.26	1.13	4.52	1
24	24A917-EFR-D-SO	1	1.5	7439-92-1	Lead	62.7	J	2.23	1.12	4.46	1
24	24A903-EFL-D-SO	1	1.5	7439-92-1	Lead	61.7	=	2.26	1.13	4.52	1
24	24A933-EFR-D-SO	1	1.5	7439-92-1	Lead	61.2	=	2.16	1.08	4.32	1
24	24A-EF-D-SO-DUP04	1	1.5	7439-92-1	Lead	60.5	=	2.25	1.12	4.49	1
24	24A977-EFL-D-SO	1	1.5	7439-92-1	Lead	60.3	=	2.27	1.13	4.53	1
24	24A942-EFR-D-SO	1	1.5	7439-92-1	Lead	58.7	=	2.27	1.14	4.54	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
24	24A920-EFR-D-SO	1	1.5	7439-92-1	Lead	58.5	=	2.12	1.06	4.23	1
24	24A907-EFR-D-SO	1	1.5	7439-92-1	Lead	57.9	=	2.17	1.09	4.34	1
24	24A970-EFL-D-SO	1	1.5	7439-92-1	Lead	55.7	=	2.12	1.06	4.23	1
24	24A905-EFL-D-SO	1	1.5	7439-92-1	Lead	55	=	2.18	1.09	4.36	1
24	24A971-EFR-D-SO	1	1.5	7439-92-1	Lead	53.4	=	2.12	1.06	4.24	1
24	24A-EF-D-SO-DUP01	1	1.5	7439-92-1	Lead	48.7	J	2.17	1.08	4.33	1
24	24A950-EFL-D-SO	1	1.5	7439-92-1	Lead	47.7	=	2.21	1.11	4.42	1
24	24A935-EFR-D-SO	1	1.5	7439-92-1	Lead	47.2	=	2.13	1.07	4.26	1
24	24A903-EFR-D-SO	1	1.5	7439-92-1	Lead	47.1	J	2.14	1.07	4.28	1
24	24A915-EFR-D-SO	1	1.5	7439-92-1	Lead	44.2	=	2.17	1.09	4.35	1
24	24A913-EFR-D-SO	1	1.5	7439-92-1	Lead	41.9	=	0.22	0.11	0.44	1
24	24A941-EFL-D-SO	1	1.5	7439-92-1	Lead	40	=	0.21	0.11	0.42	1
24	24A912-EFR-D-SO	1	1.5	7439-92-1	Lead	39.5	=	0.21	0.11	0.43	1
24	24A912-EFL-D-SO	1	1.5	7439-92-1	Lead	39.2	=	0.22	0.11	0.43	1
24	24A943-EFL-D-SO	1	1.5	7439-92-1	Lead	37.4	=	0.23	0.11	0.45	1
24	24A950-EFR-D-SO	1	1.5	7439-92-1	Lead	35.6	=	0.21	0.11	0.43	1
24	24A962-EFR-D-SO	1	1.5	7439-92-1	Lead	33.6	=	0.21	0.11	0.43	1
24	24A-EF-D-SO-DUP02	1	1.5	7439-92-1	Lead	31	=	2.24	1.12	4.49	1
24	24A917-EFL-D-SO	1	1.5	7439-92-1	Lead	30.5	=	0.22	0.11	0.44	1
24	24A916-EFR-D-SO	1	1.5	7439-92-1	Lead	29.8	=	0.22	0.11	0.44	1
24	24A914-EFR-D-SO	1	1.5	7439-92-1	Lead	28.6	=	0.21	0.11	0.43	1
24	24A909-EFR-D-SO	1	1.5	7439-92-1	Lead	25.3	=	0.22	0.11	0.44	1
24	24A917-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.75	J	0.22	0.11	0.44	1
24	24A917-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.025	=	0.014	0.0054	0.014	1
24	24A-EF-D-SO-DUP01	1	1.5	7440-38-2	Arsenic	2.68	J	0.22	0.11	0.43	1
24	24A-EF-D-SO-DUP01	1	1.5	7439-97-6	Mercury	0.032	=	0.013	0.0052	0.013	1
24	24A917-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.09	J	0.22	0.11	0.45	1
24	24A917-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.013	0.0052	0.013	1
24	24A918-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.89	=	0.27	0.13	0.53	1
24	24A918-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.043	=	0.016	0.0062	0.016	1
24	24A918-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.25	=	0.26	0.13	0.52	1
24	24A918-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.015	0.0061	0.015	1
24	24A948-EFL-D-SO2	1.5	2	7439-92-1	Lead	23.8	=	0.28	0.14	0.56	1
24	24A918-EFR-D-SO2	1.5	2	7440-38-2	Arsenic	3.4	=	0.22	0.11	0.45	1
24	24A918-EFR-D-SO2	1.5	2	7439-97-6	Mercury	0.023	=	0.013	0.0053	0.013	1
24	24A915-EFL-D-SO	1	1.5	7439-92-1	Lead	23.8	=	0.22	0.11	0.45	1
24	24A920-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.73	=	0.22	0.11	0.44	1
24	24A920-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.026	=	0.013	0.0052	0.013	1
24	24A920-EFL-D-SO2	1.5	2	7440-38-2	Arsenic	4.99	=	0.24	0.12	0.48	1
24	24A920-EFL-D-SO2	1.5	2	7439-97-6	Mercury	0.044	=	0.015	0.0058	0.015	1
24	24A920-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.69	=	0.21	0.11	0.42	1
24	24A920-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.012	0.0048	0.012	1
24	24A922-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.33	=	0.23	0.11	0.46	1
24	24A922-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.039	=	0.014	0.0056	0.014	1
24	24A955-EFR-D-SO2	2	2.5	7439-92-1	Lead	22.6	=	0.23	0.11	0.45	1
24	24A922-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.51	=	0.22	0.11	0.43	1
24	24A922-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.013	0.0051	0.013	1
24	24A922-EFR-D-SO2	4	4.5	7440-38-2	Arsenic	5.02	=	0.22	0.11	0.45	1
24	24A922-EFR-D-SO2	4	4.5	7439-97-6	Mercury	0.06	=	0.013	0.0051	0.013	1
24	24A923-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.14	=	0.23	0.11	0.45	1
24	24A923-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.005	0.013	1
24	24A946-EFL-D-SO	1	1.5	7439-92-1	Lead	22.1	=	0.21	0.11	0.43	1
24	24A923-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.95	=	0.21	0.11	0.43	1
24	24A923-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0052	0.013	1
24	24A963-EFL-D-SO	1	1.5	7439-92-1	Lead	22.1	=	0.22	0.11	0.43	1
24	24A923-EFR-D-SO2	2	2.5	7440-38-2	Arsenic	3.51	=	0.21	0.1	0.42	1
24	24A923-EFR-D-SO2	2	2.5	7439-97-6	Mercury	0.014	=	0.012	0.0047	0.012	1
24	24A924-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.17	=	0.26	0.13	0.53	1
24	24A924-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.058	=	0.016	0.0062	0.016	1
24	24A925-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.52	=	0.25	0.12	0.5	1
24	24A925-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.033	=	0.014	0.0057	0.014	1
24	24A925-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.02	=	0.24	0.12	0.48	1
24	24A925-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.024	=	0.013	0.0053	0.013	1
24	24A926-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.48	=	0.24	0.12	0.49	1
24	24A926-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.037	=	0.014	0.0056	0.014	1
24	24A926-EFL-D-SO2	2	2.5	7440-38-2	Arsenic	3.52	=	0.23	0.11	0.46	1
24	24A926-EFL-D-SO2	2	2.5	7439-97-6	Mercury	0.027	=	0.014	0.0055	0.014	1
24	24A926-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.39	=	0.28	0.14	0.55	1
24	24A926-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.015	0.0061	0.015	1
24	24A927-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.35	=	0.24	0.12	0.49	1
24	24A927-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.039	=	0.015	0.0059	0.015	1
24	24A929-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.1	=	0.21	0.11	0.42	1
24	24A929-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.012	0.0049	0.012	1
24	24A929-EFL-D-SO2	1	1.5	7440-38-2	Arsenic	3.72	=	0.24	0.12	0.47	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
24	24A929-EFL-D-SO2	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0052	0.013	1
24	24A929-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.13	=	0.21	0.1	0.41	1
24	24A929-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.032	=	0.013	0.0051	0.013	1
24	24A933-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.81	=	0.21	0.11	0.42	1
24	24A933-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.02	=	0.012	0.0049	0.012	1
24	24A933-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.95	=	0.22	0.11	0.43	1
24	24A933-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.012	0.0047	0.012	1
24	24A914-EFL-D-SO	1	1.5	7439-92-1	Lead	18.9	=	0.22	0.11	0.44	1
24	24A934-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.98	=	0.22	0.11	0.43	1
24	24A934-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0052	0.013	1
24	24A922-EFR-D-SO2	4	4.5	7439-92-1	Lead	18.7	=	0.22	0.11	0.45	1
24	24A935-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.29	=	0.22	0.11	0.44	1
24	24A935-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.012	0.0048	0.012	1
24	24A913-EFL-D-SO	1	1.5	7439-92-1	Lead	18.7	=	0.22	0.11	0.43	1
24	24A935-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.99	=	0.21	0.11	0.43	1
24	24A935-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.042	=	0.013	0.0051	0.013	1
24	24A936-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.99	=	0.21	0.11	0.42	1
24	24A936-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.013	0.0052	0.013	1
24	24A936-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.41	=	0.21	0.11	0.42	1
24	24A936-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.034	=	0.012	0.0049	0.012	1
24	24A938-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.37	=	0.22	0.11	0.44	1
24	24A938-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.035	=	0.013	0.0053	0.013	1
24	24A943-EFR-D-SO2	3.5	4	7439-92-1	Lead	18	=	0.23	0.11	0.45	1
24	24A939-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.76	=	0.22	0.11	0.44	1
24	24A939-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.027	=	0.013	0.0052	0.013	1
24	24A955-EFL-D-SO3	2	2.5	7439-92-1	Lead	18	=	0.23	0.12	0.46	1
24	24A969-EFL-D-SO2	2	2.5	7439-92-1	Lead	16.3	=	0.24	0.12	0.47	1
24	24A926-EFL-D-SO2	2	2.5	7439-92-1	Lead	16.2	=	0.23	0.11	0.46	1
24	24A944-EFR-D-SO2	2	2.5	7439-92-1	Lead	15.9	=	0.23	0.12	0.46	1
24	24A918-EFR-D-SO2	1.5	2	7439-92-1	Lead	15.7	=	0.22	0.11	0.45	1
24	24A916-EFL-D-SO	1	1.5	7439-92-1	Lead	15.7	=	0.22	0.11	0.44	1
24	24A941-EFR-D-SO2	3	3.5	7439-92-1	Lead	15.3	=	0.23	0.11	0.45	1
24	24A920-EFL-D-SO2	1.5	2	7439-92-1	Lead	14.5	=	0.24	0.12	0.48	1
24	24A-EF-D-SO-DUP04	1	1.5	7440-38-2	Arsenic	4.1	J	0.22	0.11	0.45	1
24	24A-EF-D-SO-DUP04	1	1.5	7439-97-6	Mercury	0.034	=	0.012	0.0049	0.012	1
24	24A903-EFL-D-SO	1	1.5	7440-38-2	Arsenic	4.09	J	0.23	0.11	0.45	1
24	24A903-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.029	=	0.012	0.0048	0.012	1
24	24A-EF-D-SO-DUP03	1	1.5	7440-38-2	Arsenic	2.27	J	0.22	0.11	0.44	1
24	24A-EF-D-SO-DUP03	1	1.5	7439-97-6	Mercury	0.031	=	0.013	0.0052	0.013	1
24	24A929-EFL-D-SO2	1	1.5	7439-92-1	Lead	14.3	=	0.24	0.12	0.47	1
24	24A903-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.33	J	0.21	0.11	0.43	1
24	24A903-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.0072	J	0.012	0.0046	0.012	1
24	24A905-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.09	J	0.22	0.11	0.44	1
24	24A905-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.013	0.0051	0.013	1
24	24A905-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.5	J	0.23	0.11	0.45	1
24	24A905-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.025	=	0.013	0.005	0.013	1
24	24A907-EFR-D-SO	1	1.5	7440-38-2	Arsenic	1.7	J	0.22	0.11	0.43	1
24	24A907-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.011	J	0.012	0.0049	0.012	1
24	24A909-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.3	J	0.22	0.11	0.44	1
24	24A909-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.01	J	0.012	0.0049	0.012	1
24	24A909-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.11	J	0.22	0.11	0.44	1
24	24A909-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.019	=	0.013	0.0052	0.013	1
24	24A912-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.19	J	0.22	0.11	0.43	1
24	24A912-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.0091	J	0.013	0.0051	0.013	1
24	24A912-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.08	J	0.21	0.11	0.43	1
24	24A912-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.019	=	0.013	0.0052	0.013	1
24	24A913-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.86	J	0.22	0.11	0.43	1
24	24A913-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.0055	J	0.013	0.0051	0.013	1
24	24A913-EFR-D-SO	1	1.5	7440-38-2	Arsenic	1.77	J	0.22	0.11	0.44	1
24	24A913-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.01	J	0.013	0.0052	0.013	1
24	24A914-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.33	J	0.22	0.11	0.44	1
24	24A914-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.0072	J	0.011	0.0044	0.011	1
24	24A964-EFL-D-SO	1	1.5	7439-92-1	Lead	13.9	=	0.22	0.11	0.44	1
24	24A914-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.68	J	0.21	0.11	0.43	1
24	24A914-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.014	=	0.013	0.0051	0.013	1
24	24A915-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.02	J	0.22	0.11	0.45	1
24	24A915-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.018	=	0.013	0.005	0.013	1
24	24A915-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.28	J	0.22	0.11	0.43	1
24	24A915-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.012	0.005	0.012	1
24	24A916-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.75	J	0.22	0.11	0.44	1
24	24A916-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.019	=	0.013	0.0052	0.013	1
24	24A916-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.12	J	0.22	0.11	0.44	1
24	24A916-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.021	=	0.013	0.0051	0.013	1
24	24A-EF-D-SO-DUP02	1	1.5	7440-38-2	Arsenic	3.78	J	0.22	0.11	0.45	1

**Appendix C Table 2: Summary of RCRA 8 Detections from Discrete and Composite Samples for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico**

Parcel	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
24	24A-EF-D-SO-DUP02	1	1.5	7439-97-6	Mercury	0.033	=	0.013	0.0054	0.013	1
24	2418A-960SS-C-SO	0	0.5	7439-92-1	Lead	13.1	=	4.9	1	-	5
24	24A948-EFR-D-SO	1	1.5	7439-92-1	Lead	12.7	=	0.22	0.11	0.43	1
24	24A923-EFR-D-SO2	2	2.5	7439-92-1	Lead	12.7	=	0.21	0.1	0.42	1
24	24A976-EFR-D-SO2	3	3.5	7439-92-1	Lead	12.7	=	0.22	0.11	0.44	1
24	2418A-959SS-C-SO	0	0.5	7439-92-1	Lead	11.6	=	4.9	1	-	5
24	24A951-EFR-D-SO2	2	2.5	7439-92-1	Lead	10.8	=	0.22	0.11	0.44	1
24	24A963-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.64	J	0.22	0.11	0.43	1
24	24A963-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.028	=	0.012	0.0048	0.012	1
24	24A964-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.89	J	0.22	0.11	0.44	1
24	24A964-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.025	=	0.013	0.005	0.013	1
24	24A964-EFR-D-SO	1	1.5	7440-38-2	Arsenic	2.72	J	0.22	0.11	0.43	1
24	24A964-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.029	=	0.013	0.0052	0.013	1
24	24A965-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.19	J	0.22	0.11	0.43	1
24	24A965-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.016	=	0.013	0.0051	0.013	1
24	24A969-EFL-D-SO	1	1.5	7440-38-2	Arsenic	7.1	J	0.22	0.11	0.44	1
24	24A969-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.041	=	0.011	0.0044	0.011	1
24	24A969-EFL-D-SO2	2	2.5	7440-38-2	Arsenic	4.46	=	0.24	0.12	0.47	1
24	24A969-EFL-D-SO2	2	2.5	7439-97-6	Mercury	0.034	=	0.013	0.0053	0.013	1
24	24A969-EFR-D-SO	1	1.5	7440-38-2	Arsenic	4.69	J	0.32	0.16	0.64	1
24	24A969-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.04	=	0.019	0.0077	0.019	1
24	24A970-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.43	J	0.21	0.11	0.42	1
24	24A970-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.023	=	0.013	0.0051	0.013	1
24	24A970-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.75	J	0.22	0.11	0.44	1
24	24A970-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.031	=	0.013	0.0053	0.013	1
24	24A933-EFL-D-SO	1	1.5	7439-92-1	Lead	10	=	0.21	0.11	0.42	1
24	24A971-EFL-D-SO	1	1.5	7440-38-2	Arsenic	3.05	J	0.22	0.11	0.45	1
24	24A971-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.053	=	0.012	0.005	0.012	1
24	24A971-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.7	J	0.21	0.11	0.42	1
24	24A971-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.045	=	0.013	0.0052	0.013	1
24	24A975-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3.34	J	0.21	0.1	0.42	1
24	24A975-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.022	=	0.012	0.005	0.012	1
24	24A976-EFL-D-SO	1	1.5	7440-38-2	Arsenic	2.7	J	0.22	0.11	0.43	1
24	24A976-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.024	=	0.013	0.005	0.013	1
24	24A976-EFR-D-SO	1	1.5	7440-38-2	Arsenic	3	J	0.21	0.1	0.41	1
24	24A976-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.023	=	0.012	0.0049	0.012	1
24	24A976-EFR-D-SO2	3	3.5	7440-38-2	Arsenic	4.2	=	0.22	0.11	0.44	1
24	24A976-EFR-D-SO2	3	3.5	7439-97-6	Mercury	0.017	=	0.013	0.0053	0.013	1
24	24A977-EFL-D-SO	1	1.5	7440-38-2	Arsenic	1.61	J	0.23	0.11	0.45	1
24	24A977-EFL-D-SO	1	1.5	7439-97-6	Mercury	0.013	J	0.013	0.0053	0.013	1
24	24A977-EFR-D-SO	1	1.5	7440-38-2	Arsenic	0.964	J	0.22	0.11	0.43	1
24	24A977-EFR-D-SO	1	1.5	7439-97-6	Mercury	0.014	=	0.013	0.0052	0.013	1
24	24A977-EFR-D-SO2	1.5	2	7440-38-2	Arsenic	1.58	=	0.26	0.13	0.52	1
24	24A977-EFR-D-SO2	1.5	2	7439-97-6	Mercury	0.0086	J	0.015	0.006	0.015	1

Appendix C Table 3: Summary of Explosives Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Igloo/ Revetment	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
1,3,5-Trinitrobenzene												
24	Y-A-911	2418Y-A911ASS-M-SO	0	0.5	99-35-4	1,3,5-Trinitrobenzene	0.016	J	0.04	0.002	-	1
24	A-973	2418A-973SS-C-SO	0	0.5	99-35-4	1,3,5-Trinitrobenzene	0.016	J	0.04	0.002	-	1
1,3-Dinitrobenzene												
16	K-1550	1641-K1550R-SS-D-SO	0	0.25	99-65-0	1,3-Dinitrobenzene	0.016	J	-	0.016	0.094	1
2,4,6-Trinitrotoluene												
24	Y-A-971	2418Y-A971SS-M-SO	0	0.5	118-96-7	2,4,6-Trinitrotoluene	0.015	J	0.04	0.012	-	1
2,4-Dinitrotoluene												
6	B-1006	0628B-1006-SS-C-SO	0	0.5	121-14-2	2,4-Dinitrotoluene	0.4	=	0.097	0.014	-	1
16	K-1540	1641-K1540L-SS-D-SO	0	0.25	121-14-2	2,4-Dinitrotoluene	0.029	J	-	0.015	0.099	1
16	K-1540	1641-K1540L-SS-D-SO-DUP	0	0.25	121-14-2	2,4-Dinitrotoluene	0.025	J	-	0.014	0.093	1
2-Amino-4,6-Dinitrotoluene												
9	A-998	0918A-998SS-M-SO	0	0.5	35572-78-2	2-Amino-4,6-Dinitrotoluene	0.11	=	0.039	0.005	-	1
24	A-934	2418A-934SS-M	0	0.5	35572-78-2	2-Amino-4,6-Dinitrotoluene	0.11	=	0.04	0.006	-	1
24	Y-A-941	2418Y-A941SS-M	0	0.5	35572-78-2	2-Amino-4,6-Dinitrotoluene	0.031	NJ	0.038	0.005	-	1
24	Y-A-948	2418Y-A948SS-M	0	0.5	35572-78-2	2-Amino-4,6-Dinitrotoluene	0.0087	NJ	0.04	0.006	-	1
3-Nitrotoluene												
9	A-998	0918A-998SS-M-SO	0	0.5	99-08-1	3-Nitrotoluene	0.86	=	0.078	0.012	-	1
4-Amino-2,6-Dinitrotoluene												
24	A-934	2418A-934SS-M-SO	0	0.5	19406-51-0	4-Amino-2,6-Dinitrotoluene	0.075	=	0.04	0.008	-	1
4-Nitrotoluene												
16	K-1526	1641-K1526-SS-M-SO	0	0.5	99-99-0	4-Nitrotoluene	0.17	J	-	0.034	0.19	1
16	K-1524	1641-K1524L-SS-D-SO	0	0.25	99-99-0	4-Nitrotoluene	0.078	J	-	0.036	0.2	1
16	K-1550	1641-K1550R-SS-D-SO	0	0.25	99-99-0	4-Nitrotoluene	0.058	J	-	0.034	0.19	1
HMX												
6	B-1005	0628B-1005-SS-C-SO	0	0.5	2691-41-0	HMX	2	J	0.099	0.022	-	1
16	K-1542	1641-K1542L-SS-D-SO-DUP	0	0.25	2691-41-0	HMX	1.8	J	-	0.022	0.099	1
6	B-1016	0628B-1016-SS-M-SO	0	0.25	2691-41-0	HMX	1.6	=	0.095	0.022	-	1
16	K-1542	1641-K1542L-SS-D-SO	0	0.25	2691-41-0	HMX	0.59	J	-	0.022	0.096	1
6	B-1001	0628B-1001-SS-C-SO	0	0.5	2691-41-0	HMX	0.55	=	0.095	0.021	-	1
6	B-1016	0628B-1016-SS-C-SO	0	0.5	2691-41-0	HMX	0.31	=	0.094	0.021	-	1
6	B-1017	0628B-1017-SS-C-SO	0	0.5	2691-41-0	HMX	0.048	J	0.093	0.021	-	1
6	B-1091	0628B-1091-SS-C-SO	0	0.5	2691-41-0	HMX	0.035	J	0.099	0.022	-	1
Nitrobenzene												
9	A-994	0918A-994SS-C-SO	0	0.5	98-95-3	Nitrobenzene	0.041	=	0.038	0.005	-	1
24	A-972	2418A-972SS-M	0	0.5	98-95-3	Nitrobenzene	0.015	NJ	0.04	0.005	-	1
24	Y-A-901	2418Y-A901BSS-M	0	0.5	98-95-3	Nitrobenzene	0.011	NJ	0.04	0.005	-	1
Nitroglycerin												
16	K-1533	1641-K1533R-SS-D-SO	0	0.25	55-63-0	Nitroglycerin	0.62	J	-	0.21	1.9	1
PETN												
9	A-968	0918A-986SS-C-SO	0	0.5	78-11-5	PETN	4.5	=	2	0.16	-	10

Appendix C Table 3: Summary of Explosives Detections for Igloo Aprons/Revetments in Parcels 6, 9, 16, and 24
FWDA, McKinley County, New Mexico

Parcel	Igloo/ Revetment	Sample ID	Start Depth (ft)	End Depth (ft)	CAS Number	Chemical	Results (mg/kg)	Qualifier	Detection Limit (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	Dilution
24	A-954	2418A-954SS-M	0	0.5	78-11-5	PETN	0.44	J	0.18	0.015	-	1
24	Y-A-953	2418Y-A953SS-M	0	0.5	78-11-5	PETN	0.42	J	0.2	0.016	-	1
24	A-971	2418A-971SS-M	0	0.5	78-11-5	PETN	0.32	=	0.2	0.016	-	1
9	A-990	0918A-990SS-C-SO	0	0.5	78-11-5	PETN	0.31	=	0.19	0.015	-	1
24	Y-A-945	2418Y-A945SS-M	0	0.5	78-11-5	PETN	0.27	NJ	0.2	0.016	-	1
24	A-955	2418A-955SS-M	0	0.5	78-11-5	PETN	0.25	=	0.19	0.015	-	1
24	A-910	2418A-910SS-C	0	0.5	78-11-5	PETN	0.24	NJ	0.2	0.016	-	1
24	A-914	2418A-914SS-C	0	0.5	78-11-5	PETN	0.22	NJ	0.2	0.016	-	1
24	A-968	2418A-968SS-C	0	0.5	78-11-5	PETN	0.22	=	0.2	0.016	-	1
24	A-947	2418A-947SS-M	0	0.5	78-11-5	PETN	0.18	NJ	0.2	0.016	-	1
24	A-975	2418A-975SS-C	0	0.5	78-11-5	PETN	0.18	J	0.2	0.016	-	1
9	A-995	0918A-995SS-M-SO	0	0.5	78-11-5	PETN	0.17	J	0.2	0.016	-	1
9	A-979	0918A-979SS-C-SO	0	0.5	78-11-5	PETN	0.16	J	0.2	0.016	-	1
9	A-992	0918A-992SS-C-SO	0	0.5	78-11-5	PETN	0.14	J	0.19	0.015	-	1
24	A-973	2418A-973SS-C	0	0.5	78-11-5	PETN	0.13	J	0.2	0.016	-	1
9	A-992	0918A-992SS-M-SO	0	0.5	78-11-5	PETN	0.11	J	0.19	0.015	-	1
24	A-957	2418A-957SS-M	0	0.5	78-11-5	PETN	0.075	NJ	0.2	0.016	-	1
24	A-972	2418A-972SS-C	0	0.5	78-11-5	PETN	0.073	NJ	0.2	0.016	-	1
RDX												
16	K-1542	1641-K1542L-SS-D-SO-DUP	0	0.25	121-82-4	RDX	6.9	=	-	0.043	0.2	1
16	K-1542	1641-K1542L-SS-D-SO	0	0.25	121-82-4	RDX	5.5	=	-	0.041	0.19	1
6	B-1013	0628B-1013-SS-C-SO	0	0.5	121-82-4	RDX	1.1	=	0.2	0.043	-	1
6	B-1001	0628B-1001-SS-C-SO	0	0.5	121-82-4	RDX	0.39	=	0.19	0.041	-	1
6	B-1016	0628B-1016-SS-M-SO	0	0.25	121-82-4	RDX	0.29	=	0.19	0.041	-	1
6	B-1016	0628B-1016-SS-C-SO	0	0.5	121-82-4	RDX	0.087	J	0.19	0.04	-	1
6	B-1091	0628B-1091-SS-C-SO	0	0.5	121-82-4	RDX	0.067	J	0.2	0.043	-	1

Footnotes

Appendix D: Historical Data Summary Tables

Appendix D1: Parcel 2, AOC 29, Igloo Block C

Appendix D2: Parcel 6, AOC 28, Igloo Block B

Appendix D3: Parcel 16, AOC 41, Igloo Block K

Appendix D4: Parcel 24, AOC 28, Igloo Block A

Appendix D1: Parcel 2, AOC 29, Igloo Block C

Table D1-A: Explosives Concentrations at Igloo Drains - Parcel 2, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	C-1101		C-1102		C-1103		C-1104		C-1105		C-1110		C-1111		C-1112		C-1113		C-1114	
				4029C-1101SS- 001C-SO		4029C-1102SS- 001C-SO		4029C-1103SS- 001C-SO		4029C-1104SS- 001C-SO		4029C-1105SS- 001C-SO		4029C-1110SS- 001C-SO		4029C-1111SS- 001C-SO		4029C-1112SS- 001C-SO		4029C-1113SS- 001C-SO		4029C-1114SS- 001C-SO	
				6/6/2008		6/6/2008		6/6/2008		6/6/2008		6/6/2008		6/6/2008		6/6/2008		6/6/2008		6/6/2008		6/5/2008	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report, Parcel 4A, Igloo Block C,
Final (March 2009); Final Release Assessment Report Parcel 4A - Rev
2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

**Table D1-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 2, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1115		C-1116		C-1117	
				4029C-1115SS- 001C-SO		4029C-1116SS- 001C-SO		4029C-1117SS- 001C-SO	
				6/5/2008		6/5/2008		6/5/2008	
Explosives									
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	1.4	=	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report, Parcel 4A, Igloo Block C,
Final (March 2009); Final Release Assessment Report Parcel 4A - Rev
2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

**Table D1-B: RCRA 8 Metals Concentrations at Igloo Drains - Parcel 2, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1103	
				4029C-1103SS-R-	
				XRFC-SO	
				10/2/2010	
Metals					
Arsenic	7440-38-2	mg/kg	7.1	2.3	=
Barium	7440-39-3	mg/kg	15,558	170	=
Cadmium	7440-43-9	mg/kg	70.5	0.31	J
Chromium	7440-47-3	mg/kg	96.6	6.4	=
Lead ³	7439-92-1	mg/kg	200	170	=
Mercury	7439-97-6	mg/kg	23.7	0.012	J
Selenium	7782-49-2	mg/kg	391	1.1	J
Silver	7440-22-4	mg/kg	391	1.3	U

Footnotes:

1) Data source: Final Release Assessment Report Parcel 4A - Rev 2.0
(October 2012)

2) NMED RAG (November 2022, revised)

3) See Table D1-C for additional Pb results collected at the drains

*Sample type: XRFC = discrete confirmation

**Table D1-C: Lead Concentrations at Igloo Drains - Parcel 2, Igloo Block C
Fort Wingate Depot Activity, New Mexico**

Igloo	Sample Name	Sample Date	Lead (mg/kg)	
C-1101	4029C-1101SS-001C-SO	6/6/2008	158	
C-1102	4029C-1102SS-001C-SO	6/6/2008	141	
C-1103	4029C-1103SS-001C-SO	6/6/2008	329	J
	4029C-1103SS-R-XRFC-SO	10/2/2010	170	
C-1104	4029C-1104SS-001C-SO	6/6/2008	164	J
C-1105	4029C-1105SS-001C-SO	6/6/2008	1290	J
C-1110	4029C-1110SS-001C-SO	6/6/2008	42.4	J
C-1111	4029C-1111SS-001C-SO	6/6/2008	84.1	J
C-1112	4029C-1112SS-001C-SO	6/6/2008	3.4	J
C-1113	4029C-1113SS-001C-SO	6/6/2008	93.8	J
C-1114	4029C-1114SS-001C-SO	6/5/2008	155	
C-1115	4029C-1115SS-001C-SO	6/5/2008	145	
C-1116	4029C-1116SS-001C-SO	6/5/2008	178	
C-1117	4029C-1117SS-001C-SO	6/5/2008	226	

Footnotes:

Data source: Release Assessment Report, Parcel 4A, Igloo Block C, Final (March 2009); Final Release Assessment Report Parcel 4A - Rev 2.0 (October 2012)

Exceeds criteria of 200 mg/kg

*Sample type: C = composite, XRFC = discrete confirmation

Table D1-D: Lead and Explosives Concentrations at Igloo Aprons - Parcel 2, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	C-1101	C-1102	C-1103	C-1104	C-1105	C-1110	C-1111	C-1112	C-1113	C-1114
				4029C-1101SS-M- SO	4029C-1102SS-M- SO	4029C-1103SS- M-SO	4029C-1104SS- M-SO	4029C-1105SS- M-SO	4029C-1110SS- M-SO	4029C-1111SS- M-SO	4029C-1112SS- M-SO	4029C-1113SS-M- SO	4029C-1114SS-M- SO
				6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/6/2008	6/5/2008
Lead	7439-92-1	mg/kg	200	12.1	10.3	8.7	J 9	J 8.4	J 5.9	J 7.9	J 9.4	J 5.3	J 6.3
Explosives													
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report, Parcel 4A, Igloo Block C,
Final (March 2009); Final Release Assessment Report Parcel 4A - Rev

2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table D1-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 2, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	C-1115	C-1116	C-1117	
				4029C-1115SS- M-SO	4029C-1116SS- M-SO	4029G-1117SS- M-SO	
				6/5/2008	6/5/2008	6/5/2008	
Lead	7439-92-1	mg/kg	200	9.2	5.3	6.1	
Explosives							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report, Parcel 4A, Igloo Block C,
Final (March 2009); Final Release Assessment Report Parcel 4A - Rev
2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D1-E: Lead and Explosives Concentrations at Revetments - Parcel 2, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL	Y-C1101	Y-C1102	Y-C1103	Y-C1110		Y-C1111						Y-C1112			
				4029Y-C1101SS-M-SO	4029Y-C1102SS-M-SO	4029Y-C1103SS-M-SO	4029Y-C1110SS-M-SO		4029Y-C1111SS-M-SO	4029Y-C1111 SS-M1-SO	4029Y-C1111 SS-M2-SO	4029Y-C1111 SS-M3-SO	4029Y-C1112SS-M-SO					
				6/6/2008	6/6/2008	6/6/2008	6/6/2008		6/6/2008	9/28/2010	9/28/2010	9/28/2010	6/6/2008					
Lead	7439-92-1	mg/kg	200	4	4.2	3.6	J	3.9	J	221	J	5	5	5.2	3.2	J		
Explosives																		
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	UN	0.04	U	-	-	-	0.04	UN
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	-	-	-	0.08	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	-	-	-	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	-	-	-	4	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	-	-	-	0.08	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	-	0.2	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	-	-	-	0.08	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	-	-	-	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	-	-	-	0.08	U

Footnotes:

1) Data source: Release Assessment Report, Parcel 4A, Igloo Block C, Final (March 2009); Final Release Assessment Report Parcel 4A - Rev 2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Exceeds 200 mg/kg

Table D1-E (cont.): Lead and Explosives Concentrations at Revetments - Parcel 2, Igloo Block C¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL	Y-C1113	Y-C1114		Y-C1115	Y-C1116		Y-C39	
				4029Y-C1113SS-	4029Y-C1114SS-	4029Y-C1115SS-	4029Y-C1116SS-	4029Y-C1116SS-	4029Y-C39SS-M-		
				M-SO	M-SO	M-SO	M-SO	M-SO	M-SO		
Lead	7439-92-1	mg/kg	200	6/5/2008	6/5/2008	6/5/2008	6/5/2008	6/5/2008	6/3/2008		
				2.8	3.5	3.9		4	3.7		
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report, Parcel 4A, Igloo Block C,
Final (March 2009); Final Release Assessment Report Parcel 4A - Rev
2.0 (October 2012)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Exceeds 200 mg/kg

Appendix D2: Parcel 6, AOC 28, Igloo Block B

Table D2-A: Explosives Concentrations at Igloo Drains - Parcel 6, Igloo Block B¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	B-1017				B-1019				B-1024				B-1045			
				FWDA-B1017-DL- SS-072808		FWDA-B1017-DR- SS-072808		FWDA-B1019-DL- SS-072808		FWDA-B1019-DR- SS-072808		FWDA-B1024-DL- SS-072808		FWDA-B1024- DR-SS-072808		FWDA-B1045- DL-SS-072508		FWDA-B1045-DR- SS-072508	
				7/28/2008		7/28/2008		7/28/2008		7/28/2008		7/28/2008		7/28/2008		7/25/2008		7/25/2008	
Explosives																			
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
HMX	2691-41-0	mg/kg	3850	0.08	J	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Nitroglycerin	55-63-0	mg/kg	6.2	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
PETN	78-11-5	mg/kg	570	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U
RDX	121-82-4	mg/kg	83.1	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetryl	479-45-8	mg/kg	156	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U

Footnotes:

1) Data source: RCRA Facility Investigation Work Plan, Parcel 6
(Febuary 2009)

2) NMED RAG (November 2022, revised)

*Sample type: Discrete

Table D2-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 6, Igloo Block B¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	B-1050				B-1054				B-1073				B-1075			
				FWDA-B1050-DL- SS-072808		FWDA-B1050-DR- SS-072808		FWDA-B1054- DL-SS-072908		FWDA-B1054- DR-SS-072908		FWDA-B1073-DL- SS-072508		FWDA-B1073-DR- SS-072508		FWDA-B1075- DL-SS-072408		FWDA-B1075-DR- SS-072408	
				7/28/2008		7/28/2008		7/29/2008		7/29/2008		7/25/2008		7/25/2008		7/24/2008		7/24/2008	
Explosives																			
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.068	J	0.2	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
HMX	2691-41-0	mg/kg	3850	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Nitroglycerin	55-63-0	mg/kg	6.2	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
PETN	78-11-5	mg/kg	570	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U
RDX	121-82-4	mg/kg	83.1	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetryl	479-45-8	mg/kg	156	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U

Footnotes:

1) Data source: RCRA Facility Investigation Work Plan, Parcel 6

(February 2009)

2) NMED RAG (November 2022, revised)

*Sample type: Discrete

Table D2-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 6, Igloo Block B¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	B-1081				B-1087			
				FWDA-B1081-DL- SS-072408		FWDA-B1081-DR- SS-072408		FWDA-B1087-DL- SS-072408		FWDA-B1087- DR-SS-072408	
				7/24/2008		7/24/2008		7/24/2008		7/24/2008	
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.2	U	0.2	U	0.2	U	0.2	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.13	U	0.13	U	0.13	U	0.13	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.24	U	0.24	U	0.24	U	0.24	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.23	U	0.23	U	0.23	U	0.23	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.2	U	0.2	U	0.2	U	0.2	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.18	U	0.18	U	0.18	U	0.18	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.14	U	0.14	U	0.14	U	0.14	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.22	U	0.22	U	0.22	U	0.22	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.25	U	0.25	U	0.25	U	0.25	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.23	U	0.23	U	0.23	U	0.23	U
HMX	2691-41-0	mg/kg	3850	0.21	U	0.21	U	0.21	U	0.21	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.15	U	0.15	U	0.15	U	0.15	U
Nitroglycerin	55-63-0	mg/kg	6.2	2	U	2	U	2	U	2	U
PETN	78-11-5	mg/kg	570	2.6	U	2.6	U	2.6	U	2.6	U
RDX	121-82-4	mg/kg	83.1	0.18	U	0.18	U	0.18	U	0.18	U
Tetryl	479-45-8	mg/kg	156	0.23	U	0.23	U	0.23	U	0.23	U

Footnotes:

1) Data source: RCRA Facility Investigation Work Plan, Parcel 6

(February 2009)

2) NMED RAG (November 2022, revised)

*Sample type: Discrete

**Table D2-B: Lead Concentrations at Igloo Drains - Parcel 6, Igloo Block B¹
Fort Wingate Depot Activity, New Mexico**

Igloo	Sample Name	Sample Date	Lead (mg/kg)
B-1017	FWDA-B1017-DL-SS-072808	7/28/2008	48.8
	FWDA-B1017-DR-SS-072808	7/28/2008	25.2
B-1019	FWDA-B1019-DL-SS-072808	7/28/2008	21.3 J
	FWDA-B1019-DR-SS-072808	7/28/2008	14.2
B-1024	FWDA-B1024-DL-SS-072808	7/28/2008	34.2
	FWDA-B1024-DR-SS-072808	7/28/2008	13.7
B-1045	FWDA-B1045-DL-SS-072508	7/25/2008	48.8
	FWDA-B1045-DR-SS-072508	7/25/2008	21
B-1050	FWDA-B1050-DL-SS-072808	7/28/2008	64.2
	FWDA-B1050-DR-SS-072808	7/28/2008	26.5
B-1054	FWDA-B1054-DL-SS-072908	7/29/2008	87.4
	FWDA-B1054-DR-SS-072908	7/29/2008	10.1 J
B-1073	FWDA-B1073-DL-SS-072508	7/25/2008	44.7
	FWDA-B1073-DR-SS-072508	7/25/2008	25
B-1075	FWDA-B1075-DL-SS-072408	7/24/2008	15.8
	FWDA-B1075-DR-SS-072408	7/24/2008	17.4
B-1081	FWDA-B1081-DL-SS-072408	7/24/2008	5.4
	FWDA-B1081-DR-SS-072408	7/24/2008	7.6
B-1087	FWDA-B1087-DL-SS-072408	7/24/2008	24.4
	FWDA-B1087-DR-SS-072408	7/24/2008	21

Footnotes:

1) Data source: RCRA Facility Investigation Work Plan, Parcel 6 (February 2009)

Exceeds criteria of 200 mg/kg
conditional exemption igloo - not sampled

*Sample type: Discrete

Table D2-C: Lead and Explosives Concentrations at Igloo Aprons - Parcel 6, Igloo Block B¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	B-1017		B-1019		B-1024		B-1045		B-1050		B-1054		B-1073	
				FWDA-B1017-SS-072508		FWDA-B1019-SS-072808		FWDA-B1024-SS-072808		FWDA-B1045-SS-072508		FWDA-B1050-SS-072808		FWDA-B1054-SS-072908		FWDA-B1073-SS-072508	
				7/25/2008		7/28/2008		7/28/2008		7/25/2008		7/28/2008		7/29/2008		7/25/2008	
Lead	7439-92-1	mg/kg	200	13.9		17		10.8		17.2		6.8		5.8		37.8	
Explosives																	
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
HMX	2691-41-0	mg/kg	3850	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Nitroglycerin	55-63-0	mg/kg	6.2	2	U	2	U	2	U	2	U	2	U	2	U	2	U
PETN	78-11-5	mg/kg	570	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U
RDX	121-82-4	mg/kg	83.1	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetryl	479-45-8	mg/kg	156	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U

Footnotes:

1) Data source: RCRA Facility Investigation Work Plan, Parcel 6

(February 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table D2-C (cont.): Explosives Concentrations at Igloo Aprons - Parcel 6, Igloo Block B¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	B-1075		B-1081		B-1087	
				FWDA-B1075- SS-072508		FWDA-B1081- SS-072408		FWDA-B1087-SS- 072408	
				7/25/2008		7/24/2008		7/24/2008	
Lead	7439-92-1	mg/kg	200	4		4.3		4	
Explosives									
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.2	U	0.2	U	0.2	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.13	U	0.13	U	0.13	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.24	U	0.24	U	0.24	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.23	U	0.23	U	0.23	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.2	U	0.2	U	0.2	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.18	U	0.18	U	0.18	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.14	U	0.14	U	0.14	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.22	U	0.22	U	0.22	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.25	U	0.25	U	0.25	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.23	U	0.23	U	0.23	U
HMX	2691-41-0	mg/kg	3850	0.21	U	0.21	U	0.21	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.15	U	0.15	U	0.15	U
Nitroglycerin	55-63-0	mg/kg	6.2	2	U	2	U	2	U
PETN	78-11-5	mg/kg	570	2.6	U	2.6	U	2.6	U
RDX	121-82-4	mg/kg	83.1	0.18	U	0.18	U	0.18	U
Tetryl	479-45-8	mg/kg	156	0.23	U	0.23	U	0.23	U

Footnotes:

1) Data source: RCRA Facility Investigation Work Plan, Parcel 6

(February 2009)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D2-D: Lead and Explosives Concentrations at Revetments - Parcel 6, Igloo Block B¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-B1008		Y-B10011		Y-B1019		Y-B1034		Y-B1043		Y-B1045		Y-B1052		Y-B1084	
				FWDA-Y-B1008- 07172008		FWDA-Y-B1011- 07172008		FWDA-Y-B1019- 07172008		FWDA-Y-B1034- 07172008		FWDA-Y-B1043- 07162008		FWDA-Y-B1045- 07172008		FWDA-Y-B1052- 07162008		FWDA-Y-B1084- 07152008	
				7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/15/2008	7/15/2008
Lead	7439-92-1	mg/kg	200	1/14/1900	1/15/1900	1/7/1900	1/7/1900	1/7/1900	1/7/1900	1/6/1900	1/5/1900	1/4/1900	1/5/1900	1/4/1900	1/5/1900	1/4/1900	1/5/1900	1/5/1900	1/5/1900
Explosives																			
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
HMX	2691-41-0	mg/kg	3850	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Nitroglycerin	55-63-0	mg/kg	6.2	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
PETN	78-11-5	mg/kg	570	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U
RDX	121-82-4	mg/kg	83.1	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetryl	479-45-8	mg/kg	156	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U

Footnotes:

1) Data source: RCRA Facility Investigation Work Plan, Parcel 6 (February 2009)

2) NMED RAG (November 2022, revised)

*Sample type: Multi-increment

Appendix D3: Parcel 16, AOC 41, Igloo Block K

**Table D3-A: RCRA 8 Metals and Explosives Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1524			K-1525			K-1526			K-1527			K-1528							
				1641-K1524L-SS-	1641-K1524R-SS-		1641-K1525L-SS-	1641-K1525R-SS-		1641-K1526L-SS-	1641-K1526R-SS-		1641-K1527L-SS-	1641-K1527R-SS-		1641-K1528L-SS-	1641-K1528R-SS-						
				D-SO	D-SO		D-SO	D-SO		D-SO	D-SO		D-SO	D-SO		D-SO	D-SO						
				11/2/2012	11/2/2012		11/2/2012	11/2/2012		11/2/2012	11/2/2012		11/2/2012	11/2/2012		11/2/2012	11/2/2012						
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.078	U	0.08	U	0.078	U	0.078	U	0.076	U	0.078	U	0.079	U	0.079	U	0.079	U	0.079	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.078	U	0.08	U	0.078	U	0.078	U	0.076	U	0.078	U	0.079	U	0.079	U	0.079	U	0.079	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.078	J	0.1	U	0.097	U	0.097	U	0.095	U	0.098	U	0.098	U	0.099	U	0.099	U	0.099	U
HMX	2691-41-0	mg/kg	3850	0.039	U	0.04	U	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.04	U	0.039	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.098	U	0.1	U	0.097	U	0.097	U	0.095	U	0.098	U	0.098	U	0.099	U	0.099	U	0.099	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.39	U	0.4	U	0.39	U	0.39	U	0.38	U	0.39	U	0.39	U	0.4	U	0.4	U	0.39	U
PETN	78-11-5	mg/kg	570	0.98	U	1	U	0.97	U	0.97	U	0.95	U	0.98	U	0.98	U	0.99	U	0.99	U	0.99	U
RDX	121-82-4	mg/kg	83.1	0.078	U	0.08	U	0.078	U	0.078	U	0.076	U	0.078	U	0.079	U	0.079	U	0.079	U	0.079	U
Tetryl	479-45-8	mg/kg	156	0.078	U	0.08	U	0.078	U	0.078	U	0.076	U	0.078	U	0.079	U	0.079	U	0.079	U	0.079	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: D = discrete

**Table D3-A (cont.): RCRA 8 Metals and Explosives Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1529				K-1530				K-1531				K-1532				K-1533			
				1641-K1529L-SS		1641-K1529R-SS		1641-K1530L-SS		1641-K1530R-SS		1641-K1531L-SS		1641-K1531R-SS-D-SO		1641-K1532L-SS		1641-K1532R-SS		1641-K1533L-SS		1641-K1533R-SS	
				D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.039	U	0.038	U	0.04	U	0.038	U	0.3	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.039	U	0.038	U	0.04	U	0.038	U	0.2	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.039	U	0.038	U	0.04	U	0.038	U	0.2	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.039	U	0.038	U	0.04	U	0.038	U	0.2	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.039	U	0.038	U	0.04	U	0.038	U	0.2	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.039	U	0.038	U	0.04	U	0.038	U	0.2	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.078	U	0.075	U	0.079	U	0.076	U	0.2	U	0.079	U	0.077	U	0.073	U	0.074	U	0.077	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.039	U	0.038	U	0.04	U	0.038	U	0.2	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.078	U	0.075	U	0.079	U	0.076	U	0.3	U	0.079	U	0.077	U	0.073	U	0.074	U	0.077	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.039	U	0.038	U	0.04	U	0.038	U	0.2	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.097	U	0.094	U	0.099	U	0.094	U	0.2	U	0.099	U	0.097	U	0.091	U	0.093	U	0.096	U
HMX	2691-41-0	mg/kg	3850	0.039	U	0.038	U	0.04	U	0.038	U	0.3	U	0.039	U	0.039	U	0.036	U	0.037	U	0.038	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.097	U	0.094	U	0.099	U	0.094	U	0.2	U	0.099	U	0.097	U	0.091	U	0.093	U	0.096	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.39	U	0.38	U	0.4	U	0.38	U	1.2	U	0.39	U	0.39	U	0.36	U	0.37	U	0.62	J
PETN	78-11-5	mg/kg	570	0.97	U	0.94	U	0.99	U	0.94	U	1.2	U	0.99	U	0.97	U	0.91	U	0.93	U	0.96	U
RDX	121-82-4	mg/kg	83.1	0.078	U	0.075	U	0.079	U	0.076	U	0.3	U	0.079	U	0.077	U	0.073	U	0.074	U	0.077	U
Tetryl	479-45-8	mg/kg	156	0.078	U	0.075	U	0.079	U	0.076	U	0.2	U	0.079	U	0.077	U	0.073	U	0.074	U	0.077	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: D = discrete

**Table D3-A (cont.): RCRA 8 Metals and Explosives Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1534				K-1535				K-1536				K-1537				K-1538			
				1641-K1534L-SS		1641-K1534R-SS		1641-K1535L-SS		1641-K1535R-SS		1641-K1536L-SS		1641-K1536R-SS		1641-K1537L-SS-D-SO		1641-K1537R-SS-D-SO		1641-K1538L-SS-D-SO		1641-K1538R-SS-D-SO	
				D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	
				11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012		
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.073	U	0.075	U	0.079	U	0.079	U	0.076	U	0.077	U	0.08	U	0.073	U	0.078	U	0.077	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.073	U	0.075	U	0.079	U	0.079	U	0.076	U	0.077	U	0.08	U	0.073	U	0.078	U	0.077	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.092	U	0.093	U	0.098	U	0.098	U	0.095	U	0.096	U	0.1	U	0.092	U	0.097	U	0.096	U
HMX	2691-41-0	mg/kg	3850	0.037	U	0.037	U	0.039	U	0.039	U	0.038	U	0.038	U	0.04	U	0.037	U	0.039	U	0.038	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.092	U	0.093	U	0.098	U	0.098	U	0.095	U	0.096	U	0.1	U	0.092	U	0.097	U	0.096	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.37	U	0.37	U	0.39	U	0.39	U	0.38	U	0.38	U	0.4	U	0.37	U	0.39	U	0.38	U
PETN	78-11-5	mg/kg	570	0.92	U	0.93	U	0.98	U	0.98	U	0.95	U	0.96	U	1	U	0.92	U	0.97	U	0.96	U
RDX	121-82-4	mg/kg	83.1	0.073	U	0.075	U	0.079	U	0.079	U	0.076	U	0.077	U	0.08	U	0.073	U	0.078	U	0.077	U
Tetryl	479-45-8	mg/kg	156	0.073	U	0.075	U	0.079	U	0.079	U	0.076	U	0.077	U	0.08	U	0.073	U	0.078	U	0.077	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: D = discrete

**Table D3-A (cont.): RCRA 8 Metals and Explosives Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1539			K-1540			K-1541			K-1542			K-1543			
				1641-K1539L- SS-D-SO	1641-K1539R-SS- D-SO		1641-K1540L-SS- D-SO	1641-K1540R- SS-D-SO		1641-K1541L-SS- D-SO	1641-K1541R- SS-D-SO		1641-K1542L-SS- D-SO	1641-K1542R- SS-D-SO		1641-K1543L- SS-D-SO	1641-K1543R- SS-D-SO		
				11/2/2012	11/2/2012		11/2/2012	11/2/2012		11/2/2012	11/2/2012		11/2/2012	11/2/2012		11/2/2012	11/2/2012		
Explosives																			
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.038	U	0.038	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.038	U	0.038	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.038	U	0.038	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.037	U	0.039	U	0.029	J	0.04	U	0.038	U	0.039	U	0.038	U	0.037	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.038	U	0.037	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.038	U	0.037	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.074	U	0.078	U	0.079	U	0.08	U	0.077	U	0.078	U	0.077	U	0.075	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.038	U	0.037	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.074	U	0.078	U	0.079	U	0.08	U	0.077	U	0.078	U	0.077	U	0.075	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.038	U	0.037	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.092	U	0.097	U	0.099	U	0.1	U	0.096	U	0.097	U	0.096	U	0.094	U
HMX	2691-41-0	mg/kg	3850	0.037	U	0.039	U	0.04	U	0.04	U	0.038	U	0.039	U	0.59	J	0.038	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.092	U	0.097	U	0.099	U	0.1	U	0.096	U	0.097	U	0.096	U	0.094	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.37	U	0.39	U	0.4	U	0.4	U	0.38	U	0.39	U	0.38	U	0.37	U
PETN	78-11-5	mg/kg	570	0.92	U	0.97	U	0.99	U	1	U	0.96	U	0.97	U	0.96	U	0.94	U
RDX	121-82-4	mg/kg	83.1	0.074	U	0.078	U	0.079	U	0.08	U	0.077	U	0.078	U	5.5	=	0.075	U
Tetryl	479-45-8	mg/kg	156	0.074	U	0.078	U	0.079	U	0.08	U	0.077	U	0.078	U	0.077	U	0.075	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: D = discrete

**Table D3-A (cont.): RCRA 8 Metals and Explosives Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1544				K-1545				K-1546				K-1547				K-1548			
				1641-K1544L- SS-D-SO		1641-K1544R- SS-D-SO		1641-K1545L- SS-D-SO		1641-K1545R-SS- D-SO		1641-K1546L-SS- D-SO		1641-K1546R- SS-D-SO		1641-K1547L- SS-D-SO		1641-K1547R-SS- D-SO		1641-K1548L-SS- D-SO		1641-K1548R-SS- D-SO	
				11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012				
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.079	U	0.079	U	0.073	U	0.078	U	0.078	U	0.076	U	0.079	U	0.076	U	0.075	U	0.078	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.079	U	0.079	U	0.073	U	0.078	U	0.078	U	0.076	U	0.079	U	0.076	U	0.075	U	0.078	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.099	U	0.099	U	0.092	U	0.098	U	0.097	U	0.095	U	0.099	U	0.096	U	0.094	U	0.098	U
HMX	2691-41-0	mg/kg	3850	0.04	U	0.04	U	0.037	U	0.039	U	0.039	U	0.038	U	0.039	U	0.038	U	0.038	U	0.039	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.099	U	0.099	U	0.092	U	0.098	U	0.097	U	0.095	U	0.099	U	0.096	U	0.094	U	0.098	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.4	U	0.4	U	0.37	U	0.39	U	0.39	U	0.38	U	0.39	U	0.38	U	0.38	U	0.39	U
PETN	78-11-5	mg/kg	570	0.99	U	0.99	U	0.92	U	0.98	U	0.97	U	0.95	U	0.99	U	0.96	U	0.94	U	0.98	U
RDX	121-82-4	mg/kg	83.1	0.079	U	0.079	U	0.073	U	0.078	U	0.078	U	0.076	U	0.079	U	0.076	U	0.075	U	0.078	U
Tetryl	479-45-8	mg/kg	156	0.079	U	0.079	U	0.073	U	0.078	U	0.078	U	0.076	U	0.079	U	0.076	U	0.075	U	0.078	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: D = discrete

**Table D3-A (cont.): RCRA 8 Metals and Explosives Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1549			K-1550				
				1641-K1549L-SS	1641-K1549R-SS		1641-K1550L-SS	1641-K1550R-SS			
				D-SO	D-SO		D-SO	D-SO			
				11/2/2012	11/2/2012		11/2/2012	11/2/2012			
Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.038	U	0.039	U	0.04	U	0.038	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.038	U	0.039	U	0.04	U	0.016	J
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.038	U	0.039	U	0.04	U	0.038	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.038	U	0.039	U	0.04	U	0.038	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.038	U	0.039	U	0.04	U	0.038	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.038	U	0.039	U	0.04	U	0.038	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.075	U	0.078	U	0.08	U	0.075	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.038	U	0.039	U	0.04	U	0.038	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.075	U	0.078	U	0.08	U	0.075	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.038	U	0.039	U	0.04	U	0.038	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.094	U	0.098	U	0.1	U	0.058	J
HMX	2691-41-0	mg/kg	3850	0.038	U	0.039	U	0.04	U	0.038	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.094	U	0.098	U	0.1	U	0.094	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.38	U	0.39	U	0.4	U	0.38	U
PETN	78-11-5	mg/kg	570	0.94	U	0.98	U	1	U	0.94	U
RDX	121-82-4	mg/kg	83.1	0.075	U	0.078	U	0.08	U	0.075	U
Tetryl	479-45-8	mg/kg	156	0.075	U	0.078	U	0.08	U	0.075	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: D = discrete

**Table D3-B: RCRA 8 Metals Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1524				K-1525				K-1526				K-1527				K-1528			
				1641-K1524L-SS-		1641-K1524R-SS-		1641-K1525L-SS-		1641-K1525R-SS-		1641-K1526L-SS-		1641-K1526R-SS-		1641-K1527L-SS-		1641-K1527R-SS-		1641-K1528L-SS-		1641-K1528R-SS-	
				D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	
				11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	
Metals																							
Arsenic	7440-38-2	mg/kg	7.1	2.3	J	2.4	J	3.1	=	2.4	=	1.9	J	2.4	=	3.4	=	4	=	2.2	J	2.8	=
Barium	7440-39-3	mg/kg	15,558	300	=	320	=	310	=	280	=	250	=	280	=	260	=	280	=	350	J	370	=
Cadmium	7440-43-9	mg/kg	70.5	0.39	J	0.41	J	0.4	J	0.3	J	0.21	J	1.1	=	0.54	=	0.64	=	0.31	J	0.53	=
Chromium	7440-47-3	mg/kg	96.6	14	J	13	J	15	J	13	J	11	J	12	J	16	J	15	J	12	J	10	J
Lead ³	7439-92-1	mg/kg	200	530	J	530	J	640	J	160	J	58	J	260	J	170	J	810	J	74	J	960	J
Mercury	7439-97-6	mg/kg	23.7	0.017	J	0.017	J	0.015	J	0.018	=	0.014	J	0.019	J	0.017	J	0.016	J	0.017	J	0.022	=
Selenium	7782-49-2	mg/kg	391	1.2	U	1.2	U	1.2	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U	1.1	U	1.2	U
Silver	7440-22-4	mg/kg	391	0.19	U	0.21	U	0.2	U	0.18	U	0.19	U	0.14	J	0.2	U	0.18	U	0.19	U	0.21	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

3) See Table D3-C for additional Pb results collected at the drains

Exceeds criteria of 200 mg/kg

*Sample type: D = discrete

**Table D3-B (cont.): RCRA 8 Metals Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1529				K-1530				K-1531				K-1532				K-1533			
				1641-K1529L-SS		1641-K1529R-SS		1641-K1530L-SS		1641-K1530R-SS		1641-K1531L-SS		1641-K1531R-SS-D-SO		1641-K1532L-SS		1641-K1532R-SS		1641-K1533L-SS		1641-K1533R-SS	
				D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO		D-SO	
				11/2/2012		11/2/2012		11/2/2012		11/2/2012		11/5/2012		11/2/2012		11/2/2012		11/2/2012		11/2/2012		11/2/2012	
Metals																							
Arsenic	7440-38-2	mg/kg	7.1	1.8	J	2.8	=	1.5	J	1.5	J	0.44	U	2.5	=	1.7	J	2.3	J	3.6	=	2.3	=
Barium	7440-39-3	mg/kg	15,558	300	=	280	=	310	=	260	=	262	=	220	J	330	=	260	=	270	=	290	=
Cadmium	7440-43-9	mg/kg	70.5	0.4	J	0.38	J	0.24	J	0.24	J	0.082	=	0.62	=	0.23	J	0.43	J	0.44	J	0.28	J
Chromium	7440-47-3	mg/kg	96.6	19	J	29	J	17	J	19	J	7.5	=	10	J	18	J	17	J	17	J	12	J
Lead ³	7439-92-1	mg/kg	200	530	J	210	J	130	J	66	J	59.1	=	490	J	110	J	210	J	780	J	120	J
Mercury	7439-97-6	mg/kg	23.7	0.014	J	0.019	J	0.014	J	0.015	J	0.011	J	0.012	J	0.013	J	0.017	J	0.019	J	0.015	J
Selenium	7782-49-2	mg/kg	391	1.3	U	1.2	U	1.1	U	1.1	U	0.22	U	1.2	U	1.2	U	1.2	U	1.3	U	1.1	U
Silver	7440-22-4	mg/kg	391	0.21	U	0.2	U	0.19	U	0.18	U	0.054	U	0.2	U	0.21	U	0.2	U	0.21	U	0.18	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report, Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

3) See Table D3-C for additional Pb results collected at the drains

Exceeds criteria of 200 mg/kg

*Sample type: D = discrete

**Table D3-B (cont.): RCRA 8 Metals Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1534				K-1535				K-1536				K-1537				K-1538			
				1641-K1534L-SS	1641-K1534R-SS	1641-K1535L-SS	1641-K1535R-SS	1641-K1536L-SS	1641-K1536R-SS	1641-K1537L-SS	1641-K1537R-SS	1641-K1538L-SS	1641-K1538R-SS										
				D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO	D-SO										
				11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012		
Metals																							
Arsenic	7440-38-2	mg/kg	7.1	1.6	J	2.5	=	2.9	=	2.6	=	1.2	J	1.6	J	1.1	J	1.3	J	1.5	J	1.7	J
Barium	7440-39-3	mg/kg	15,558	290	=	460	=	380	=	500	=	410	=	490	=	220	=	310	=	310	J	280	=
Cadmium	7440-43-9	mg/kg	70.5	0.36	J	4.8	=	0.26	J	0.42	J	0.23	J	0.3	J	0.19	J	0.28	J	0.33	J	0.35	J
Chromium	7440-47-3	mg/kg	96.6	14	J	11	J	16	J	12	J	22	J	22	J	13	J	17	J	21	J	20	J
Lead ³	7439-92-1	mg/kg	200	250	J	180	J	180	J	190	J	37	J	110	J	41	J	45	J	200	J	280	J
Mercury	7439-97-6	mg/kg	23.7	0.015	J	0.016	J	0.018	J	0.02	=	0.016	J	0.013	J	0.013	J	0.017	J	0.015	J	0.037	=
Selenium	7782-49-2	mg/kg	391	1.2	U	1.1	U	1.2	U	1.2	U	1.2	U	1.3	U	1.2	U	1.1	U	1.1	U	0.8	J
Silver	7440-22-4	mg/kg	391	0.2	U	0.18	U	0.2	U	0.2	U	0.2	U	0.21	U	0.19	U	0.18	U	0.19	U	0.18	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report, Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

3) See Table D3-C for additional Pb results collected at the drains

Exceeds criteria of 200 mg/kg

*Sample type: D = discrete

**Table D3-B (cont.): RCRA 8 Metals Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1539				K-1540				K-1541				K-1542				K-1543			
				1641-K1539L- SS-D-SO		1641-K1539R-SS- D-SO		1641-K1540L-SS- D-SO		1641-K1540R- SS-D-SO		1641-K1541L-SS- D-SO		1641-K1541R- SS-D-SO		1641-K1542L-SS- D-SO		1641-K1542R- SS-D-SO		1641-K1543L- SS-D-SO		1641-K1543R- SS-D-SO	
				11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012
Metals																							
Arsenic	7440-38-2	mg/kg	7.1	2	J	2.4	=	3.7	=	2.5	=	2.3	J	2	J	3.2	=	1.7	J	1.1	J	6.1	=
Barium	7440-39-3	mg/kg	15,558	350	=	280	=	310	=	320	=	330	J	380	=	250	=	140	=	480	J	400	=
Cadmium	7440-43-9	mg/kg	70.5	0.38	J	0.57	=	0.58	=	0.37	J	0.4	J	0.41	J	0.49	=	0.31	J	0.38	J	0.5	J
Chromium	7440-47-3	mg/kg	96.6	20	J	20	J	16	J	13	J	15	J	14	J	12	J	8.1	J	20	J	30	J
Lead ³	7439-92-1	mg/kg	200	170	J	260	J	960	J	120	J	480	J	160	J	230	J	190	J	340	J	510	J
Mercury	7439-97-6	mg/kg	23.7	0.017	J	0.023	=	0.018	=	0.023	=	0.011	J	0.0098	J	0.007	J	0.016	U	0.0098	J	0.015	U
Selenium	7782-49-2	mg/kg	391	1.1	U	1.2	U	1.2	U	0.98	J	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	J
Silver	7440-22-4	mg/kg	391	0.19	U	0.19	U	0.2	U	0.18	U	0.19	U	0.18	U	0.18	U	0.19	U	0.2	U	0.21	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

3) See Table D3-C for additional Pb results collected at the drains

Exceeds criteria of 200 mg/kg

*Sample type: D = discrete

**Table D3-B (cont.): RCRA 8 Metals Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1544				K-1545				K-1546				K-1547				K-1548			
				1641-K1544L- SS-D-SO		1641-K1544R- SS-D-SO		1641-K1545L- SS-D-SO		1641-K1545R-SS- D-SO		1641-K1546L-SS- D-SO		1641-K1546R- SS-D-SO		1641-K1547L- SS-D-SO		1641-K1547R-SS- D-SO		1641-K1548L-SS- D-SO		1641-K1548R-SS- D-SO	
				11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012					
Metals																							
Arsenic	7440-38-2	mg/kg	7.1	2	J	1.8	J	1.1	U	2.8	=	3.6	J	2.6	J	2.1	J	2.3	J	2	J	2.1	J
Barium	7440-39-3	mg/kg	15,558	360	=	400	=	550	J	370	=	360	=	470	=	360	=	410	=	350	=	360	=
Cadmium	7440-43-9	mg/kg	70.5	0.26	J	0.37	J	0.39	J	0.38	J	0.46	J	0.39	J	0.57	J	0.61	J	0.34	J	0.32	J
Chromium	7440-47-3	mg/kg	96.6	18	J	22	J	900	J	14	J	14	=	14	=	11	=	17	=	12	J	16	J
Lead ³	7439-92-1	mg/kg	200	73	J	350	J	4200	J	170	J	540	=	150	=	490	=	470	=	180	J	100	J
Mercury	7439-97-6	mg/kg	23.7	0.013	J	0.01	J	0.0078	J	0.018	U	0.012	J	0.017	U	0.0069	J	0.012	J	0.024	=	0.008	J
Selenium	7782-49-2	mg/kg	391	1.2	U	1.3	U	1.4	U	1.1	J	1.1	J	1.1	UJ	1.1	UJ	1.2	UJ	1.2	U	1.3	U
Silver	7440-22-4	mg/kg	391	0.21	U	0.21	U	0.23	U	0.22	U	0.22	U	0.19	U	0.19	U	0.2	U	0.19	U	0.21	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

3) See Table D3-C for additional Pb results collected at the drains

Exceeds criteria of 200 mg/kg

*Sample type: D = discrete

**Table D3-B (cont.): RCRA 8 Metals Concentrations at Igloo Drains - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1549				K-1550			
				1641-K1549L-SS-	1641-K1549R-SS-	1641-K1550L-SS-	1641-K1550R-SS-	1641-K1550L-SS-	1641-K1550R-SS-		
				D-SO	D-SO	D-SO	D-SO	D-SO	D-SO		
11/2/2012											
11/2/2012											
11/2/2012											
11/2/2012											
Metals											
Arsenic	7440-38-2	mg/kg	7.1	2	J	1.7	J	2.3	J	2.3	J
Barium	7440-39-3	mg/kg	15,558	370	=	430	=	330	=	300	=
Cadmium	7440-43-9	mg/kg	70.5	0.3	J	0.3	J	0.39	J	0.58	=
Chromium	7440-47-3	mg/kg	96.6	13	J	19	J	12	J	14	J
Lead ³	7439-92-1	mg/kg	200	260	J	450	J	130	J	200	J
Mercury	7439-97-6	mg/kg	23.7	0.0095	J	0.017	J	0.0079	J	0.01	J
Selenium	7782-49-2	mg/kg	391	1.3	U	1.1	U	1.2	U	1.2	U
Silver	7440-22-4	mg/kg	391	0.21	U	0.18	U	0.2	U	0.2	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

3) See Table D3-C for additional Pb results collected at the drains

Exceeds criteria of 200 mg/kg

*Sample type: D = discrete

**Table D3-C: Lead Concentrations at Igloo Drains - Parcel 16, Igloo Block K
Fort Wingate Depot Activity, New Mexico**

Igloo	Sample Name	Sample Date	Lead (mg/kg)
K-1524	1641-K1524L-SS-D-SO	11/2/2012	530 J
	1641-K1524R-SS-D-SO	11/2/2012	530 J
K-1525	1641-K1525L-SS-D-SO	11/2/2012	640 J
	1641-K1525R-SS-D-SO	11/2/2012	160 J
K-1526	1641-K1526L-SS-D-SO	11/2/2012	58 J
	1641-K1526R-SS-D-SO	11/2/2012	260 J
K-1527	1641-K1527L-SS-D-SO	11/2/2012	170 J
	1641-K1527R-SS-D-SO	11/2/2012	810 J
K-1528	1641-K1528L-SS-D-SO	11/2/2012	74 J
	1641-K1528R-SS-D-SO	11/2/2012	960 J
K-1529	1641-K1529L-SS-D-SO	11/2/2012	530 J
	1641-K1529R-SS-D-SO	11/2/2012	210 J
K-1530	1641-K1530L-SS-D-SO	11/2/2012	130 J
	1641-K1530R-SS-D-SO	11/2/2012	66 J
K-1531	1641-K1531L-SS-D-SO	11/5/2012	59.1 =
	1641-K1531R-SS-D-SO	11/2/2012	490 J
K-1532	1641-K1532L-SS-D-SO	11/2/2012	110 J
	1641-K1532R-SS-D-SO	11/2/2012	210 J
K-1533	1641-K1533L-SS-D-SO	11/2/2012	780 J
	1641-K1533R-SS-D-SO	11/2/2012	120 J
K-1534	1641-K1534L-SS-D-SO	11/2/2012	250 J
	1641-K1534R-SS-D-SO	11/2/2012	180 J
K-1535	1641-K1535L-SS-D-SO	11/2/2012	180 J
	1641-K1535R-SS-D-SO	11/2/2012	190 J
K-1536	1641-K1536L-SS-D-SO	11/2/2012	37 J
	1641-K1536R-SS-D-SO	11/2/2012	110 J
K-1537	1641-K1537L-SS-D-SO	11/2/2012	41 J
	1641-K1537R-SS-D-SO	11/2/2012	45 J
K-1538	1641-K1538L-SS-D-SO	11/2/2012	200 J
	1641-K1538R-SS-D-SO	11/2/2012	280 J
K-1539	1641-K1539L-SS-D-SO	11/2/2012	170 J
	1641-K1539R-SS-D-SO	11/2/2012	260 J
K-1540	1641-K1540L-SS-D-SO	11/2/2012	960 J
	1641-K1540R-SS-D-SO	11/2/2012	120 J
K-1541	1641-K1541L-SS-D-SO	11/2/2012	480 J
	1641-K1541R-SS-D-SO	11/2/2012	160 J
K-1542	1641-K1542L-SS-D-SO	11/2/2012	230 J
	1641-K1542R-SS-D-SO	11/2/2012	190 J

**Table D3-C (cont.): Lead Concentrations at Igloo Drains - Parcel 16, Igloo Block K
Fort Wingate Depot Activity, New Mexico**

Igloo	Sample Name	Sample Date	Lead (mg/kg)
K-1543	1641-K1543L-SS-D-SO	11/2/2012	340 J
	1641-K1543R-SS-D-SO	11/2/2012	510 J
K-1544	1641-K1544L-SS-D-SO	11/2/2012	73 J
	1641-K1544R-SS-D-SO	11/2/2012	350 J
K-1545	1641-K1545L-SS-D-SO	11/2/2012	4200 J
	1641-K1545R-SS-D-SO	11/2/2012	170 J
K-1546	1641-K1546L-SS-D-SO	11/5/2012	540 =
	1641-K1546R-SS-D-SO	11/5/2012	150 =
K-1547	1641-K1547L-SS-D-SO	11/5/2012	490 =
	1641-K1547R-SS-D-SO	11/5/2012	470 =
K-1548	1641-K1548L-SS-D-SO	11/2/2012	180 J
	1641-K1548R-SS-D-SO	11/2/2012	100 J
K-1549	1641-K1549L-SS-D-SO	11/2/2012	260 J
	1641-K1549R-SS-D-SO	11/2/2012	450 J
K-1550	1641-K1550L-SS-D-SO	11/2/2012	130 J
	1641-K1550R-SS-D-SO	11/2/2012	200 J

Footnotes:

Data source: Final Revision 1, RCRA Facility Investigation Report, Parcel 16
(May 2014)

Exceeds criteria of 200 mg/kg

*Sample type: D = discrete

Table D3-D: Explosives Concentrations at Igloo Aprons - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	K-1524		K-1525		K-1526		K-1527		K-1528		K-1529		K-1530		K-1531		K-1532		K-1533	
				1641-K1524-SS- M-SO		1641-K1525-SS- M-SO		1641-K1526-SS- M-SO		1641-K1527-SS- M-SO		1641-K1528-SS- M-SO		1641-K1529-SS- M-SO		1641-K1530-SS- M-SO		1641-K1531-SS- M-SO		1641-K1532-SS- M-SO		1641-K1533-SS- M-SO	
				11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/8/2012		11/8/2012		11/8/2012	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.078	U	0.078	U	0.075	U	0.078	U	0.077	U	0.079	U	0.077	U	0.076	U	0.076	U		
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.078	U	0.078	U	0.075	U	0.078	U	0.077	U	0.079	U	0.077	U	0.076	U	0.076	U		
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
4-Nitrotoluene	99-99-0	mg/kg	247	0.097	U	0.097	U	0.17	J	0.097	U	0.097	U	0.098	U	0.097	U	0.092	U	0.096	U	0.095	U
HMX	2691-41-0	mg/kg	3850	0.039	U	0.039	U	0.038	U	0.039	U	0.039	U	0.039	U	0.037	U	0.038	U	0.038	U		
Nitrobenzene	98-95-3	mg/kg	60.4	0.097	U	0.097	U	0.094	U	0.097	U	0.097	U	0.098	U	0.097	U	0.092	U	0.096	U	0.095	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.39	U	0.39	U	0.38	U	0.39	U	0.39	U	0.39	U	0.37	U	0.38	U	0.38	U		
PETN	78-11-5	mg/kg	570	0.97	U	0.97	U	0.94	U	0.97	U	0.97	U	0.98	U	0.97	U	0.92	U	0.96	U	0.95	U
RDX	121-82-4	mg/kg	83.1	0.078	U	0.078	U	0.075	U	0.078	U	0.077	U	0.079	U	0.077	U	0.073	U	0.076	U	0.076	U
Tetryl	479-45-8	mg/kg	156	0.078	U	0.078	U	0.075	U	0.078	U	0.077	U	0.079	U	0.077	U	0.073	U	0.076	U	0.076	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table D3-D (cont.): Explosives Concentrations at Igloo Aprons - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1534	K-1535	K-1536	K-1537	K-1538	K-1539	K-1540	K-1541	K-1542	K-1543				
				1641-K1534-SS-M-SO	1641-K1535-SS-M-SO	1641-K1536-SS-M-SO	1641-K1537-SS-M-SO	1641-K1538-SS-M-SO	1641-K1539-SS-M-SO	1641-K1540-SS-M-SO	1641-K1541-SS-M-SO	1641-K1542-SS-M-SO	1641-K1543-SS-M-SO				
				11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012				
Explosives																	
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.077	U	0.075	U	0.076	U	0.077	U	0.074	U	0.073	U	0.078	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.077	U	0.075	U	0.076	U	0.077	U	0.074	U	0.073	U	0.078	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.096	U	0.094	U	0.095	U	0.096	U	0.093	U	0.091	U	0.097	U
HMX	2691-41-0	mg/kg	3850	0.039	U	0.038	U	0.038	U	0.037	U	0.036	U	0.039	U	0.038	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.096	U	0.094	U	0.095	U	0.096	U	0.093	U	0.091	U	0.097	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.39	U	0.38	U	0.38	U	0.38	U	0.37	U	0.36	U	0.39	U
PETN	78-11-5	mg/kg	570	0.96	U	0.94	U	0.95	U	0.96	U	0.93	U	0.91	U	0.97	U
RDX	121-82-4	mg/kg	83.1	0.077	U	0.075	U	0.076	U	0.077	U	0.074	U	0.073	U	0.078	U
Tetryl	479-45-8	mg/kg	156	0.077	U	0.075	U	0.076	U	0.077	U	0.074	U	0.073	U	0.078	U

Footnotes:

- 1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)
- 2) NMED RAG (November 2022, revised)
- *Sample type: MI = multi-increment

**Table D3-D (cont.): Explosives Concentrations at Igloo Aprons - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1544		K-1545		K-1546		K-1547		K-1548		K-1549		K-1550	
				1641-K1544-SS- M-SO		1641-K1545-SS- M-SO		1641-K1546-SS- M-SO		1641-K1547-SS- M-SO		1641-K1548-SS- M-SO		1641-K1549-SS- M-SO		1641-K1550- SS-M-SO	
				11/8/2012		11/8/2012		11/8/2012		11/8/2012		11/8/2012		11/8/2012		11/8/2012	
Explosives																	
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.078	U	0.076	U	0.074	U	0.074	U	0.073	U	0.075	U	0.076	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.078	U	0.076	U	0.074	U	0.074	U	0.073	U	0.075	U	0.076	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.097	U	0.095	U	0.093	U	0.093	U	0.091	U	0.094	U	0.095	U
HMX	2691-41-0	mg/kg	3850	0.039	U	0.038	U	0.037	U	0.037	U	0.037	U	0.037	U	0.038	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.097	U	0.095	U	0.093	U	0.093	U	0.091	U	0.094	U	0.095	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.39	U	0.38	U	0.37	U	0.37	U	0.37	U	0.37	U	0.38	U
PETN	78-11-5	mg/kg	570	0.97	U	0.95	U	0.93	U	0.93	U	0.91	U	0.94	U	0.95	U
RDX	121-82-4	mg/kg	83.1	0.078	U	0.076	U	0.074	U	0.074	U	0.073	U	0.075	U	0.076	U
Tetryl	479-45-8	mg/kg	156	0.078	U	0.076	U	0.074	U	0.074	U	0.073	U	0.075	U	0.076	U

Footnotes:

- 1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)
- 2) NMED RAG (November 2022, revised)
- *Sample type: MI = multi-increment

**Table D3-E: RCRA 8 Metals Concentrations at Igloo Aprons - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1524		K-1525		K-1526		K-1527		K-1528		K-1529		K-1530		K-1531		K-1532		K-1533			
				1641-K1524-SS-		1641-K1525-SS-		1641-K1526-SS-		1641-K1527-SS-		1641-K1528-SS-		1641-K1529-SS-		1641-K1530-SS-		1641-K1531-SS-		1641-K1532-SS-		1641-K1533-SS-			
				M-SO		M-SO		M-SO		M-SO		M-SO		M-SO		M-SO		M-SO		M-SO		M-SO		M-SO	
				11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/9/2012		11/8/2012		11/8/2012		11/8/2012		11/8/2012	
Metals																									
Arsenic	7440-38-2	mg/kg	7.1	1.5	J	2.1	J	1.5	J	1.5	J	2	J	1.8	J	1.9	J	1.8	J	1.7	J	1.8	J		
Barium	7440-39-3	mg/kg	15,558	280	=	340	=	260	=	280	=	340	=	330	=	300	=	310	=	310	=	340	=		
Cadmium	7440-43-9	mg/kg	70.5	0.15	J	0.16	J	0.16	J	0.19	J	0.18	J	0.16	J	0.13	J	0.17	J	0.15	J	0.17	J		
Chromium	7440-47-3	mg/kg	96.6	13	=	13	=	14	=	13	=	12	=	13	=	10	=	14	=	13	=	15	=		
Lead	7439-92-1	mg/kg	200	18	=	20	=	23	=	27	=	17	=	15	=	29	=	17	=	20	=	16	=		
Mercury	7439-97-6	mg/kg	23.7	0.0083	J	0.0099	J	0.011	J	0.011	J	0.01	J	0.0081	J	0.007	J	0.011	J	0.0094	J	0.0096	J		
Selenium	7782-49-2	mg/kg	391	1.2	U	1.2	U	1.2	U	1.2	U	1.1	U	1.1	U	1.2	U	1.2	U	1.1	U	1.1	U		
Silver	7440-22-4	mg/kg	391	0.19	U	0.2	U	0.19	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19	U	0.18	U	0.19	U		

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table D3-E (cont.): RCRA 8 Metals Concentrations at Igloo Aprons - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1534	K-1535	K-1536	K-1537	K-1538	K-1539	K-1540	K-1541	K-1542	K-1543										
				1641-K1534-SS-M-SO	1641-K1535-SS-M-SO	1641-K1536-SS-M-SO	1641-K1537-SS-M-SO	1641-K1538-SS-M-SO	1641-K1539-SS-M-SO	1641-K1540-SS-M-SO	1641-K1541-SS-M-SO	1641-K1542-SS-M-SO	1641-K1543-SS-M-SO										
				11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012										
Metals																							
Arsenic	7440-38-2	mg/kg	7.1	2	J	1.7	J	1.5	J	1.6	J	1.7	J	2.1	J	1.8	J	1.6	J	1.9	J	2	J
Barium	7440-39-3	mg/kg	15,558	350	=	300	=	380	=	280	=	260	=	340	=	310	J	290	=	300	=	510	=
Cadmium	7440-43-9	mg/kg	70.5	0.18	J	0.17	J	0.15	J	0.15	J	0.18	J	0.2	J	0.19	J	0.19	J	0.2	J	0.15	J
Chromium	7440-47-3	mg/kg	96.6	13	=	12	=	13	=	12	=	17	=	17	=	14	J	15	=	12	=	15	=
Lead	7439-92-1	mg/kg	200	33	=	22	=	14	=	15	=	15	=	23	=	17	=	15	=	50	=	10	=
Mercury	7439-97-6	mg/kg	23.7	0.011	J	0.0097	J	0.0072	J	0.0085	J	0.012	J	0.01	J	0.0071	J	0.011	J	0.0096	J	0.0075	J
Selenium	7782-49-2	mg/kg	391	1.2	U	1.1	U	1.2	U	1.2	U	1.1	U	1.1	U	1.1	U	1.2	U	1.2	U	1.1	U
Silver	7440-22-4	mg/kg	391	0.2	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.2	U	0.19	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table D3-E (cont.): RCRA 8 Metals Concentrations at Igloo Aprons - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	K-1544	K-1545	K-1546	K-1547	K-1548	K-1549	K-1550							
				1641-K1544-SS-	1641-K1545-SS-	1641-K1546-SS-	1641-K1547-SS-	1641-K1548-SS-	1641-K1549-SS-	1641-K1550-SS-							
				M-SO	M-SO	M-SO	M-SO	M-SO	M-SO	M-SO							
				11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012	11/8/2012							
Metals																	
Arsenic	7440-38-2	mg/kg	7.1	2.2	J	2	J	1.7	J	1.7	J	2	J	1.6	J	1.9	J
Barium	7440-39-3	mg/kg	15,558	360	=	420	=	310	=	380	=	400	=	390	=	480	=
Cadmium	7440-43-9	mg/kg	70.5	0.18	J	0.21	J	0.21	J	0.18	J	0.2	J	0.21	J	0.21	J
Chromium	7440-47-3	mg/kg	96.6	15	=	14	=	14	=	14	=	14	=	19	=	14	=
Lead	7439-92-1	mg/kg	200	12	=	14	=	15	=	10	=	13	=	14	=	21	=
Mercury	7439-97-6	mg/kg	23.7	0.011	J	0.01	J	0.0088	J	0.0083	J	0.011	J	0.014	=	0.0062	J
Selenium	7782-49-2	mg/kg	391	1.2	U	1.2	U	1.2	U	1.1	U	1.2	U	1.1	U	1.2	U
Silver	7440-22-4	mg/kg	391	0.2	U	0.19	U	0.19	U	0.19	U	0.2	U	0.19	U	0.2	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D3-F: Explosives Concentrations at Revetments - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-K1524	Y-K1525		Y-K1526		Y-K1527		Y-K1530		Y-K1531		Y-K1532		Y-K1533		Y-K1534		
				1641-Y1524-SS-M-	1641-Y1525-SS-M-	1641-Y1526-SS-M-	1641-Y1527-SS-M-	1641-Y1530-SS-M-	1641-Y1531-SS-M-	1641-Y1532-SS-M-	1641-Y1533-SS-M-	1641-Y1534-SS-M-									
				SO	SO	SO	SO	SO	SO	SO	SO	SO									
				11/3/2012	11/3/2012	11/3/2012	11/3/2012	11/5/2012	11/5/2012	11/3/2012	11/5/2012	11/3/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012		
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.075	U	0.079	U	0.079	U	0.079	U	0.076	U	0.074	U	0.075	U	0.078	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.075	U	0.079	U	0.079	U	0.079	U	0.076	U	0.074	U	0.075	U	0.078	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.093	U	0.099	U	0.099	U	0.099	U	0.096	U	0.092	U	0.094	U	0.098	U	0.1	U
HMX	2691-41-0	mg/kg	3850	0.037	U	0.04	U	0.04	U	0.04	U	0.038	U	0.037	U	0.038	U	0.039	U	0.04	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.093	U	0.099	U	0.099	U	0.099	U	0.096	U	0.092	U	0.094	U	0.098	U	0.1	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.37	U	0.4	U	0.4	U	0.4	U	0.38	U	0.37	U	0.38	U	0.39	U	0.4	U
PETN	78-11-5	mg/kg	570	0.93	U	0.99	U	0.99	U	0.99	U	0.96	U	0.92	U	0.94	U	0.98	U	1	U
RDX	121-82-4	mg/kg	83.1	0.075	U	0.079	U	0.079	U	0.079	U	0.076	U	0.074	U	0.075	U	0.078	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.075	U	0.079	U	0.079	U	0.079	U	0.076	U	0.074	U	0.075	U	0.078	U	0.08	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D3-F (cont.): and Explosives Concentrations at Revetments - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-K1536	Y-K1537		Y-K1538		Y-K1539		Y-K1540		Y-K1541		Y-K1543		Y-K1544		Y-K1547		
				1641-Y1536-SS-M-	1641-Y1537-SS-M-	1641-Y1538-SS-M-	1641-Y1539-SS-M-	1641-Y1540-SS-M-	1641-Y1541-SS-M-	1641-Y1543-SS-M-	1641-Y1544-SS-M-	1641-Y1547-SS-M-									
				SO	SO	SO	SO	SO	SO	SO	SO	SO									
				11/5/2012	11/5/2012		11/5/2012		11/5/2012		11/5/2012		11/5/2012		11/6/2012		11/6/2012		11/6/2012		
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.074	U	0.078	U	0.073	U	0.079	U	0.077	U	0.079	U	0.078	U	0.079	U	0.073	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.074	U	0.078	U	0.073	U	0.079	U	0.077	U	0.079	U	0.078	U	0.079	U	0.073	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.092	U	0.098	U	0.091	U	0.098	U	0.096	U	0.098	U	0.097	U	0.099	U	0.092	U
HMX	2691-41-0	mg/kg	3850	0.037	U	0.039	U	0.037	U	0.039	U	0.038	U	0.039	U	0.039	U	0.04	U	0.037	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.092	U	0.098	U	0.091	U	0.098	U	0.096	U	0.098	U	0.097	U	0.099	U	0.092	U
Nitroglycerin	55-63-0	mg/kg	6.16	0.37	U	0.39	U	0.37	U	0.39	U	0.38	U	0.39	U	0.39	U	0.4	U	0.37	U
PETN	78-11-5	mg/kg	570	0.92	U	0.98	U	0.91	U	0.98	U	0.96	U	0.98	U	0.97	U	0.99	U	0.92	U
RDX	121-82-4	mg/kg	83.1	0.074	U	0.078	U	0.073	U	0.079	U	0.077	U	0.079	U	0.078	U	0.079	U	0.073	U
Tetryl	479-45-8	mg/kg	156	0.074	U	0.078	U	0.073	U	0.079	U	0.077	U	0.079	U	0.078	U	0.079	U	0.073	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

**Table D3-F (cont.): and Explosives Concentrations at Revetments - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	Y-K1549		Y-K1		Y-K2		Y-K3		Y-K4		Y-K5
				1641-Y1549-SS-M-		1641-YK1-SS-M-		1641-YK2-SS-M-		1641-YK3-SS-M-		1641-YK4-SS-M-		1641-YK5-SS-M-
				SO		SO		SO		SO		SO		SO
				11/6/2012		11/3/2012		11/3/2012		11/3/2012		11/3/2012		11/3/2012
Explosives														
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.076	U	0.076	U	0.078	U	0.078	U	0.075	U	0.077
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.076	U	0.076	U	0.078	U	0.078	U	0.075	U	0.077
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
4-Nitrotoluene	99-99-0	mg/kg	247	0.095	U	0.095	U	0.097	U	0.097	U	0.093	U	0.096
HMX	2691-41-0	mg/kg	3850	0.038	U	0.038	U	0.039	U	0.039	U	0.037	U	0.038
Nitrobenzene	98-95-3	mg/kg	60.4	0.095	U	0.095	U	0.097	U	0.097	U	0.093	U	0.096
Nitroglycerin	55-63-0	mg/kg	6.16	0.38	U	0.38	U	0.39	U	0.39	U	0.37	U	0.38
PETN	78-11-5	mg/kg	570	0.95	U	0.95	U	0.97	U	0.97	U	0.93	U	0.96
RDX	121-82-4	mg/kg	83.1	0.076	U	0.076	U	0.078	U	0.078	U	0.075	U	0.077
Tetryl	479-45-8	mg/kg	156	0.076	U	0.076	U	0.078	U	0.078	U	0.075	U	0.077

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D3-G: RCRA 8 Metals Concentrations at Revetments - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-K1524	Y-K1525	Y-K1526	Y-K1527	Y-K1530	Y-K1531	Y-K1532	Y-K1533	Y-K1534									
				1641-Y1524-SS-M	1641-Y1525-SS-M	1641-Y1526-SS-M	1641-Y1527-SS-M	1641-Y1530-SS-M	1641-Y1531-SS-M	1641-Y1532-SS-M	1641-Y1533-SS-M	1641-Y1534-SS-M									
				SO	SO	SO	SO	SO	SO	SO	SO	SO									
				11/3/2012	11/3/2012	11/3/2012	11/3/2012	11/5/2012	11/5/2012	11/3/2012	11/5/2012	11/5/2012									
Metals																					
Arsenic	7440-38-2	mg/kg	7.1	2.4	J	2.4	J	2.4	J	2.5	J	2.5	J	2.4	J	2.4	J	2.4	J		
Barium	7440-39-3	mg/kg	15,558	250	=	230	=	270	=	260	J	300	=	260	J	260	=	270	=	270	=
Cadmium	7440-43-9	mg/kg	70.5	0.48	J	0.49	J	0.49	J	0.5	J	0.49	J	0.49	J	0.48	J	0.47	J	0.49	J
Chromium	7440-47-3	mg/kg	96.6	13	=	12	=	14	=	15	J	26	=	19	J	15	=	16	=	16	=
Lead	7439-92-1	mg/kg	200	10	=	9.9	=	11	=	10	J	11	=	11	J	11	=	10	=	10	=
Mercury	7439-97-6	mg/kg	23.7	0.0055	J	0.0061	J	0.012	U	0.0054	J	0.0084	J	0.0086	J	0.013	U	0.012	U	0.0056	J
Selenium	7782-49-2	mg/kg	391	1.1	U	1.2	U	1.2	UJ	1.2	U	2.4	UJ	1.2	U	1.1	U	1.2	U	1.2	U
Silver	7440-22-4	mg/kg	391	0.19	U	0.19	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U	0.2	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D3-G (cont.): RCRA 8 Metals Concentrations at Revetments - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-K1536		Y-K1537		Y-K1538		Y-K1539		Y-K1540		Y-K1541		Y-K1543		Y-K1544		Y-K1547	
				1641-Y1536-SS-M		1641-Y1537-SS-M		1641-Y1538-SS-M		1641-Y1539-SS-M		1641-Y1540-SS-M		1641-Y1541-SS-M		1641-Y1543-SS-M		1641-Y1544-SS-M		1641-Y1547-SS-M	
				SO		SO		SO		SO		SO		SO		SO		SO		SO	
				11/5/2012		11/5/2012		11/5/2012		11/5/2012		11/5/2012		11/5/2012		11/6/2012		11/6/2012		11/6/2012	
Metals																					
Arsenic	7440-38-2	mg/kg	7.1	2.5	J	2.5	J	2.5	J	2.4	J	2.4	J	2.4	J	1.4	J	1.7	J	2.8	=
Barium	7440-39-3	mg/kg	15,558	680	J	270	J	260	=	270	=	280	=	240	=	450	=	360	=	350	=
Cadmium	7440-43-9	mg/kg	70.5	0.5	J	0.5	J	0.49	J	0.48	J	0.48	J	0.48	J	0.12	J	0.15	J	0.2	J
Chromium	7440-47-3	mg/kg	96.6	15	=	21	J	21	=	24	=	17	=	18	=	14	=	17	=	11	=
Lead	7439-92-1	mg/kg	200	7.9	=	11	J	11	=	10	=	8.2	=	10	=	8	=	9	=	6.7	=
Mercury	7439-97-6	mg/kg	23.7	0.012	U	0.013	U	0.0083	J	0.012	U	0.0095	J	0.01	J	0.0056	J	0.0061	J	0.0091	J
Selenium	7782-49-2	mg/kg	391	1.2	U	1.2	U	1.2	U	1.2	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Silver	7440-22-4	mg/kg	391	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.18	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D3-G (cont.): RCRA 8 Metals Concentrations at Revetments - Parcel 16, Igloo Block K¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-K1549	Y-K1		Y-K2		Y-K3		Y-K4		Y-K5		
				1641-Y1549-SS-M-	1641-YK1-SS-M-	1641-YK2-SS-M-	1641-YK3-SS-M-	1641-YK4-SS-M-	1641-YK5-SS-M-						
				SO	SO	SO	SO	SO	SO						
				11/6/2012	11/3/2012		11/3/2012		11/3/2012		11/3/2012		11/3/2012		
Metals															
Arsenic	7440-38-2	mg/kg	7.1	1.9	J	2.4	J	2.4	J	2.4	J	2.4	J	2.4	J
Barium	7440-39-3	mg/kg	15,558	240	=	270	=	240	=	290	=	240	=	250	=
Cadmium	7440-43-9	mg/kg	70.5	0.094	J	0.48	J	0.48	J	0.48	J	0.48	J	0.49	J
Chromium	7440-47-3	mg/kg	96.6	8	=	15	=	14	=	13	=	12	=	11	=
Lead	7439-92-1	mg/kg	200	6.2	=	11	=	10	=	10	=	10	=	9.8	=
Mercury	7439-97-6	mg/kg	23.7	0.013	U	0.0055	J	0.013	U	0.0057	J	0.012	U	0.006	J
Selenium	7782-49-2	mg/kg	391	1.2	U	1.2	U	1.1	U	1.2	U	1.2	U	1.2	U
Silver	7440-22-4	mg/kg	391	0.2	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U

Footnotes:

1) Data source: Final Revision 1, RCRA Facility Investigation Report,
Parcel 16 (May 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Appendix D4: Parcel 24, AOC 28, Igloo Block A

Table D4-A: Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-901		A-902		A-903		A-904		A-905		A-906		A-907		A-908		A-909		A-910	
				2418A-901SS-C-SO		2418A-902SS-C-SO		2418A-903SS-C-SO		2418A-904SS-C-SO		2418A-905SS-C-SO		2418A-906SS-C-SO		2418A-907SS-C-SO		2418A-908SS-C-SO		2418A-909SS-C-SO		2418A-910SS-C-SO	
				9/20/2008		9/20/2008		9/19/2008		9/19/2008		9/19/2008		9/20/2008		9/20/2008		9/19/2008		9/19/2008		9/19/2008	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.24	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-911		A-912			A-913		A-914				A-915		A-916		A-917		
				2418A-911SS-C-SO		2418A-912SS-C-SO		2418A-912SS-R-XRFC-SO	2418A-913SS-C-SO		2418A-914SS-C-SO		2418A-914SS-L-XRFC-SO	2418A-914SS-R-XRFC-SO	2418A-915SS-C-SO		2418A-916SS-C-SO		2418A-917SS-C-SO		
				9/19/2008		9/19/2008		10/5/2010	9/18/2008		9/18/2008		10/5/2010	10/5/2010	9/18/2008		9/18/2008		9/18/2008		
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.22	U	0.22	U	0.22	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-918		A-919		A-920		A-921		A-922		A-923		A-924		A-925		A-926		A-927	
				2418A-918SS-C-SO		2418A-919SS-C-SO		2418A-920SS-C-SO		2418A-921SS-C-SO		2418A-922SS-C-SO		2418A-923SS-C-SO		2418A-924SS-C-SO		2418A-925SS-C-SO		2418A-926SS-C-SO		2418A-927SS-C-SO	
				9/19/2008		9/19/2008		9/17/2008		9/17/2008		9/17/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	UN	0.04	UN	0.04	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	UN	0.08	UN	0.08	UN	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-928		A-929		A-930		A-931		A-932		A-933		A-934		A-935		A-936		A-937	
				2418A-928SS-C-SO		2418A-929SS-C-SO		2418A-930SS-C-SO		2418A-931SS-C-SO		2418A-932SS-C-SO		2418A-933SS-C-SO		2418A-934SS-C-SO		2418A-935SS-C-SO		2418A-936SS-C-SO		2418A-937SS-C-SO	
				9/18/2008		9/16/2008		9/16/2008		9/16/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	UN
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	UN

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-938		A-939		A-940		A-941		A-942		A-943		A-944		A-945		A-946		A-947	
				2418A-938SS-C-SO		2418A-939SS-C-SO		2418A-940SS-C-SO		2418A-941SS-C-SO		2418A-942SS-C-SO		2418A-943SS-C-SO		2418A-944SS-C-SO		2418A-945SS-C-SO		2418A-946SS-C-SO		2418A-947SS-C-SO	
				9/17/2008		9/17/2008		9/15/2008		9/15/2008		9/15/2008		9/15/2008		9/15/2008		9/16/2008		9/16/2008		9/16/2008	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.076	U	0.074	U	0.074	U	0.074	U	0.076	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.076	U	0.074	U	0.074	U	0.074	U	0.076	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	UN	0.04	UN	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.076	U	0.074	U	0.074	U	0.074	U	0.076	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.076	U	0.074	U	0.074	U	0.074	U	0.076	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.038	U	0.037	U	0.037	U	0.037	U	0.038	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	3.8	U	3.7	U	3.7	U	3.7	U	3.8	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.14	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.076	U	0.074	U	0.074	U	0.074	U	0.076	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	UN	0.08	UN	0.076	U	0.074	U	0.074	U	0.074	U	0.076	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-948		A-949		A-950		A-951		A-952		A-953		A-954		A-955		A-956		A-957	
				2418A-948SS-C-SO		2418A-949SS-C-SO		2418A-950SS-C-SO		2418A-951SS-C-SO		2418A-952SS-C-SO		2418A-953SS-C-SO		2418A-954SS-C-SO		2418A-955SS-C-SO		2418A-956SS-C-SO		2418A-957SS-C-SO	
				9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	U	0.038	U	0.039	U	0.038	U	0.037	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	U	0.038	U	0.039	U	0.038	U	0.037	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	U	0.038	U	0.039	U	0.038	U	0.037	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	U	0.038	U	0.039	U	0.038	U	0.037	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	UN	0.038	UN	0.039	UN	0.038	U	0.037	UN
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	UN	0.038	UN	0.039	UN	0.038	U	0.037	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.076	U	0.077	U	0.078	U	0.075	U	0.075	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	U	0.038	U	0.039	U	0.038	U	0.037	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.076	U	0.077	U	0.078	U	0.075	U	0.075	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	UN	0.04	UN	0.04	UN	0.04	UN	0.04	UN	0.038	UN	0.038	UN	0.039	UN	0.038	U	0.037	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.076	U	0.077	U	0.078	U	0.075	U	0.075	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.076	U	0.077	U	0.078	U	0.075	U	0.075	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.038	U	0.038	U	0.039	U	0.038	U	0.037	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	3.8	U	3.8	U	3.9	U	3.8	U	3.7	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19	U	0.19	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.076	U	0.077	U	0.078	U	0.075	U	0.075	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.076	U	0.077	U	0.078	U	0.075	U	0.075	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-958	A-959	A-960	A-961	A-962	A-963	A-964	A-965	A-966	A-967								
				2418A-958SS-C-SO	2418A-959SS-C-SO	2418A-960SS-C-SO	2418A-961SS-C-SO	2418A-962SS-C-SO	2418A-963SS-C-SO	2418A-964SS-C-SO	2418A-965SS-C-SO	2418A-966SS-C-SO	2418A-967SS-C-SO								
				9/13/2008	9/13/2008	9/13/2008	9/13/2008	9/15/2008	9/15/2008	9/15/2008	9/15/2008	9/12/2008	9/12/2008								
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.039	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.039	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.039	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.039	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	UN	0.039	UN	0.038	UN	0.039	UN	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	UN	0.039	UN	0.038	UN	0.039	UN	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.079	U	0.08	U	0.079	U	0.08	U	0.079	U	0.078	U	0.076	U	0.077	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.039	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.079	U	0.08	U	0.079	U	0.08	U	0.079	U	0.078	U	0.076	U	0.077	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	UN	0.039	UN	0.038	UN	0.039	UN	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.079	U	0.08	U	0.079	U	0.08	U	0.079	U	0.078	U	0.076	U	0.077	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.079	U	0.08	U	0.079	U	0.08	U	0.079	U	0.078	U	0.076	U	0.077	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.039	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	3.9	U	3.8	U	3.9	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.079	U	0.08	U	0.079	U	0.08	U	0.079	U	0.078	U	0.076	U	0.077	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.079	U	0.08	U	0.079	U	0.08	U	0.079	U	0.078	U	0.076	U	0.077	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-A (cont.): Explosives Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-968		A-969		A-970		A-971		A-972		A-973		A-974		A-975		A-976		A-977	
				2418A-968SS-C-SO		2418A-969SS-C-SO		2418A-970SS-C-SO		2418A-971SS-C-SO		2418A-972SS-C-SO		2418A-973SS-C-SO		2418A-974SS-C-SO		2418A-975SS-C-SO		2418A-976SS-C-SO		2418A-977SS-C-SO	
				9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/13/2008		9/13/2008		9/13/2008	
Explosives																							
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.016	J	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.22	=	0.2	U	0.2	U	0.2	U	0.073	NJ	0.13	J	0.2	U	0.18	J	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: C = composite

Table D4-B: RCRA 8 Metals Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-905				A-909		A-912		A-914				A-918		A-920	
				2418A-905SS-L- XRFC-SO	2418A-905SS-R- XRFC-SO	2418A-909SS-R- XRFC-SO	2418A-912SS-R- XRFC-SO	2418A-914SS-L- XRFC-SO	2418A-914SS-R- XRFC-SO	2418A-918SS-R- XRFC-SO	2418A-920SS- R-XRFC-SO								
				10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010								
Metals																			
Arsenic	7440-38-2	mg/kg	7.1	4.1	=	3.1	=	3	=	3.5	=	2.9	=	2.4	=	2.9	=	3.2	=
Barium	7440-39-3	mg/kg	15,558	190	=	200	=	160	=	180	=	210	=	240	=	250	=	220	=
Cadmium	7440-43-9	mg/kg	70.5	0.41	J	0.17	J	0.35	J	0.18	J	0.14	J	0.17	J	0.16	J	0.49	U
Chromium	7440-47-3	mg/kg	96.6	14	=	11	=	8.9	=	9.8	=	10	=	11	=	11	=	10	=
Lead ³	7439-92-1	mg/kg	200	440	=	290	=	480	=	93	=	200	=	640	=	350	=	1400	J
Mercury	7439-97-6	mg/kg	23.7	0.028	=	0.025	=	0.022	=	0.02	=	0.012	J	0.0081	J	0.016	J	0.011	J
Selenium	7782-49-2	mg/kg	391	1.6	U	1.5	U	1.5	U	1.7	U	1.5	U	1.5	U	1.5	U	1.5	U
Silver	7440-22-4	mg/kg	391	0.21	U	0.2	U	0.2	U	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U

Footnotes:

- 1) Data source: Release Assessment Report Parcel 24 (Jan 2014); Final Investigation Report Igloo Block A, Parcel 9 (July 2018)
2) NMED RAG (November 2022, revised)
3) See Table D4-C for additional Pb results collected at the drains

Exceeds criteria

*Sample type: XRFC = discrete

Table D4-B (cont.): RCRA 8 Metals Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-924	A-929	A-930	A-933	A-934	A-935	A-936									
				2418A-924SS-R- XRFC-SO	2418A-929SS-R- XRFC-SO	2418A-930SS-R- XRFC-SO	2418A-933SS-L- XRFC-SO	2418A-934SS-L- XRFC-SO	2418A-935SS-L- XRFC-SO	2418A-936SS-L- XRFC-SO	2418A-936SS-R- XRFC-SO								
				10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010	10/5/2010								
Metals																			
Arsenic	7440-38-2	mg/kg	7.1	3.2	=	4	=	2.9	=	1.6	=	2.4	=	2.4	=	1.5	=	2.9	=
Barium	7440-39-3	mg/kg	15,558	180	=	190	=	210	=	150	=	190	=	170	=	420	=	180	=
Cadmium	7440-43-9	mg/kg	70.5	0.46	J	0.83	=	0.42	J	0.51	U	0.53	U	0.5	U	0.1	U	0.26	J
Chromium	7440-47-3	mg/kg	96.6	11	=	15	=	12	=	8.7	=	13	=	8.3	=	12	=	9.7	=
Lead ³	7439-92-1	mg/kg	200	2300	J	3900	J	260	=	100	J	430	J	100	J	660	J	330	J
Mercury	7439-97-6	mg/kg	23.7	0.024	=	0.019	=	0.029	=	0.018	=	0.019	=	0.023	=	0.011	J	0.022	=
Selenium	7782-49-2	mg/kg	391	1.6	U	1.6	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U	1.4	U
Silver	7440-22-4	mg/kg	391	0.21	U	0.21	U	0.21	U	0.2	U	0.21	U	0.2	U	0.2	U	0.18	U

Footnotes:

- 1) Data source: Release Assessment Report Parcel 24 (Jan 2014); Final Investigation Report Igloo Block A, Parcel 9 (July 2018)
- 2) NMED RAG (November 2022, revised)
- 3) See Table D4-C for additional Pb results collected at the drains

Exceeds criteria

*Sample type: XRFC = discrete

Table D4-B (cont.): RCRA 8 Metals Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-938		A-945			A-948		A-954		A-956		A-964		
				2418A-938SS-R- XRFC-SO		2418A-945SS-L- XRFC-SO		2418A-945SS-R- XRFC-SO	2418A-948SS-R- XRFC-SO		2418A-954SS-L- XRFC-SO		2418A-956SS-L- XRFC-SO		2418A-964SS-R- XRFC-SO		
				10/5/2010		10/5/2010		10/5/2010	10/5/2010		10/5/2010		10/5/2010		10/5/2010		
Metals																	
Arsenic	7440-38-2	mg/kg	7.1	3.6	=	3	=	3.8	=	4.3	=	2	=	3.1	=	2.5	=
Barium	7440-39-3	mg/kg	15,558	180	=	170	=	190	=	180	=	230	=	190	=	210	=
Cadmium	7440-43-9	mg/kg	70.5	0.52	U	0.22	J	0.44	U	0.28	J	0.46	U	0.49	U	0.31	J
Chromium	7440-47-3	mg/kg	96.6	10	=	12	=	12	=	12	=	11	=	11	=	12	=
Lead ³	7439-92-1	mg/kg	200	200	J	190	J	360	J	270	=	140	J	160	J	740	J
Mercury	7439-97-6	mg/kg	23.7	0.022	=	0.024	=	0.023	=	0.03	=	0.012	J	0.022	=	0.028	=
Selenium	7782-49-2	mg/kg	391	1.6	U	1.6	U	1.3	U	1.8	U	1.4	U	1.5	U	1.4	U
Silver	7440-22-4	mg/kg	391	0.21	U	0.21	U	0.18	U	0.24	U	0.18	U	0.2	U	0.19	U

Footnotes:

- 1) Data source: Release Assessment Report Parcel 24 (Jan 2014); Final Investigation Report Igloo Block A, Parcel 9 (July 2018)
- 2) NMED RAG (November 2022, revised)
- 3) See Table D4-C for additional Pb results collected at the drains

Exceeds criteria

*Sample type: XRFC = discrete

Table D4-C: Lead Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Igloo	Sample Name	Sample Date	Lead (mg/kg)
A-049	2418A-049SS-C-SO	9/15/2008	151
A-299	2418A-299SS-C-SO	9/16/2008	657
A-439	2418A-439SS-C-SO	9/17/2008	746
A-509	2418A-509SS-C-SO	9/19/2008	419
A-769	2418A-769SS-C-SO	9/12/2008	168
A-901	2418A-901SS-C-SO	9/20/2008	134
A-902	2418A-902SS-C-SO	9/20/2008	287
A-903	2418A-903SS-C-SO	9/19/2008	775
A-904	2418A-904SS-C-SO	9/19/2008	357
A-905	2418A-905SS-C-SO	9/19/2008	383
A-906	2418A-906SS-C-SO	9/20/2008	359
A-907	2418A-907SS-C-SO	9/20/2008	275
A-908	2418A-908SS-C-SO	9/19/2008	294
A-909	2418A-909SS-C-SO	9/19/2008	954
A-910	2418A-910SS-C-SO	9/19/2008	371
A-911	2418A-911SS-C-SO	9/19/2008	170
A-912	2418A-912SS-C-SO	9/19/2008	443
A-913	2418A-913SS-C-SO	9/18/2008	415
A-914	2418A-914SS-C-SO	9/18/2008	438
A-915	2418A-915SS-C-SO	9/18/2008	1000
A-916	2418A-916SS-C-SO	9/18/2008	948
A-917	2418A-917SS-C-SO	9/18/2008	609
A-918	2418A-918SS-C-SO	9/19/2008	1090
A-919	2418A-919SS-C-SO	9/19/2008	385
A-920	2418A-920SS-C-SO	9/17/2008	286
A-921	2418A-921SS-C-SO	9/17/2008	186
A-922	2418A-922SS-C-SO	9/17/2008	626
A-923	2418A-923SS-C-SO	9/18/2008	582
A-924	2418A-924SS-C-SO	9/18/2008	260
A-925	2418A-925SS-C-SO	9/18/2008	762
A-926	2418A-926SS-C-SO	9/18/2008	464
A-927	2418A-927SS-C-SO	9/18/2008	273
A-928	2418A-928SS-C-SO	9/18/2008	249
A-929	2418A-929SS-C-SO	9/16/2008	1390
A-930	2418A-930SS-C-SO	9/16/2008	324
A-931	2418A-931SS-C-SO	9/16/2008	144
A-932	2418A-932SS-C-SO	9/17/2008	246
A-933	2418A-933SS-C-SO	9/17/2008	1790
A-934	2418A-934SS-C-SO	9/17/2008	347

Table D4-C (cont.): Lead Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Igloo	Sample Name	Sample Date	Lead (mg/kg)
A-935	2418A-935SS-C-SO	9/17/2008	506
A-936	2418A-936SS-C-SO	9/17/2008	824
A-937	2418A-937SS-C-SO	9/17/2008	294
A-938	2418A-938SS-C-SO	9/17/2008	292
A-939	2418A-939SS-C-SO	9/17/2008	1340
A-940	2418A-940SS-C-SO	9/15/2008	194
A-941	2418A-941SS-C-SO	9/15/2008	741
A-942	2418A-942SS-C-SO	9/15/2008	429
A-943	2418A-943SS-C-SO	9/15/2008	669
A-944	2418A-944SS-C-SO	9/15/2008	434
A-945	2418A-945SS-C-SO	9/16/2008	376
A-946	2418A-946SS-C-SO	9/16/2008	1460
A-947	2418A-947SS-C-SO	9/16/2008	350
A-948	2418A-948SS-C-SO	9/16/2008	603
A-949	2418A-949SS-C-SO	9/16/2008	316
A-950	2418A-950SS-C-SO	9/16/2008	423
A-951	2418A-951SS-C-SO	9/16/2008	499
A-952	2418A-952SS-C-SO	9/16/2008	1020
A-953	2418A-953SS-C-SO	9/13/2008	94.3
A-954	2418A-954SS-C-SO	9/13/2008	241
A-955	2418A-955SS-C-SO	9/13/2008	413
A-956	2418A-956SS-C-SO	9/13/2008	395
A-957	2418A-957SS-C-SO	9/13/2008	208
A-958	2418A-958SS-C-SO	9/13/2008	296
A-959	2418A-959SS-C-SO	9/13/2008	11.6
A-960	2418A-960SS-C-SO	9/13/2008	13.1
A-961	2418A-961SS-C-SO	9/13/2008	140
A-962	2418A-962SS-C-SO	9/15/2008	428
A-963	2418A-963SS-C-SO	9/15/2008	223
A-964	2418A-964SS-C-SO	9/15/2008	407
A-965	2418A-965SS-C-SO	9/15/2008	337
A-966	2418A-966SS-C-SO	9/12/2008	84.7
A-967	2418A-967SS-C-SO	9/12/2008	215
A-968	2418A-968SS-C-SO	9/12/2008	333
A-969	2418A-969SS-C-SO	9/12/2008	977
A-970	2418A-970SS-C-SO	9/12/2008	494
A-971	2418A-971SS-C-SO	9/12/2008	720
A-972	2418A-972SS-C-SO	9/12/2008	179
A-973	2418A-973SS-C-SO	9/12/2008	369

Table D4-C (cont.): Lead Concentrations at Igloo Drains - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Igloo	Sample Name	Sample Date	Lead (mg/kg)	
A-974	2418A-974SS-C-SO	9/12/2008	334	J
A-975	2418A-975SS-C-SO	9/13/2008	208	
A-976	2418A-976SS-C-SO	9/13/2008	481	
A-977	2418A-977SS-C-SO	9/13/2008	606	

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

Exceeds criteria of 200 mg/kg

*Sample type: C = composite

**Table D4-D: Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico**

Analyte	CAS #	Units	Residential SSL ²	A-901		A-902		A-903		A-904		A-905		A-906		A-907		A-908		A-909	
				2418A-901SS-M-SO		2418A-902SS-M-SO		2418A-903SS-M-SO		2418A-904SS-M-SO		2418A-905SS-M-SO		2418A-906SS-M-SO		2418A-907SS-M-SO		2418A-908SS-M-SO		2418A-909SS-M-SO	
				9/20/2008		9/20/2008		9/19/2008		9/19/2008		9/19/2008		9/20/2008		9/20/2008		9/19/2008		9/19/2008	
Lead	7439-92-1	mg/kg	200	32.2	=	20.9	=	22.1	=	19.5	=	17.8	=	17.5	=	13.4	=	26.6	=	19.3	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-910		A-911		A-912		A-913		A-914		A-915		A-916		A-917		A-918	
				2418A-910SS-M-	=	2418A-911SS-M-	=	2418A-912SS-M-	=	2418A-913SS-M-	=	2418A-914SS-M-	=	2418A-915SS-M-	=	2418A-916SS-M-	=	2418A-917SS-M-	=	2418A-918SS-M-	=
				SO		SO		SO		SO		SO		SO		SO		SO		SO	
				9/19/2008		9/19/2008		9/19/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008		9/19/2008	
Lead	7439-92-1	mg/kg	200	20.8	=	13.7	=	23.7	=	15.8	=	24.9	=	15.4	=	17.6	=	19.5	=	14.3	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-919		A-920		A-921		A-922		A-923		A-924		A-925		A-926		A-927	
				2418A-919SS-M- SO		2418A-920SS-M- SO		2418A-921SS-M- SO		2418A-922SS- M-SO		2418A-923SS-M- SO		2418A-924SS-M- SO		2418A-925SS-M- SO		2418A-926SS-M- SO		2418A-927SS-M- SO	
				9/19/2008		9/17/2008		9/17/2008		9/17/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008	
Lead	7439-92-1	mg/kg	200	14.5	=	19.6	=	23.8	=	17.4	=	17.3	=	16.3	=	14.9	=	22.8	=	18.6	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	UN	0.04	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	UN	0.08	UN	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-928		A-929		A-930		A-931		A-932		A-933		A-934		A-935		A-936	
				2418A-928SS-M-		2418A-929SS-M-		2418A-930SS-M-		2418A-931SS-M-		2418A-932SS-		2418A-933SS-M-		2418A-934SS-M-		2418A-935SS-M-		2418A-936SS-M-	
				SO		SO		SO		SO		M-SO		SO		SO		SO		SO	
				9/18/2008		9/16/2008		9/16/2008		9/16/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008	
Lead	7439-92-1	mg/kg	200	13.6	=	14.8	=	19.2	=	16.8	=	19	=	10.9	=	15.3	=	15.6	=	12.7	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.11	=	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.075	=	0.04	U	0.04	UN
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	UN

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-937		A-938		A-939		A-940		A-941		A-942		A-943		A-944		A-945	
				2418A-937SS-M- SO		2418A-938SS-M- SO		2418A-939SS-M- SO		2418A-940SS-M- SO		2418A-941SS-M- SO		2418A-942SS-M- SO		2418A-943SS-M- SO		2418A-944SS-M- SO		2418A-945SS-M- SO	
				9/17/2008		9/17/2008		9/17/2008		9/15/2008		9/15/2008		9/15/2008		9/15/2008		9/15/2008		9/16/2008	
Lead	7439-92-1	mg/kg	200	16.2	=	11.7	=	12.8	=	12.5	=	45.2	=	18.3	=	20.9	=	35.3	=	23.9	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.077	U	0.076	U	0.076	U	0.076	U	0.076	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.077	U	0.076	U	0.076	U	0.076	U	0.076	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	UN	0.04	UN	0.04	UN	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.077	U	0.076	U	0.076	U	0.076	U	0.076	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.077	U	0.076	U	0.076	U	0.076	U	0.076	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.038	U	0.038	U	0.038	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	3.9	U	3.8	U	3.8	U	3.8	U	3.8	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.2	UN
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.077	U	0.076	U	0.076	U	0.076	U	0.076	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	UN	0.08	UN	0.08	UN	0.077	U	0.076	U	0.076	U	0.076	U	0.076	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-946		A-947		A-948		A-949		A-950		A-951		A-952		A-953		A-954	
				2418A-946SS-M		2418A-947SS-M		2418A-948SS-M		2418A-949SS-M		2418A-950SS-M		2418A-951SS-M		2418A-952SS-M		2418A-953SS-M		2418A-954SS-	
				SO		SO		SO		SO		SO		SO		SO		SO		M-SO	
				9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/13/2008		9/13/2008	
Lead	7439-92-1	mg/kg	200	11.7	=	26.3	=	14	=	17.8	=	14.3	=	15.8	=	11.2	=	17.1	=	19.1	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.037	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.037	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.037	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.037	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	UN	0.037	UN
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	UN	0.037	UN
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.074	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.037	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.074	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	UN	0.04	UN	0.04	UN	0.04	UN	0.04	UN	0.039	UN	0.037	UN
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.074	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.074	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.037	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	3.9	U	3.7	U
PETN	78-11-5	mg/kg	570	0.2	U	0.18	NJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.44	J
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.074	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.074	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-955		A-956		A-957		A-958		A-959		A-960		A-961		A-962		A-963	
				2418A-955SS-		2418A-956SS-M-		2418A-957SS-M-		2418A-958SS-M-		2418A-959SS-M-		2418A-960SS-M-		2418A-961SS-M-		2418A-962SS-M-		2418A-963SS-M-	
				M-SO		SO		SO		SO		SO		SO		SO		SO		SO	
				9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/15/2008		9/15/2008	
Lead	7439-92-1	mg/kg	200	18	=	12.7	=	16.1	=	16.7	=	281	=	14.3	=	11.4	=	14.5	=	12.3	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.037	U	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.037	U	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.037	U	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.037	U	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.037	UN	0.039	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	UN	0.038	UN
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.037	UN	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	UN	0.038	UN
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.075	U	0.079	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.076	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.037	U	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.075	U	0.079	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.076	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.037	UN	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	UN	0.038	UN
4-Nitrotoluene	99-99-0	mg/kg	247	0.075	U	0.079	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.076	U
HMX	2691-41-0	mg/kg	3850	0.075	U	0.079	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.076	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.037	U	0.039	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U
Nitroglycerin	55-63-0	mg/kg	6.16	3.7	U	3.9	U	4	U	4	U	4	U	4	U	4	U	3.9	U	3.8	U
PETN	78-11-5	mg/kg	570	0.25	=	0.2	U	0.075	NJ	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
RDX	121-82-4	mg/kg	83.1	0.075	U	0.079	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.076	U
Tetryl	479-45-8	mg/kg	156	0.075	U	0.079	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.076	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-964		A-965		A-966		A-967		A-968		A-969		A-970		A-971		A-972	
				2418A-964SS-M-		2418A-965SS-M-		2418A-966SS-M-		2418A-967SS-M-		2418A-968SS-M-		2418A-969SS-M-		2418A-970SS-M-		2418A-971SS-M-		2418A-972SS-M-	
				SO		SO		SO		SO		SO		SO		SO		SO		SO	
				9/15/2008		9/15/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008	
Lead	7439-92-1	mg/kg	200	13.5	=	12.6	=	10.1	=	11.2	=	28.1	=	16.1	=	17.9	=	19.9	=	11.2	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.038	U	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.038	U	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.038	U	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.038	U	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.038	UN	0.038	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.038	UN	0.038	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.076	U	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.079	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.038	U	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.076	U	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.079	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.038	UN	0.038	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.076	U	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.079	U
HMX	2691-41-0	mg/kg	3850	0.076	U	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.079	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.038	U	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.015	NJ
Nitroglycerin	55-63-0	mg/kg	6.16	3.8	U	3.8	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.19	U	0.19	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.32	=	0.2	U
RDX	121-82-4	mg/kg	83.1	0.076	U	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.079	U
Tetryl	479-45-8	mg/kg	156	0.076	U	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.079	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-D (cont.): Lead and Explosives Concentrations at Igloo Aprons - Parcel 24, Igloo Block A¹

Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	A-973		A-974		A-975		A-976		A-977	
				2418A-973SS-M-		2418A-974SS-M-		2418A-975SS-M-		2418A-976SS-M-		2418A-977SS-M-	
				SO		SO		SO		SO		SO	
				9/12/2008		9/12/2008		9/13/2008		9/13/2008		9/13/2008	
Lead	7439-92-1	mg/kg	200	15.3	=	19.7	=	14.2	=	15	=	15.7	=
Explosives													
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-E: Lead and Explosives Concentrations at Revetments - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-A901		Y-A902		Y-A903		Y-A904		Y-A905		Y-A907		Y-A908		Y-A909		Y-A910	
				2418Y-A901SS-M-	SO	2418Y-A902SS-M-	SO	2418Y-A903SS-M-	SO	2418Y-A904SS-M-	SO	2418Y-A905SS-M-	SO	2418Y-A907SS-M-	SO	2418Y-A908SS-M-	SO	2418Y-A909SS-M-	SO	2418Y-A910SS-M-	SO
				9/20/2008		9/20/2008		9/19/2008		9/19/2008		9/19/2008		9/20/2008		9/19/2008		9/19/2008		9/19/2008	
Lead	7439-92-1	mg/kg	200	15.5	=	12.7	=	14	=	13.4	=	14.4	=	13.6	=	14.8	=	8.7	=	10	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-E (cont.): Lead and Explosives Concentrations at Revetments - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-A911		Y-A912		Y-A913		Y-A914		Y-A916		Y-A917		Y-A918		Y-A919		Y-A920	
				2418Y-A911SS-M-SO		2418Y-A912SS-M-SO		2418Y-A913SS-M-SO		2418Y-A914SS-M-SO		2418Y-A916SS-M-SO		2418Y-A917SS-M-SO		2418Y-A918SS-M-SO		2418Y-A919SS-M-SO		2418Y-A920SS-M-SO	
				9/19/2008		9/19/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008		9/19/2008		9/19/2008		9/17/2008	
Lead	7439-92-1	mg/kg	200	10.1	=	11.6	=	13.2	=	14.4	=	11.1	=	11.4	=	13.1	=	12.9	=	13.9	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	UN
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	UN

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-E (cont.): Lead and Explosives Concentrations at Revetments - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-A921		Y-A922		Y-A924		Y-A926		Y-A927		Y-A928		Y-A929		Y-A930		Y-A931	
				2418Y-A921SS-M-SO		2418Y-A922SS-M-SO		2418Y-A924SS-M-SO		2418Y-A926SS-M-SO		2418Y-A927SS-M-SO		2418Y-A928SS-M-SO		2418Y-A929SS-M-SO		2418Y-A930SS-M-SO		2418Y-A931SS-M-SO	
				9/17/2008		9/17/2008		9/18/2008		9/18/2008		9/18/2008		9/18/2008		9/16/2008		9/16/2008		9/16/2008	
Lead	7439-92-1	mg/kg	200	16.5	=	12.4	=	11.2	=	12.3	=	13.1	=	11.6	=	14.4	=	14.4	=	13.8	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	UN	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.08	UN	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-E (cont.): Lead and Explosives Concentrations at Revetments - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-A932		Y-A933		Y-A935		Y-A936		Y-A937		Y-A938		Y-A940		Y-A941		Y-A942	
				2418Y-A932SS-M-SO		2418Y-A933SS-M-SO		2418Y-A935SS-M-SO		2418Y-A936SS-M-SO		2418Y-A937SS-M-SO		2418Y-A938SS-M-SO		2418Y-A940SS-M-SO		2418Y-A941SS-M-SO		2418Y-A942SS-M-SO	
				9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/15/2008		9/15/2008		9/15/2008	
Lead	7439-92-1	mg/kg	200	9.5	=	14.7	=	10.5	=	11.3	=	13.1	=	11.6	=	10.7	=	17.5	=	10.7	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.037	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.037	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.037	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.037	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.037	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.031	NJ	0.037	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.077	U	0.074	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.037	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.077	U	0.074	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.04	U	0.04	U	0.04	U	0.04	UN	0.04	UN	0.04	UN	0.039	U	0.038	U	0.037	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.077	U	0.074	U
HMX	2691-41-0	mg/kg	3850	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.077	U	0.074	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.039	U	0.038	U	0.037	U
Nitroglycerin	55-63-0	mg/kg	6.16	4	U	4	U	4	U	4	U	4	U	4	U	3.9	U	3.8	U	3.7	U
PETN	78-11-5	mg/kg	570	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
RDX	121-82-4	mg/kg	83.1	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.078	U	0.077	U	0.074	U
Tetryl	479-45-8	mg/kg	156	0.08	U	0.08	U	0.08	U	0.08	UN	0.08	UN	0.08	UN	0.078	U	0.077	U	0.074	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-E (cont.): Lead and Explosives Concentrations at Revetments - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-A943		Y-A944		Y-A945		Y-A948		Y-A949		Y-A950		Y-A951		Y-A952		Y-A953	
				2418Y-A943SS-M-SO		2418Y-A944SS-M-SO		2418Y-A945SS-M-SO		2418Y-A948SS-M-SO		2418Y-A949SS-M-SO		2418Y-A950SS-M-SO		2418Y-A951SS-M-SO		2418Y-A952SS-M-SO		2418Y-A953SS-M-SO	
				9/15/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/16/2008		9/13/2008	
Lead	7439-92-1	mg/kg	200	11.9	=	13.9	=	14	=	12.7	=	11.5	=	10.9	=	11.4	=	10.2	=	8	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.037	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.037	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.037	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.037	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.037	UN
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.038	U	0.04	U	0.04	U	0.0087	NJ	0.04	U	0.04	U	0.04	U	0.04	U	0.037	UN
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.077	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.074	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.037	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.077	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.074	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.038	U	0.04	U	0.04	U	0.04	UN	0.04	UN	0.04	UN	0.04	UN	0.04	UN	0.037	UN
4-Nitrotoluene	99-99-0	mg/kg	247	0.077	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.074	U
HMX	2691-41-0	mg/kg	3850	0.077	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.074	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.037	U
Nitroglycerin	55-63-0	mg/kg	6.16	3.8	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	3.7	U
PETN	78-11-5	mg/kg	570	0.19	U	0.2	U	0.27	NJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U
RDX	121-82-4	mg/kg	83.1	0.077	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.074	U
Tetryl	479-45-8	mg/kg	156	0.077	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.074	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-E (cont.): Lead and Explosives Concentrations at Revetments - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-A954		Y-A955		Y-A956		Y-A957		Y-A958		Y-A960		Y-A961		Y-A962		Y-A963	
				2418Y-A954SS-M-SO		2418Y-A955SS-M-SO		2418Y-A956SS-M-SO		2418Y-A957SS-M-SO		2418Y-A958SS-M-SO		2418Y-A960SS-M-SO		2418Y-A961SS-M-SO		2418Y-A962SS-M-SO		2418Y-A963SS-M-SO	
				9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/13/2008		9/15/2008		9/15/2008	
Lead	7439-92-1	mg/kg	200	14.2	=	11.1	=	16	=	14.1	=	16.9	=	11	=	15.8	=	46	=	11.4	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.039	U	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	U	0.039	U	0.039	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.039	U	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	U	0.039	U	0.039	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.039	U	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	U	0.039	U	0.039	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.039	U	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	U	0.039	U	0.039	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.039	UN	0.039	U	0.039	UN	0.04	U	0.04	U	0.04	U	0.038	UN	0.039	UN	0.039	UN
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.039	UN	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	UN	0.039	UN	0.039	UN
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.077	U	0.079	U	0.078	U	0.079	U	0.08	U	0.08	U	0.075	U	0.077	U	0.078	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.039	U	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	U	0.039	U	0.039	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.077	U	0.079	U	0.078	U	0.079	U	0.08	U	0.08	U	0.075	U	0.077	U	0.078	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.039	UN	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	UN	0.039	UN	0.039	UN
4-Nitrotoluene	99-99-0	mg/kg	247	0.077	U	0.079	U	0.078	U	0.079	U	0.08	U	0.08	U	0.075	U	0.077	U	0.078	U
HMX	2691-41-0	mg/kg	3850	0.077	U	0.079	U	0.078	U	0.079	U	0.08	U	0.08	U	0.075	U	0.077	U	0.078	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.039	U	0.039	U	0.039	U	0.04	U	0.04	U	0.04	U	0.038	U	0.039	U	0.039	U
Nitroglycerin	55-63-0	mg/kg	6.16	3.9	U	3.9	U	3.9	U	4	U	4	U	4	U	3.8	U	3.9	U	3.9	U
PETN	78-11-5	mg/kg	570	0.19	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U	0.19	U
RDX	121-82-4	mg/kg	83.1	0.077	U	0.079	U	0.078	U	0.079	U	0.08	U	0.08	U	0.075	U	0.077	U	0.078	U
Tetryl	479-45-8	mg/kg	156	0.077	U	0.079	U	0.078	U	0.079	U	0.08	U	0.08	U	0.075	U	0.077	U	0.078	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment

Table D4-E (cont.): Lead and Explosives Concentrations at Revetments - Parcel 24, Igloo Block A¹
Fort Wingate Depot Activity, New Mexico

Analyte	CAS #	Units	Residential SSL ²	Y-A964		Y-A966		Y-A968		Y-A969		Y-A970		Y-A971		Y-A973		Y-A974		Y-A976	
				2418Y-A964SS-M-SO		2418Y-A966SS-M-SO		2418Y-A968SS-M-SO		2418Y-A969SS-M-SO		2418Y-A970SS-M-SO		2418Y-A971SS-M-SO		2418Y-A973SS-M-SO		2418Y-A974SS-M-SO		2418Y-A976SS-M-SO	
				9/15/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/12/2008		9/13/2008	
Lead	7439-92-1	mg/kg	200	9.5	=	8.8	=	13.3	=	9.3	=	15.9	=	12.7	=	14.5	=	10.1	=	11.6	=
Explosives																					
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2200	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
1,3-Dinitrobenzene	99-65-0	mg/kg	6.3	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,4,6-Trinitrotoluene	118-96-7	mg/kg	36.0	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.015	J	0.04	U	0.04	U	0.04	U
2,4-Dinitrotoluene	121-14-2	mg/kg	17.1	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2,6-Dinitrotoluene	606-20-2	mg/kg	3.56	0.038	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	7.7	0.038	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
2-Nitrotoluene	88-72-2	mg/kg	31.6	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.08	U	0.08	U
3,5-Dinitroaniline	618-87-1	mg/kg	25.0	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
3-Nitrotoluene	99-08-1	mg/kg	6.16	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.08	U	0.08	U
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7.64	0.038	UN	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
4-Nitrotoluene	99-99-0	mg/kg	247	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.08	U	0.08	U
HMX	2691-41-0	mg/kg	3850	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.08	U	0.08	U
Nitrobenzene	98-95-3	mg/kg	60.4	0.038	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Nitroglycerin	55-63-0	mg/kg	6.16	3.8	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
PETN	78-11-5	mg/kg	570	0.19	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RDX	121-82-4	mg/kg	83.1	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.08	U	0.08	U
Tetryl	479-45-8	mg/kg	156	0.076	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.079	U	0.08	U	0.08	U

Footnotes:

1) Data source: Release Assessment Report Parcel 24 (Jan 2014)

2) NMED RAG (November 2022, revised)

*Sample type: MI = multi-increment