Prepared for: Tronox LLC Henderson, Nevada

Phase B Source Area Investigation Work Plan Area II (Central LOUs) Tronox LLC Facility Henderson, Nevada

ENSR Corporation June 2008 Document No.: 04020-023-430 – II





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Susan Crowley Staff Environmental Specialist (702) 651-2234 Fax (405) 302-4607 susan.crowley@tronox.com

June 27, 2008

Ms. Shannon Harbour, P.E. Nevada Division of Environmental Protection 2030 East Flamingo Road, Suite 230 Las Vegas, Nevada 89119-0818

Subject: Phase B Source Area Investigation – Area II Work Plan TRONOX LLC, Henderson, Nevada

Dear Ms. Harbour:

Tronox LLC (Tronox) has undertaken an Environmental Conditions Assessment (ECA) as directed by the Nevada Division of Environmental Protection (NDEP). Towards this work, Tronox has prepared the attached *Phase B Source Area Investigation – Area II, Tronox LLC, Henderson Nevada*. This is the fourth of the "Area" work plans, and incorporates NDEP comments on the Area I and Area IV documents. This is one of the set of six Phase B work plans which collectively will provide information to be used in assessing soil, soil gas and groundwater impacts at the Tronox Henderson facility. The associated CD will be provided under a separate submittal to NDEP within two business days.

Please contact me at (702) 651-2234 if you have any comments or questions concerning this correspondence.

Sincerely,

muowlug

Susan M. Crowley Staff Environmental Specialist

Overnight Mail

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Phase B Source Area Investigation Work Plan – Area II Tronox LLC Facility Henderson, Nevada

Responsible CEM for this project

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.

5 muonly

Susan M. Crowley, CEM 1428 exp. date 3/8/09 Staff Environmental Specialist Tronox LLC

Technical Contributions by:

Keith Bailey, Ph.D. Lisa Bradley, Ph.D., DABT Michael Flack, PG Brian Ho, CEM Robert Kennedy Carmen Schnell, PG

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A Phase B Sample Locations and LOUs for Area II

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ABBREVIATIONS AND ACRONYMS

AP	Ammonium Perchlorate
ASTM	American Society for Testing and Materials
bgs	below ground surface
BMI	Black Mountain Industrial
BRC	Basic Remediation Company
CAS	Columbia Analytical Services
CEM	Certified Environmental Manager
CSM	Conceptual Site Model
ECA	Environmental Conditions Assessment
EDD	electronic data deliverable
ft/ft	feet per foot
HASP	Health and Safety Plan
HHRA	Human Health Risk Assessment
LOU	Letter of Understanding
MCfg1	Muddy Creek Formation – first fine-grained facies
MCL	Maximum Contaminant Level
MSSL	Medium Specific Screening Levels
NDEP	Nevada Division of Environmental Protection
OCHs	organochlorine herbicides
OCPs	organochlorine pesticides
OPPs	organophosphorus pesticides
PCB	polychlorinated biphenyl
PRGs	Preliminary Remediation Goals
Qal	Quaternary Alluvium
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
SAPs	sampling and analytical plans
SPLP	Synthetic Precipitation Leaching Procedure
SRCs	Site-related chemicals
SVOC	semi-volatile organic compound
Tronox	Tronox LLC
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
WDC	Water Development Corporation

1.0 Introduction

This document presents the Area II Work Plan (Work Plan), which is part of the Phase B Source Area Investigation at the Tronox LLC (Tronox) facility located within the Black Mountain Industrial (BMI) Complex in Henderson, Nevada (the Site). The Site is owned and operated by Tronox, headquartered in Oklahoma City, Oklahoma. Tronox was formerly known as Kerr-McGee Chemical LLC. The Source Area Investigation, including Phase A and Phase B, is being conducted under the regulatory oversight of the Nevada Division of Environmental Protection (NDEP) and is being submitted as part of the Environmental Conditions Assessment (ECA) as required by NDEP (2004).

The Phase B activities follow the Phase A Source Area Investigation (ENSR 2007b) and are intended to further characterize soil and groundwater conditions at the source areas within the roughly 450-acre Site (Figure 1).

At the request of the NDEP, the Phase B Source Area Investigation field activities have been segmented into investigations of soil gas, soil and groundwater, and background groundwater conditions with each segment requiring separate, stand-alone work plans that describe the goals, scope of work, and methods used to implement each investigation.

To investigate the approximately 70 source areas on the Site and their potential affect on soil conditions, the Site has been subdivided into four "Areas" (Area I, II, III, and IV) as shown on **Figure 2**. The Phase B soil investigation by ENSR does not include investigation of soils in Parcels A through D, F, G, and H (see **Figure 2**), which are for sale, and are being investigated by the Basic Remediation Company (BRC) independently, of ENSR's Phase B Source Area Investigation. (Parcel E consists of land that is jointly used by Montrose Chemical and others, and evaluation of this parcel will be addressed at a later date.)

Whereas the Site has been subdivided into four Areas for the soil investigation, Tronox will evaluate groundwater conditions and soil gas on a Site-wide basis.

Individual work plan documents have been prepared that describe the scope of work to investigate each of the four Areas. This document presents the work plan to investigate soil and groundwater conditions in Area II. The Area I Work Plan was submitted on April 3, 2008 (ENSR 2008c), and NDEP provided conditional approval and comments on May 6, 2008 (NDEP 2008b). The Area IV Work Plan was submitted on May 16, 2008 (ENSR 2008e), and NDEP provided conditional approval and comments on June 18, 2008. On June 30, 2008, the Area III Work Plan (ENSR 2008f) was submitted to NDEP. Additionally, a separate work plan to evaluate soil gas and the vapor intrusion pathway for the entire Site has been prepared (ENSR 2008b). The soil gas investigation work plan was approved with conditions by the NDEP on March 26, 2008.

The four Area investigation work plans focus on evaluation of potential source areas for the Site-related analytes as shown on **Table 1**, (which was updated and forwarded to NDEP on May 29, 2008; Tronox 2008). (The Site-related analytes, herein after referred to as Site-related chemicals [SRCs], increased slightly from the full list of SRCs addressed in previous reports.) Potential source areas were identified by the NDEP in their August 15, 1994 Letter of Understanding (LOU). Seventy areas have been identified as on-site potential source areas. Of the 70 potential source areas identified in the NDEP LOU, 29 are within Area II as shown in **Figure 3** and as listed below:

- LOU-5 On-Site Portion of Beta Ditch, Including "Small Diversion Ditch" Northwest of Pond C-1
- LOU-7 Old P-2 Pond and Associated Conveyance Facilities
- LOU-8 Old P-3 Pond and Associated Conveyance Facilities
- LOU-9 New P-2 Pond and Associated Piping
- LOU-11 Sodium Chlorate Filter Cake Holding Area
- LOU-12 Hazardous Waste Storage Area
- LOU-13 Pond S-1
- LOU-14 Pond P-1 and Associated Conveyance Piping
- LOU-15 Platinum Drying Unit
- LOUs–16 and 17 Ammonium Perchlorate (AP) Ponds AP-1, AP-2 and AP-3 and Associated Transfer Lines
- LOU-18 Pond AP-4
- LOU-19 Pond AP-5
- LOU-20 Pond C-1 and Associated Piping
- LOU 22 & 23 Ponds WC-West and WC-East
- LOU-29 Solid Waste Dumpsters
- LOU-30 AP Area Pad 35
- LOU-31 Drum Recycling Area
- LOU-36 Former Satellite Accumulation Point, Unit 3, Maintenance Shop
- LOU-43 Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning
- LOU-45 Diesel Storage Tank
- LOU-52 AP Plant Area Screening Building, dryer Building and Associated Sump
- LOU-53 AP Plant Area Tank Farm
- LOU-55 Area Affected by July 1990 Fire
- LOU-56 AP Plant Area Old Building D-1-Washdown
- LOU-57 AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant SIs and Transfer Lines
- LOU 59 Storm Sewer System in Area II
- LOU 60 Acid Drain System in Area II

The Area II Work Plan includes a compilation of individual sampling and analysis plans for each of the 29 LOUs that are presented in **Appendix A**. The LOUs adjacent to Area II are also shown on **Figure 3**, and were addressed in work plans for Areas I, III and IV.

It is important to note that the work plan for Area II is designed to investigate both soil and groundwater within the Area (**Figure 3**). Results of the BRC soil investigations on Tronox sale Parcels A, B, C, D, F, G and H will be incorporated into the final Phase B Source Area Investigation report.

In several cases individual LOUs have been combined with overlapping or adjacent LOUs into a single consolidated LOU package in **Appendix A**. This has been done to simplify the discussion of the

investigations to occur at each LOU. The combined LOU packages for Area II are: LOUs 7, 8, 9, 13 and 14; LOUs 16, 17, 18, 19, 52, 53, and 57; LOUs 30 and 56; and LOUs 43, 11, 12 and 15..

1.1 Purpose and Objectives

The purpose of this Area II Work Plan is to describe the assessment of each potential source area, the sampling and data-gathering methods to be used, the locations to be sampled, the rationale for the locations proposed, and the analytical methodologies to be employed for the Phase B Source Area Investigation of Area II.

The objective of the Area II investigation is to gather information on the nature and extent of SRCs that may have been released to the environment in each of the respective potential source areas. Additionally, the scope-of-work has been designed to gather information for human health risk-based decision-making purposes. As such, samples of soil and groundwater will be collected and analyzed to support the evaluation of potential routes of exposure (e.g., direct contact pathway, soil-to-groundwater pathway, and groundwater pathway) in an industrial/commercial setting. The evaluation of the potential for migration of volatile organic compounds (VOCs) that may migrate from groundwater and/or soil to indoor air will be evaluated on a Site-wide basis under a separate soil gas survey work plan (ENSR 2008b) as noted above.

The distribution of sampling locations is designed in part to evaluate potential sources within each LOU and to provide general coverage within each Area supporting the planned future risk assessment, assuming that the receptors have equal probability of contacting environmental media within operationally (or on other basis) defined exposure areas of the Site. To evaluate source areas, proposed soil borings are placed at locations where constituents are anticipated to occur in soil at the highest concentrations or "worst case scenario" for most source areas. In a few cases, where containment structures cover "worst case" locations, sampling is proposed adjacent to the containments. Soil borings are also placed in locations outside the boundary of LOUs to gain additional insight into the horizontal extent of constituents in soil. The number of samples to be collected from Area II is designed to provide a large enough statistical sample distribution to allow for completion of the planned risk assessment program.

Data from the investigation will be evaluated in conjunction with data from the other Area investigations to identify the exposure areas that will be used as part of the site-specific human health risk assessment (HHRA). The exposure areas will be identified based on current or planned operational areas, the SRC data, and chemical distribution across the Site. In addition, a screening level risk assessment will be performed for each of the source areas, using U.S. EPA Region VI Medium Specific Screening Levels (MSSLs) (updated March 2008 [USEPA 2008]) and screening levels from appropriate state and federal guidance, to provide further information for defining exposure areas. The screening level risk assessment will consist of a simple comparison of the sample analytical results to the MSSLs or other appropriate state and federal screening levels, which is in essence, the first step (Hazard Identification) of the full four-step risk assessment process to be used as part of the Site-specific HHRA.

The Site-specific HHRA will be performed generally consistent with the methods presented in Section 9 of the Basic Remediation Company (BRC) Closure Plan (BRC 2007a). However, some modifications to the BRC Closure Plan are necessary so that the methods are appropriate for the evaluation of the Tronox Areas I through IV. Site-specific modifications to the BRC Closure Plan will be discussed in a separate memorandum that will be prepared following discussions with NDEP, and will include, but may not be limited to, the following:

- Exposure areas, pathways and receptors and associated exposure factors
- Selection of chemicals of potential concern
- Methodology for evaluation of soil gas results to evaluate the potential vapor intrusion pathway (i.e., soil gas measurements for the Site-specific HHRA instead of flux chamber measurements to assess the potential vapor intrusion inhalation pathway).

The HHRA will be prepared following completion of the Phase B Source Area Investigation report.

Upon completing field activities and receipt of the analytical results, the Area II investigation data will be compiled. The data will undergo comprehensive data validation as described by NDEP guidance (NDEP 2006) and in the *Quality Assurance Project Plan (QAPP)* (ENSR 2008d). Upon completion of the data validation, the Area II data will be discussed with NDEP. If data gaps are identified, additional field sampling may be proposed as an addendum to the Area II Work Plan.

1.2 Documents of Record

Previously prepared planning documents for the BMI Common Areas in general, and the Site in particular, have been reviewed and approved by the NDEP. These documents are considered documents of record and are referenced as appropriate herein to refer the reader to detailed prior discussions on Site conditions and information used to develop the LOU data packages and sampling and analysis plans. These documents include the following:

- Environmental Conditions Assessment (Kleinfelder 1993);
- Response to Letter of Understanding, Henderson, Nevada Facility (Kerr-McGee 1996);
- Phase II Environmental Conditions Assessment, Kerr-McGee Chemical LLC, Henderson, Nevada (ENSR 1997);
- Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada (ENSR 2005);
- Upgradient Investigation Work Plan, Tronox LLC Facility, Henderson, Nevada Site (ENSR 2006a);
- Upgradient Investigation Work Plan Addendum, Tronox LLC Facility, Henderson, Nevada Site (ENSR 2006b);
- Phase A Source Area Investigation Work Plan, Tronox LLC Facility, Henderson, Nevada Site (ENSR 2006c);
- Upgradient Investigation Results Report, Tronox LLC Facility, Henderson, Nevada Site (ENSR 2006e);
- Addendum to the Phase A Source Area Investigation Work Plan, Tronox LLC Facility, Henderson, Nevada Site (ENSR 2007a);

- Phase A Source Area Investigation Results Report, Tronox LLC Facility, Henderson, Nevada (ENSR 2007b);
- Revisions to the Upgradient Investigation Results, Tronox LLC Facility, Henderson, Nevada Site (ENSR 2007c);
- Phase B Source Area Investigation Work Plan Soil Gas Survey, Tronox LLC Facility, Henderson, Nevada (ENSR 2008b);
- Phase B Source Area Investigation Work Plan Area I (Northern LOUs), Tronox LLC Facility, Henderson, Nevada (ENSR 2008c);
- Phase B Source Area Investigation Work Plan Area IV (Western and Southern LOUs), Tronox LLC Facility, Henderson, Nevada [Draft] (ENSR 2008e); and
- Phase B Source Area Investigation Work Plan Area III (Western LOUs), Tronox LLC Facility, Henderson, Nevada [Draft] (ENSR 2008f).

Additional documents that have been prepared to define field procedures and protocols, quality assurance and quality control (QA/QC), and health and safety are as follows:

- Basic Remediation Company (BRC) Field Sampling and Standard Operating Procedures for the BMI Common Areas (BRC 2007b);
- Health and Safety Plan (HASP) Revision 3 (ENSR 2008a); and
- Quality Assurance Project Plan (QAPP), Tronox LLC Facility, Henderson, Nevada (ENSR 2008d).

1.3 **Project Organization**

The Tronox project manager is Susan Crowley. Ms. Crowley is a Nevada-Certified Environmental Manager (CEM # 1428, expiring March 8, 2009) and is the person who serves as the point of contact for regulatory and environmental issues pertinent to the Site. She is located at the Tronox Henderson Facility. Her telephone number is (702) 651-2234. Ms. Crowley manages the consultants and subcontractors that will be performing the tasks described in this Work Plan. Ms. Crowley will be supported by Tronox hydrogeologist Mr. Tom Reed.

ENSR Corporation is Tronox's environmental consultant. Mr. Michael Flack (Senior Program Manager and Hydrogeologist), Dr. Keith Bailey of Environmental Answers LLC (Engineer), Dr. Lisa Bradley (Senior Toxicologist), Brian Ho, CEM (Phase B Investigation Team Leader and Field Manager), Elizabeth Perry (Geostatistician), and Robert Kennedy (Senior Chemist and Data QA/QC Officer) comprise ENSR's senior team, who along with ENSR Staff Geologists and Engineers will be assisting with this project as needed. Ms. Elizabeth Martinez will be responsible for QA/QC of documents.

Boart-Longyear and Water Development Corporation (WDC) have been solicited for competitive bids to advance the soil borings, using either sonic or hollow-stem auger equipment, and to install additional groundwater monitor wells. Both firms are licensed by the State of Nevada to install water wells.

The primary analytical laboratories that will be used for the analytical program (excluding radionuclides) will be the Columbia Analytical Services (CAS) Laboratories in Rochester, NY; Kelso, WA; and Houston, TX (Nevada

certification numbers NY000322008A, WA35, and TX014112007A, respectively). The radionuclides analysis will be performed by GEL Laboratories, LLC of Charlestown, South Carolina (Nevada certification number SC12). Analysis of soil samples for asbestos will be performed by EMSL Analytical, Inc. of Westmont, New Jersey – the same laboratory that performed the asbestos analysis for the Phase A Source Area Investigation. Laboratory data for the analytical suites will be provided to Tronox in hard copy format as well as Tronox-specific EQuIS[™] electronic data deliverable (EDD) format. The laboratory will provide sample receipt notification upon receipt of samples at the laboratory.

2.0 Source Area Investigation for Area II

This section provides a brief summary of the site conditions within Area II and the approach used to develop the soil and groundwater sampling and analytical plans (SAPs) for Area II. The potential source areas that will be evaluated, including associated soil borings and wells for the Area II investigation are shown on **Plate A**.

The list of SRCs for which samples will be investigated in the Phase B Source Area Investigation is presented in **Table 1**. The soil SAP is presented in **Table 2**, which lists the soil borings proposed for Area II, the rationale for each soil boring location, the sample depths, and the analytical program for each soil sample. The groundwater SAP is presented in **Table 3**, which lists the monitoring wells proposed for sampling in Area II along with the analytical plan for each groundwater sample.

2.1 Site Conditions

Background information including the Site description, Site location, physical setting, regional and local geology, hydrogeology, etc., are described in detail in the *Conceptual Site Model (CSM) Report* (ENSR 2005) and the *Phase A Source Area Investigation Results Report* (ENSR 2007b). **Figure 4** shows local groundwater conditions within Area II that were developed from groundwater levels measured in May and December 2007 as well as historic wind direction for the Site. Two geological cross sections showing local stratigraphy in Area III are presented in **Figures 6 and 7**. The general hydrogeologic conditions within Area II are summarized as follows:

- Groundwater is generally encountered in the fine-grained facies within uppermost Muddy Creek Formation (MCfg1) below most of Area II and in the Quaternary Alluvium (Qal) in the northern central portion of Area II. In the southernmost portion of Area II however, groundwater could be initially encountered in the uppermost coarse-grained facies of the Muddy Creek Formation (MCcf1).
- The depth to groundwater measured in May and December 2007 ranges from about 29 to 40 feet below ground surface (bgs) and is generally deepest in the southernmost portion of the Area.
- The groundwater flow direction is generally to the north in Area II ranging from about 0.077 feet per foot (ft/ft) north of Area II to a gradient of about 0.083 ft/ft south of Area II (Figure 4).
- The prevailing wind direction for the period between March 2003 and 2008 is to the northwest and south-southeast at wind speeds up to about 8 to 13 miles per hour (Community Environmental Monitoring Program 2008).

2.2 Development of Area II Sampling and Analytical Plans

The scope of work for each potential source area was designed to address the Phase B Source Area Investigation objectives as described in Section 1.1. **Appendix A** contains the data packages for each LOU in Area II. Included in the LOU data packages are associated historic data and recent information from the Phase A Source Area Investigation, and figures showing the LOU and locations of proposed Phase B soil and groundwater samples. Each data package contains a set of soil and groundwater SAPs that are LOU-specific. The LOU-specific SAPs have been consolidated into Area II SAPs for soil and groundwater and are shown as **Table 2** (Soils Sampling and Analysis Plan) and **Table 3** (Groundwater Sampling and Analysis Plan). LOUspecific sample locations as shown in the data packages have been consolidated and are shown on **Plate A**. For LOUs that include conveyances (e.g., pipelines) that cross Area II boundaries into Areas I, III or IV for example, the Area II SAPs list only those sample locations that are in Area II. (Sample locations to evaluate conveyances that cross into Areas I, III or IV were listed in the respective SAPs for each Area.) The data packages incorporate NDEP comments from their review of several draft LOU data package submittals. Historic information in the data packages is derived from a number of sources including:

- Environmental Conditions Assessment Report (Kleinfelder 1993);
- Response to Letter of Understanding, Henderson, Nevada Facility (Kerr-McGee 1996);
- Personal communications with Susan Crowley, Tronox,
- Personal communications with Keith Bailey, Environmental Answers,
- Phase II Environmental Conditions Assessment, Kerr-McGee Chemical LLC, Henderson, Nevada (ENSR 1997);
- Conceptual Site Model (CSM), Kerr-McGee Facility, Henderson, Nevada (ENSR 2005);
- Aerial Reconnaissance of Hazardous Waste Sources BMI Industrial Complex, Henderson, 1943-1979 (USEPA 1980);
- Phase A Source Area Investigation Results Report, Tronox LLC Facility, Henderson, Nevada (ENSR 2007b); and
- NDEP Response to: Phase B Source Area Investigation Work Plan, Area I (Northern LOUs), Tronox LLC Facility, Henderson, Nevada (NDEP 2008b).
- NDEP Response to: Phase B Source Area Investigation Work Plan, Area IV (Western and Southern LOUs), Tronox LLC Facility, Henderson, Nevada (NDEP 2008c)

The LOU data packages in Appendix A along with the LOU data packages that were provided in the Work Plans for Areas I, III, and IV contain more detailed information than the CSM report (ENSR 2005). As such, the LOU data packages and Phase B Source Area Investigation results will be used to revise the CSM, including associated CSM figures, three-dimensional cartoons, and measles chart. The CSM will be updated after completion of the Phase B soil, soil gas, and groundwater investigation.

2.2.1 Evaluation of LOUs

An LOU summary was prepared for each of the 70 recognized potential source areas identified in the NDEP LOU. This facilitated incorporating data on potential impacts of adjacent LOUs into the 29 LOUs in Area II. As noted above, several individual overlapping or adjacent LOUs have been consolidated into a single LOU data package. For each of the 29 LOUs the following were described:

- Closure goals;
- Site investigation area details, including size, location, and current status and features;
- LOU information such as construction details, historical and/or current operations, years of
 operation, materials used, and process waste streams generated and received;
- adjacent or overlapping LOUs;
- LOUs with the potential to affect the specific LOU;
- known or potential chemical classes associated with the LOU;
- known or potential release mechanisms;
- results of historical sampling; and,
- historical data, including Phase A data.

Each LOU summary includes a discussion of the proposed investigation/rationale and constituents for soil, groundwater, and soil gas. A more detailed discussion of the data reviewed as part of the LOU evaluations is provided below.

As part of the evaluation of an LOU, the goal of closure was developed with the input from Tronox and is based on the current and proposed future use of the area. A summary of the closure goals for LOUs in Area II is presented in **Table 4**. Closure is not being requested for LOU 59 (Storm Sewer System, still active). For currently operating LOUs, the Phase B Investigation and subsequent HHRA will provide a "baseline" condition for the LOU and the surrounding area. If current operations do not exacerbate contamination, future closure may not require sampling for the full SRC list (i.e., if a chemical is not detected in the Phase B Investigation and is not a part of the process associated with the LOU, it may not be analyzed for at the time of closure).

The Site investigation area for each LOU is described, including the dimensions/area, location within the Site, and current status and features of the LOU. These descriptions were developed through review of historical documents, available aerial photographs, recent Site visits, and interviews with Tronox employees. The description provides information about the construction details, historical and/or current operations, years of operation, materials used, and process waste streams generated. To further evaluate potential SRCs at an LOU, process waste streams received from other LOUs or areas of the Site were included in the summary and considered when designing the Phase B scope of work for a particular LOU. SRCs associated with the known process waste streams are provided in a table in the LOU summary.

Associated SRCs for adjacent and/or overlapping LOUs were considered when evaluating an LOU. If an adjacent or overlapping LOU was considered to have the potential to affect the primary LOU, the lists of known or potential chemical classes were compared and analytes were added, if necessary, to the primary LOU's scope of work based on the affecting LOU. A brief description of the affecting LOU and the additional analytes added is included in the LOU summary.

In order to evaluate suitable locations and sampling depths for the Phase B soil borings, known or potential release mechanisms were evaluated. Potential release mechanisms (i.e., infiltration, surface runoff, etc.) associated with an LOU is based on surface features, LOU construction, and historical operations. Known releases noted in historical documents are described and considered. In addition, analytical results and historical soil and groundwater sampling locations from previous investigations were evaluated for their adequacy to address potential or known releases. Further, sources of soil impacts related to soil gas migration from areas outside the LOU and Area III, and the re-wetting of soil by impacted groundwater through capillary rise and/or fluctuation of the water table were considered in selection of soil boring locations and depths.

Data from the *Phase A Source Area Investigation Results Report* (ENSR 2007b) were also evaluated. For an LOU with a Phase A sampling location within its boundaries, Phase A data were used as indicators of possible previously unknown SRCs at that LOU. SRCs detected in Phase A borings, and not already associated with an LOU, were added to the "Known or Potential Chemical Classes" list. For LOUs with no Phase A locations within their boundaries, the closest Phase A location is provided. The Phase A data in these cases is provided in the LOU summary only as an indication of subsurface soil and groundwater conditions in the vicinity of the LOU. Analytical data from the Phase A Source Area Investigation were reviewed and constituent classes detected in soil were compared to the list of "Known or Potential Chemical Classes" identified for the specific LOU. Phase A constituent classes not consistent with the "Known or Potential Chemical Classes" list were added to the Phase B analytical program. Based on the location of the Phase A sample locations, a

determination was made as to whether or not they were located in "worst case" areas of the LOU. If not, Phase B investigations were proposed.

A soil boring assessment has been proposed as part of the Phase B Source Area Investigation to evaluate the known and potential source areas onsite. In general, soil borings designed to assess an LOU will be drilled within the LOU boundaries. In cases where drilling within an LOU is not possible (e.g., an LOU is active or the integrity of containment could be compromised) soil borings will be located adjacent to the LOU. Soil borings upgradient and downgradient of an LOU will also be sampled to further assess the LOU and the impact, if any, on surrounding areas.

The Phase B soil borings consist of two categories, "judgmental" and "random." Judgmental boring locations are designed to evaluate known or potential chemical classes associated with a specific LOU based on the known process waste streams. These soil borings are located in or near an LOU at locations considered to be either "worst case", representative of soil conditions at the LOU, or in areas of reported or known releases. The Phase B analytical program for the judgmental borings is based on known or potential chemical classes specifically associated with an LOU.

To further evaluate the possibility of additional potential source areas beyond the 70 already identified onsite, an additional random soil boring assessment will be implemented area-wide as part of the Phase B Source Area Investigation. With the concurrence of NDEP, the Site has been divided into 4-acre grids as shown on **Plate A**. Each grid has been further subdivided into 25 subsections, one of which was randomly selected to be sampled for the Area II investigation (**Plate A**). Soil samples from the randomly located borings will be collected at an initial interval of 0.0 to 0.5 feet bgs and each 10 feet thereafter, extending to the water table. In areas where surface features were noted, such as minor stains or above ground pipelines, judgmental soil samples will only be collected at 0.0 to 0.5 feet and 10 feet bgs.

Within Area II of the Site, the combined random and judgmental soil boring evaluation program will include the drilling of 82 soil borings. Each random sample location is designated with an identifier such as RSAQ5. The prefix symbol "R" identifies the sample as random; "SA" indicates it is a source area investigation boring, and "Q5" denotes the grid identifier.

To be conservative, a modified Phase A Source Area Investigation soil sampling suite is proposed (see Section 2.3.2).

Groundwater conditions upgradient and downgradient of the LOU, and/or at the LOU will be evaluated by sampling existing or new groundwater monitoring wells. Groundwater beneath the Site is considered to be a Site-wide issue therefore, the modified Phase A Source Area Investigation groundwater sampling analytical suite will be implemented for each proposed well (see Section 2.3.3).

2.2.2 Evaluation of Other Potential Sources

The Phase B scope of work includes sampling locations for potential source areas not identified as LOUs. A review of Phase A data suggests that offsite sources of constituents may exist. Soil borings designed to evaluate areas not associated with a specific LOU are listed in **Table 5**. These proposed borings include judgmental and random borings as described in Section 2.2.1 and will be analyzed for the modified Phase A analytical suite (see Section 2.3.2).

2.3 Summary of Area II Investigation

The proposed soil and groundwater sampling locations shown on **Plate A** were selected to determine the nature and extent of SRCs within Area II. Soil samples will be collected at 82 locations within Area II. Because the movement of groundwater transcends man-made features such as LOU boundaries, groundwater samples will also be collected from additional wells that are located in Areas I, III and IV, which surround Area II. In total, groundwater samples will be collected from 36 wells, under this work plan of which about 35 percent were sampled during the Phase A Source Area Investigation (**Plate A**). Six of the 36 wells are located out side (north, east, south, and west) of the Area II boundary.

The following is a summary of the soil and groundwater sampling program for the Phase B Source Area Investigation for Area II. Procedures and protocols for collecting soil and groundwater samples are presented in the QAPP (ENSR 2008d).

2.3.1 Surface Soil Sampling for Asbestos and Dioxins/Furans

Asbestos fibers and dioxins/furans were identified in surface soil samples from the Phase A Source Area Investigation (ENSR 2007b). As a result, surface soil samples will be collected and analyzed for asbestos and dioxins/furans as part of the Phase B Source Area Investigation. The samples for asbestos will be collected from a depth of 0.0 (surface) to 2 inches bgs. The samples for dioxins/furans will be collected from a depth of 0.0 to 0.5 feet bgs.

Soil samples for the asbestos and dioxin/furans analysis will be collected from each of the 84 proposed Phase B boring locations in Area III (**Plate A**). Asbestos samples will be analyzed by the modified elutriator method of Berman and Kolk based on United States Environmental Protection Agency (USEPA) 540/R-97/028. Dioxin/furan analysis will be by USEPA method 8290. **Table 2** lists the locations where surface soil samples for asbestos and dioxin/furans analysis will be collected. Sampling procedures are described in the QAPP (ENSR 2008d).

The number of samples to be collected, when combined with the Phase A Source Area Investigation results for Area II, is designed to provide a sufficient sample and geographic distribution for the Site-wide HHRA.

2.3.2 Subsurface Soil Sampling

Soil samples will be collected at 84 locations within Area II and analyzed for constituent classes that were identified as follows:

- constituents that were identified in an LOU based on historical site investigations;
- constituents that were identified as historically being used or stored at an LOU;
- constituents that were or are potentially associated with process waste streams at an LOU; and
- constituents that were associated with overlapping or adjacent LOUs.

In addition, soil samples from randomly selected sample locations will be analyzed for the modified Phase A list of SRCs (see below).

The analytes listed on **Table 1** are the same analytes used for the Phase A samples with the following modifications:

- Analysis of soil for polychlorinated biphenyl (PCB) compounds will not be performed on Phase B soil samples except at locations where it is documented that PCBs were used or stored (e.g., LOU 40 PCB Transformer Spill [Area III] and LOU 27 PCB Storage Area [Area IV]) or reported in Phase A samples (e.g., boring SA09 in LOU 35 Truck Emptying/Dumping Site [Area I]). For Area II, no soil samples will be tested for PCBs. The basis for not sampling PCBs Site-wide is that PCBs were only detected in one out of 130 soil samples (i.e., Phase A boring SA09 at 0.47J mg/kg at 20 feet bgs) in the Phase A Source Area Investigation (ENSR 2007b).
- Analysis of soil for organophosphorus pesticides (OPPs) will not be performed on Phase B soil samples. The basis for this decision is that there is no documentation to indicate OPPs were used, manufactured, or stored on the Site. Moreover, OPPs (Demeton-O) were detected in only one out of 36 Phase A soil samples (i.e., Phase A boring SA17 at 0.092J mg/kg). SA17 is located in Beta Ditch, which also received waste effluent from offsite sources west of the Tronox Site.
- Analysis of soil for organochlorine pesticides (OCPs) will be performed on Phase B soil samples to
 assess the potential for OCP use on the Site, to have contributed to a groundwater plume of organic
 contaminants identified under the Site. Soil sample will be collected at all proposed sampling depths
 (surface, every 10 feet to the capillary fringe, and at the capillary fringe), for each sampling location.
 However, only the surface and capillary fringe samples will initially be analyzed. All other samples will
 be placed on hold, pending the results of the initial samples. If OCPs are detected in either sample,
 the remaining samples for that location will be analyzed.
- Analysis of soil for organochlorine herbicides (OCHs) will not be performed on Phase B soil samples. The basis for this decision is that there is no documentation to indicate OCHs were used, manufactured, or stored on the Site. Moreover, OCHs were not detected in any of the Phase A soil samples analyzed.
- Analyses of soil for radionuclides will consist of alpha spectroscopy for Radium-226, Thorium -230/232, Uranium 234/235 and Uranium 238; beta counting will be used for Radium-228. Unlike the Phase A Source Area Investigation, Phase B soil samples will not be analyzed using gamma spectroscopy as the default analytical technique.
- Formaldehyde was added to the Phase B analyte list since formaldehyde may have been associated with LOU 38 – Former Satellite Accumulation Point, Ammonium Perchlorate (AP) Change House/Laboratory, and LOU 54 – AP Plant Area Change House/Laboratory Septic Tank.
- In Area II, total cyanide will only be analyzed in borings associated with LOU 62 (State Industries Inc.) and segments of LOU 60 (former Acid Drain System) that could have potentially carried effluent from LOU 62 to LOU 5 (Beta Ditch). Free cyanide analysis will be conducted in samples were total cyanide is detected.

In general, soil samples for the Phase B Source Area Investigation will be collected initially at a depth of 0.0 to 0.5 foot bgs and thereafter at 10-foot depth intervals to the level of the water table. If the boring location is covered with pavement (asphalt, concrete, etc.) then the initial subsurface sample will be collected at 0.5 feet below the pavement's gravel base. The soil sampling program proposed for Area II, including a complete list of soil borings, the proposed sample depths, and the analytical program for each sample is shown in **Table 2**. Sample containers, analytical methods, and holding times for soil samples area listed in **Table 6**.

2.3.3 Groundwater Sampling

The *Phase A Source Area Investigation Results Report* (ENSR 2007b) identified SRCs in groundwater that were present at concentrations above comparison levels. The *Phase A Source Area Investigation Results Report*, the ECA report (Kleinfelder 1993), and the CSM report (ENSR 2005) form the basis for further evaluation of SRCs in shallow groundwater as part of the Phase B Source Area Investigation.

As shown on **Figure 5**, groundwater samples will be collected from 36 wells within or adjacent to Area II as part of the Site-wide evaluation of SRCs in groundwater. The sample locations were selected to evaluate specific LOU areas as identified in the CSM report (ENSR 2005) as potential source areas, and to further evaluate the horizontal extent of SRCs that was identified in the *Phase A Source Area Investigation Results Report* (ENSR 2007b). **Table 3** lists the wells that will be sampled for laboratory analyses as part of the Area II investigation of groundwater. Sample containers, analytical methods, and holding times for groundwater samples area listed in **Table 7**. **Table 9** is a subset of the All Wells Database (June 2008) that focuses on well completion data for the Tronox wells, as well as the three Timet wells proposed for sampling under the Phase B investigation program.

Groundwater samples will be analyzed for the list of SRCs shown on **Table 1**. Unlike the Phase A analytical program for groundwater samples, the Phase B groundwater samples will not be analyzed for PCBs because PCBs were not detected in as part of the Phase A investigation. Similarly, groundwater samples will not be analyzed for OPPs because OPPs were not detected in the Phase A samples that were collected from 27 wells spread across the Site.

2.3.4 Additional Data Collection

Additional tests will be performed on soil samples collected in Area II to gather data in support of further site characterization activities or risk assessment modeling. This includes performing tests on soil samples to: 1) evaluate the soil-to-groundwater migration potential of SRCs, and 2) gather data on the physical properties of onsite soils to provide Site-specific parameters.

2.3.4.1 Soil-to-Groundwater Migration Potential of SRCs

The *Phase A Source Area Investigation Results Report* (ENSR 2007b) identified SRCs in soil that have the potential to migrate to groundwater at concentrations of potential concern. Soil samples collected from the alluvium and Muddy Creek formation above the capillary fringe will be analyzed for leachability from the following Area II soil borings: RSAL6, SA64, SA102 and SA30. **Table 2** provides the following information for the sampling locations: grid location associated LOU, boring number, sample depth(s), SRCs to be analyzed for, expected soil type and rationale for sampling location/depth. **Table 8** lists the Soil Screening Levels (SSLs) based on the soil to groundwater pathway for the SRCs.

The potential for an SRC to partition from soil to groundwater will be determined using the Synthetic Precipitation Leaching Procedure (SPLP), USEPA Method 1312. The partitioning factor approach uses a leaching agent to evaluate the concentration of the chemical of interest (i.e., target SRC) that might leach from the solid matrix and partition into the pore water thus having the potential to affect water quality. Evaluating the potential for partitioning involves a stepwise process as follows:

• Soil samples are initially analyzed for the target SRCs to determine their solid matrix concentration (Table 2);

- Samples are then subjected to the leaching procedure using extraction fluid #2 (reagent water at a pH of 5.0 ±0.05) to derive the leachate;
- Samples will also be subjected to the leaching procedure using extraction fluid #3 (solely reagent water);
- The leachates are then analyzed for the target SRCs to evaluate a chemical's potential to partition from the solid matrix into the pore water.

The leachate data derived from the reagent water and that from the pH 5.0 water will be compared to reflect variable conditions at the site. The SPLP employs as the leaching agent a liquid with a pH of about 5.0 (reagent fluid #2) to reflect slightly acidic precipitation in areas west of the Mississippi (USEPA 1994). The analytical suite will include the SRC chemical categories shown on **Table 2**. SRCs were selected for analysis along the soil-to-groundwater pathway because they were reported above detection limits in Phase A samples, were detected in soil samples in other previous site investigations, and had CSM-indicated concentrations that were greater than their respective comparison level. Sample containers, analytical methods, and holding times for groundwater samples area listed in **Table 7**.

2.3.4.2 Geotechnical Testing Program

Soil samples will be collected and sent to a geotechnical engineering laboratory in order to measure physical parameters of the coarse-grained and fine-grained soils encountered during the course of this investigation. The soil samples will be collected from the same borings and sample depths as the soil samples for SPLP analyses as shown on **Table 2**. Soil samples collected for geotechnical testing will be co-located with soil samples for leachability tests in order to facilitate possible future fate and transport modeling. Data from the geotechnical tests will provide Site-specific data that will be used to support, modeling of the vadose zone for potential contaminant migration pathways, and to support evaluation of remedial alternatives, if necessary.

Tronox intends to follow the simple soil/water partitioning and groundwater dilution model provided in the USEPA's Soil Screening Guidance (1996) to assess the potential impacts to groundwater from residual chemicals in the unsaturated zone. The geotechnical testing program parameters, sample locations and depths were designed to provide sufficient data to use in an unsaturated zone modeling program. Additional details regarding the soil-to-groundwater evaluation will be provided in the HHRA work plan.

Fine-grained and coarse-grained soil samples will be collected and analyzed for the following parameters:

- Moisture content (dry weight basis) using American Society for Testing and Materials (ASTM) Method D-2216;
- Particle size analysis using ASTM Method D-422 (for sand and gravel) and C117-04 (for silt and clay);
- Soil Dry Bulk Density using ASTM Method D2937;
- Grain Density using ASTM Method D854;
- Soil Water-Filled Porosity using ASTM Method D2216; and
- Vertical Hydraulic Conductivity using ASTM D5084/USEPA 9100.

3.0 Investigation Report and Schedule

Upon completing field activities and receipt of the analytical results, the Area II investigation data will be compiled. The Area II data will be discussed with NDEP. If data gaps are identified, additional field sampling may be proposed as an addendum to the Area II Work Plan. Elements of the Area II investigation and results will be integrated with the soil and groundwater data from the Area I, III, and IV investigations, the soil gas investigation, and the background water quality investigation to create a report on the results of the Phase B Source Area Investigation for the Site. One document will be provided to NDEP, which will summarize all the Area investigation results.

The Phase B report will summarize the Site description, LOUs, previous environmental assessments conducted at the Site, including the Phase A results, Site physical conditions and the findings of the soil, soil gas, and groundwater sampling program. The report will be organized similar to the *Phase A Source Area Investigation Results Report* (ENSR 2007b) and will include the following:

- Copies of applicable permits;
- Field logs, groundwater sampling and boring logs;
- Description of field procedures and any deviations from the proposed program;
- Presentation of field observations and analytical results;
- Certified analytical laboratory reports and chain-of-custody documentation;
- Data validation summary report and data validation memorandum;
- Summary tables of results organized by chemical species (i.e., VOCs, SVOCs, metals) and environmental media (i.e., soil, soil gas, and groundwater);
- Figures showing the results of the soil, soil gas and groundwater sampling program organized in a similar fashion as the tables by chemical species and environmental media;
- Discussion of the data and comparison to screening level criteria; and
- Recommendations for additional assessment, as applicable.

The Area II investigation activities will commence within 30 days following NDEP approval of this Work Plan. Actual start dates will depend on the availability of drilling contractors at the time of approval. General milestones and durations are provided below:

- Field Activities three to four weeks, inclusive of utility clearance activities at the Site;
- Laboratory Analyses four to six weeks; and
- Data Validation and Analysis four to six weeks.

4.0 References

- BRC, 2007a, Basic Remediation Company (BRC), Closure Plan, BRC Common Areas, Clark County, Nevada:
 Basic Remediation Company (BRC), Henderson, Nevada, Environmental Resource Management
 (ERM), Sacramento, California, and Daniel Stephens and Associates, Goleta, California. May 2007.
- BRC, 2007b, Basic Remediation Company (BRC) Field Sampling and Standard Operating Procedures Manual for the BMI Common Areas, August 2007.
- Community Environmental Monitoring Program 2008, Henderson Nevada Wind Frequency Table (percentage), March 2003 to March 2008: http://www.cemp.dri.edu/cgi-bin/wea-windrose2.pl.
- ENSR, 1997, Phase II Environmental Conditions Assessment, Kerr-McGee Chemical Corporation, Henderson, Nevada, August 1997.
- ENSR, 2005, Conceptual Site Model (CSM), Kerr-McGee Facility, Henderson, Nevada: ENSR, Camarillo, California, February 2005.
- ENSR, 2006a, Upgradient Investigation Work Plan, Tronox LLC Facility, Henderson, Nevada: ENSR, Camarillo, California, February 2006.
- ENSR, 2006b, Upgradient Investigation Work Plan Addendum, Tronox LLC Facility, Henderson, Nevada: ENSR, Camarillo, California, February 2006.
- ENSR, 2006c, Phase A Source Area Investigation Work Plan, Tronox LLC Facility, Henderson, Nevada: ENSR, Camarillo, California, September 2006.
- ENSR, 2006e, Upgradient Investigation Results Report, Tronox LLC Facility, Henderson, Nevada: ENSR, Camarillo, California, October 2006.
- ENSR, 2007a, Addendum to the Phase A Source Area Work Plan, Tronox LLC Facility, Henderson, Nevada: ENSR, Camarillo, California, April 2007.
- ENSR, 2007b, Phase A Source Area Investigation Results Report, Tronox LLC Facility, Henderson, Nevada, September 2007.
- ENSR, 2007c, Revisions to the Upgradient Investigation Results, Tronox LLC Facility, Henderson, Nevada, September 2007.
- ENSR, 2008a, Health and Safety Plan, Revision 3, January 2008.
- ENSR, 2008b, Phase B Source Area Investigation Work Plan Soil Gas Survey, Tronox LLC Facility, Henderson, Nevada, March 2008.
- ENSR, 2008c, Phase B Source Area Investigation Work Plan, Area I (Northern LOUs), Tronox LLC Facility, Henderson, Nevada, April 2008.

- ENSR, 2008d, Quality Assurance Project Plan, Tronox LLC Facility, Henderson, Nevada: ENSR, Camarillo, California, April 2008.
- ENSR, 2008e, Phase B Source Area Investigation Work Plan, Area IV (Western and Southern LOUs), Tronox LLC Facility, Henderson, Nevada, May 2008.
- ENSR, 2008f, Phase B Source Area Investigation Work Plan, Area III (Eastern LOUs), Tronox LLC Facility, Henderson, Nevada, May 2008.
- Hargis and Associates, 2008, Technical Memorandum, 2007 Vapor Intrusion Groundwater Monitoring Results, February 2008.
- Kerr-McGee, 1996, Response to Letter of Understanding, Henderson, Nevada, October 1996.
- Kleinfelder, 1993, Environmental Conditions Assessment (ECA), Kerr-McGee Chemical Corporation, Henderson, Nevada Facility, April 1993 (Final).
- NDEP, 2004, Kerr-McGee Chemical Corporation LLC (KM) NDEP Facility ID #H-000539, Nevada Division of Environmental Protection Response to Supplemental Phase II Report – Environmental Conditions Assessment: Department of Conservation and Natural Resources, Division of Environmental Protection (Las Vegas Office), Las Vegas, Nevada, February 2004.
- NDEP, 2006, NDEP Guidance on Data Validation, BMI Plant Sites and Common Areas Projects, Henderson, Nevada: Department of Conservation and Natural Resources, Division of Environmental Protection (Las Vegas Office), Las Vegas, Nevada.
- NDEP, 2008a, BMI Plant Sites and Common Areas Projects, Henderson Nevada Generic Comparison Levels Department of Conservation and Natural Resources, Division of Environmental Protection (Las Vegas Office), Las Vegas, Nevada. April 21.
- NDEP, 2008b, Nevada Division of Environmental Protection (NDEP) Response to: Phase B Source Area Investigation Work Plan, Area I (Northern LOUs), Tronox LLC Facility, Henderson, Nevada: Department of Conservation and Natural Resources, Division of Environmental Protection (Las Vegas Office), Las Vegas, Nevada. May 6.
- Tronox, 2008, Updated Site-Related Chemicals List, Tronox LLC, Henderson, Nevada, May 29, 2008.
- USEPA, 1980, Aerial Reconnaissance of Hazardous Waste Sources BMI Industrial Complex, Henderson, 1943-1979.
- USEPA 1996, Soil Screening Guidance: User's Guide, Second Edition, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, DC, Publication 9355.4-23, July 1996.
- USEPA, 1989, EPA Risk Assessment Guidance for Superfund, Volume 1.
- USEPA, 1992, EPA Guidance for Data Useability in Risk Assessment (Part A).
- USEPA, 1994, Method Synthetic Precipitation Leaching Procedure, Test Methods for Evaluating Solid Waste Physical/Chemical Methods, SW-846, 3rd Edition, September 1994.

- USEPA, 2002, OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance), EPA 530-D-02-004. November 2002.
- USEPA, 2003, Technical Support Document for a Protocol to Assess Related Risk, Final Draft, Office of Solid Waste and Emergency Response, EPA #9345-06, October 2003.
- USEPA, 2008, Region 6 Media Specific Screen Levels: <u>http://www.epa.gov/region6/6pd/rcra_c/pd-</u> n/screen.htm (May 2008).

TABLES

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 1 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
		soil / water	so	oil	Wa	ater
Metals			mg	/kg	u	g/L
Aluminum	7429-90-5	EPA 6010	1.00E+01	7.50E+01	5.00E+01	5.00E+01
Antimony	7440-36-0	EPA 6020	5.00E-02	3.00E-01	5.00E-02	6.00E+00
Arsenic	7440-38-2	EPA 6020	5.00E-01	1.59E-01	5.00E-01	1.00E+01
Barium	7440-39-3	EPA 6010	2.00E+00	8.20E+01	5.00E+00	2.00E+03
Beryllium	7440-41-7	EPA 6020	2.00E-02	3.00E+00	2.00E-02	4.00E+00
Boron	7440-42-8	EPA 6020	5.00E-01	2.27E+00	5.00E-01	7.30E+02
Cadmium	7440-43-9	EPA 6020	2.00E-02	4.00E-01	2.00E-02	5.00E+00
Calcium	7440-70-2	EPA 6010	1.00E+01	na	5.00E+01	na
Chromium (total)	7440-47-3	EPA 6020	2.00E-01	4.48E+01	2.00E-01	1.09E+01
Chromium (hexavalent)	18540-29-9	EPA 7199+3060A / 218.6	5.00E-01	2.00E+00	1.00E+01	1.00E+02
Cobalt	7440-48-4	EPA 6010	2.00E+00	3.29E+00	1.00E+01	7.30E+01
Copper	7440-50-8	EPA 6010	2.00E+00	4.68E+02	1.00E+01	1.30E+03
Iron	7439-89-6	EPA 6010	4.00E+00	7.53E+00	2.00E+01	3.00E+02
Lead	7439-92-1	EPA 6020	5.00E-02	1.34E+01	2.00E-02	1.50E+01
Magnesium	7439-95-4	EPA 6010	4.00E+00	na	2.00E+01	1.50E+05
Manganese	7439-95-4	EPA 6010	2.00E+00	3.26E+00	5.00E+00	5.00E+01
Mercury	7439-97-6	EPA 7471/7470	2.00E-02	1.64E-01	2.00E-01	2.00E+00
Molybdenum	7439-98-7	EPA 6020	5.00E-02	3.66E-01	5.00E-02	1.82E+01
Nickel	7440-02-0	EPA 6020	2.00E-01	7.00E+00	2.00E-01	7.30E+01
Platinum	7440-06-4	EPA 6020	1.00E-01	na	1.00E-01	na
Potassium	7440-09-7	EPA 6010	2.00E+02	na	2.00E+03	na
Selenium	7782-49-2	EPA 6020	1.00E+00	5.11E+02	1.00E+00	5.00E+01
Silver	7440-22-4	EPA 6020	2.00E-02	2.00E+00	2.00E-02	1.00E+02
Sodium	7440-23-5	EPA 6010	2.00E+01	na	1.00E+02	na
Strontium	7440-24-6	EPA 6010	2.00E+00	7.69E+01	1.00E+01	2.19E+03
Tin	7440-31-5	EPA 6010	1.00E+01	5.48E+02	5.00E+01	2.19E+03
Titanium	7440-32-6	EPA 6010	2.00E+00	1.46E+04	1.00E+01	1.46E+04

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 2 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal	
		soil / water	so	soil		water	
Thallium	7440-28-0	EPA 6020	2.00E-02	1.42E-01	2.00E-02	2.00E+00	
Tungsten	7440-33-7	EPA 6020	1.00E-01	na	1.00E-01	na	
Uranium	7440-61-1	EPA 6020	2.00E-02	1.53E-02	2.00E-02	3.00E+01	
Vanadium	7440-62-2	EPA 6020	2.00E-01	1.02E+02	2.00E-01	3.65E+00	
Zinc	7440-66-6	EPA 6010	2.00E+00	6.20E+02	1.00E+01	5.00E+03	
Wet Chem Analytes			mg	/kg	u	g/L	
Alkalinity (total,CQ ,HCO ₃ ⁻)	na	SM 2320B	2.00E+01	na	2.00E+03	na	
Ammonia	7664-41-7	EPA 350.1	5.00E+00	na	5.00E+01	na	
Bromide	24959-67-9	EPA 9056	1.00E+00	na	1.00E+02	na	
Chlorate	7790-93-4	EPA 300.1	2.00E-01	na	2.00E+01	na	
Chloride	16887-00-6	EPA 9056	2.00E+00	na	2.00E+02	2.50E+05	
Conductivity	na	EPA 9050A	na	na	na	na	
Cyanide (total)	57-12-5	EPA 9012A	1.00E+00	1.20E+03	1.00E+01	2.00E+02	
Nitrate	7697-37-2	EPA 9056	5.00E-01	na	5.00E+01	1.00E+04	
Nitrite	14797-65-0	EPA 9056	5.00E-01	na	5.00E+01	1.00E+03	
Perchlorate	14797-73-0	EPA 314.0	1.00E-01	1.00E+01	1.00E+00	1.80E+01	
рН	na	EPA 9045C/9040B	na	na	na	na	
Phosphate (total)	14265-44-2	EPA 365.1	5.00E-01	na	5.00E+01	na	
Sulfate	14808-79-8	EPA 9056	2.00E+00	na	2.00E+02	2.50E+05	
Surfactants (MBAS)	na	SM 5540C	1.00E+00	na	2.00E+01	na	
TDS	na	SM 2540C	na	na	1.00E+04	1.90E+06	
Total Organic Carbon	7440-44-0	EPA Lloyd Kahn/ 9060	3.00E+02	na	1.00E+03	na	
TSS	na	SM 2540D	na	na	1.00E+04	na	

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 3 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
		soil / water	so	bil	water	
ТРН			ug/kg		ug/L	
GRO(C6-C10)	na	EPA 8015B	5.00E+01	1.00E+03	na	na
DRO(C10-C28)	na	EPA 8015B	4.00E+04	1.00E+03	na	na
ORO (C28-C40)	na	EPA 8015B	4.00E+04	1.00E+03	na	na
Organochlorine Pesticides			mg	/kg	ug	ı/L
4,4'-DDD	72-54-8	EPA 8081A	3.30E-03	8.00E-01	5.00E-02	2.80E-02
4,4'-DDE	72-55-9	EPA 8081A	3.30E-03	7.02E-01	5.00E-02	1.98E-02
4,4'-DDT	50-29-3	EPA 8081A	3.30E-03	7.02E-01	5.00E-02	1.98E-02
Aldrin	309-00-2	EPA 8081A	1.70E-03	1.00E-02	5.00E-02	4.00E-02
alpha-BHC	319-84-6	EPA 8081A	1.70E-03	3.59E-02	5.00E-02	1.10E-03
alpha-Chlordane	5103-71-9	EPA 8081A	1.70E-03	6.47E-01	5.00E-02	2.00E+00
beta-BHC	319-85-7	EPA 8081A	1.70E-03	1.00E-04	5.00E-02	3.74E-03
Chlordane, technical	57-74-9	EPA 8081A	8.30E-03	6.47E-01	2.50E-01	2.00E+00
delta-BHC	319-86-8	EPA 8081A	1.70E-03	3.59E-02	5.00E-02	1.10E-03
Dieldrin	60-57-1	EPA 8081A	3.30E-03	1.10E-02	5.00E-02	4.20E-02
Endosulfan I	959-98-8	EPA 8081A	1.70E-03	3.70E+02	5.00E-02	2.19E+01
Endosulfan II	33213-65-9	EPA 8081A	3.30E-03	3.70E+02	5.00E-02	2.19E+01
Endosulfan sulfate	1031-07-8	EPA 8081A	3.30E-03	3.70E+02	5.00E-02	2.19E+01
Endrin	72-20-8	EPA 8081A	3.30E-03	1.85E+01	5.00E-02	2.00E+00
Endrin aldehyde	7421-93-4	EPA 8081A	3.30E-03	4.98E-02	5.00E-02	1.09E+00
Endrin Ketone	53494-70-5	EPA 8081A	3.30E-03	1.85E+01	5.00E-02	1.09E+00
gamma-BHC (Lindane)	58-89-9	EPA 8081A	1.70E-03	1.74E-01	5.00E-02	2.00E-01
gamma-Chlordane	5103-74-2	EPA 8081A	1.70E-03	6.47E-01	5.00E-02	1.20E+00
Heptachlor	76-44-8	EPA 8081A	1.70E-03	3.83E-02	5.00E-02	4.00E-01
Heptachlor epoxide	1024-57-3	EPA 8081A	1.70E-03	1.89E-02	5.00E-02	2.00E-01
Hexachlorobenzene	118-74-1	EPA 8081A	1.70E-03	1.00E-01	5.00E-02	1.00E+00
Methoxychlor	72-43-5	EPA 8081A	1.70E-02	8.00E+00	5.00E-01	4.00E+01
Toxaphene	8001-35-2	EPA 8081A	3.30E-02	1.57E-01	1.00E+00	3.00E+00

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 4 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
		soil / water	so	bil	wa	iter
PCBs as Aroclors				//		- /1
Aroclor 1016	12674-11-2		mg			g/L
Aroclor 1221	11104-28-2	EPA 8082	3.30E-02	2.03E-01	2.00E-01	5.00E-01
	11141-16-5	EPA 8082	6.70E-02	2.03E-01	4.00E-01	5.00E-01
Aroclor 1232		EPA 8082	3.30E-02	2.03E-01	2.00E-01	5.00E-01
Aroclor 1242	53469-21-9	EPA 8082	3.30E-02	2.03E-01	2.00E-01	5.00E-01
Aroclor 1248	12672-29-6	EPA 8082	3.30E-02	2.03E-01	2.00E-01	5.00E-01
Aroclor 1254	11097-69-1	EPA 8082	3.30E-02	2.03E-01	2.00E-01	5.00E-01
Aroclor 1260	11096-82-5	EPA 8082	3.30E-02	2.03E-01	2.00E-01	5.00E-01
PCBs as congeners **			mg	/kg	uç	g/L
Total PCBs	na	EPA 1668A	1.00E-04	2.03E-01	1.00E-03	5.00E-01
3,3',4,4'-tetraCB (PCB 77)	32598-13-3	EPA 1668A	6.00E-07	3.00E-02	4.17E-06	4.50E-03
3,4,4',5-tetraCB (PCB 81)	70362-50-4	EPA 1668A	7.00E-07	9.80E-03	4.34E-06	1.50E-03
3,3',4,4',5-pentaCB (PCB 126)	57465-28-8	EPA 1668A	7.40E-07	3.00E-05	3.32E-06	4.50E-06
3,3,'4,4',5,5'-hexaCB (PCB 169)	32774-16-6	EPA 1668A	4.80E-07	9.80E-05	2.07E-06	1.50E-05
2,3,3',4,4'-pentaCB (PCB 105)	32598-14-4	EPA 1668A	6.40E-07	9.80E-02	3.48E-06	1.50E-02
2,3,4,4',5-pentaCB (PCB 114)	74472-37-0	EPA 1668A	6.80E-07	9.80E-02	3.83E-06	1.50E-02
2,3',4,4',5-pentaCB (PCB 118)	31208-00-6	EPA 1668A	5.50E-07	9.80E-02	3.47E-06	1.50E-02
2',3,4,4',5-pentaCB (PCB 123)	65510-44-3	EPA 1668A	6.30E-07	9.80E-02	3.85E-06	1.50E-02
2,3,3',4,4',5-hexaCB (PCB 156)	38380-08-4	EPA 1668A	6.20E-07	9.80E-02	2.88E-06	1.50E-02
2,3,3',4,4',5'-hexaCB (PCB 157)	69782-90-7	EPA 1668A	6.20E-07	9.80E-02	2.88E-06	1.50E-02
2,3',4,4',5,5'-hexaCB (PCB 167)	52663-72-6	EPA 1668A	4.20E-07	9.80E-02	1.80E-06	1.50E-02
2,3,3',4,4',5,5'-heptaCB (PCB 189)	39635-31-9	EPA 1668A	4.60E-07	9.80E-02	4.14E-06	1.50E-02
Dioxins & Furans**			ng/	′kg		
1,2,3,4,6,7,8,9-Ocatchlorodibenzofuran	39001-02-0	EPA 1613B/ 8290	5.90E-01	*	na	na
1,2,3,4,6,7,8,9-Ocatchlorodibenzo-p-dioxin	3268-87-9	EPA 1613B/ 8290	5.70E-01	*	na	na
1,2,3,4,6,7,8-Heptatchlorodibenzofuran	67562-39-4	EPA 1613B/ 8290	2.20E-01	*	na	na
1,2,3,4,6,7,8-Heptatchlorodibenzo-p-dioxin	35822-46-9	EPA 1613B/ 8290	2.60E-01	*	na	na
1,2,3,4,7,8,9-Heptatchlorodibenzofuran	55673-89-7	EPA 1613B/ 8290	3.50E-01	*	na	na

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 5 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
		soil / water	so	il	wa	ter
Dioxins & Furans** (continued)			ng/			
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	EPA 1613B/ 8290	9.00E-02	*	na	na
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	EPA 1613B/ 8290	1.90E-01	*	na	na
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	EPA 1613B/ 8290	1.00E-01	*	na	na
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	EPA 1613B/ 8290	1.90E-01	*	na	na
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	EPA 1613B/ 8290	1.50E-01	*	na	na
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	EPA 1613B/ 8290	1.90E-01	*	na	na
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	EPA 1613B/ 8290	1.40E-01	*	na	na
1,2,3,7,8-Pentachlorodibenzof-p-dioxin	40321-76-4	EPA 1613B/ 8290	1.50E-01	*	na	na
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	EPA 1613B/ 8290	1.10E-01	*	na	na
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	EPA 1613B/ 8290	1.60E-01	*	na	na
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	EPA 1613B/ 8290	1.20E-01	*	na	na
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	EPA 1613B/ 8290	1.70E-01	1.00E+03	na	na
Radionuclides			pCi	/g	pC	;i/L
Radium 226	13982-63-3	EPA 903.1 modified/ 903.1	5.00E-01	2.60E-03	1.00E+00	5.00E+00
Radium 228	15262-20-1	EPA 904.0 modified/ 904.0	5.00E-01	8.10E-09	3.00E+00	5.00E+00
Thorium 228	14274-82-9	EML HASL 300 Alpha Spec	5.00E-02	3.62E-10	3.00E-02	1.59E-02
Thorium 230	14269-63-7	EML HASL 300 Alpha Spec	5.00E-02	1.49E-05	3.00E-02	5.23E-02
Thorium 232	7440-29-1	EML HASL 300 Alpha Spec	1.00E-01	1.90E+00	3.00E-02	4.71E-02
Uranium 234	13966-29-5	EML HASL 300 Alpha Spec	4.00E-02	1.53E-02	3.00E-02	6.74E-02
Uranium 235	15117-96-1	EML HASL 300 Alpha Spec	4.00E-02	1.53E-02	3.00E-02	6.63E-02
Uranium 238	7440-61-1	EML HASL 300 Alpha Spec	4.00E-02	1.53E-02	3.00E-02	5.47E-02
VOCs			mg/	mg/kg		ı/L
1,1,1,2-Tetrachloroethane	630-20-6	EPA 8260	5.00E-03	7.28E-01	1.00E+00	4.32E-02
1,1,1-Trichloroethane	71-55-6	EPA 8260	5.00E-03	1.00E-01	1.00E+00	2.00E+02
1,1,2,2-Tetrachloroethane	79-34-5	EPA 8260	5.00E-03	9.29E-02	1.00E+00	5.53E-03
1,1,2-Trichloroethane	79-00-5	EPA 8260	5.00E-03	1.61E-01	1.00E+00	5.00E+00
1,1-Dichloroethane	75-34-3	EPA 8260	5.00E-03	1.00E+00	1.00E+00	8.11E+01

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 6 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
		soil / water	S	bil	wa	ter
VOCs (continued)			mg	/kg	ug	/L
1,1-Dichloroethene	75-35-4	EPA 8260	5.00E-03	4.13E+01	1.00E+00	7.00E+00
1,1-Dichloropropene	563-58-6	EPA 8260	5.00E-03	1.76E-01	2.00E+00	3.95E-02
1,2,3-Trichlorobenzene	120-82-1	EPA 8260	5.00E-03	2.34E-01	2.00E+00	7.00E+01
1,2,3-Trichloropropane	96-18-4	EPA 8260	5.00E-03	7.60E-03	2.00E+00	5.60E-04
1,2,4-Trichlorobenzene	120-82-1	EPA 8260	5.00E-03	3.00E-01	2.00E+00	7.00E+01
1,2,4-Trimethylbenzene	95-63-6	EPA 8260	5.00E-03	1.70E+01	2.00E+00	1.23E+00
1,2-Dibromo-3-chloropropane	96-12-8	EPA 8260	5.00E-03	2.02E-01	5.00E+00	2.00E-01
1,2-Dibromoethane	106-93-4	EPA 8260	5.00E-03	7.30E-03	1.00E+00	5.00E-02
1,2-Dichlorobenzene	95-50-1	EPA 8260	5.00E-03	9.00E-01	2.00E+00	2.60E+02
1,2-Dichloroethane	107-06-2	EPA 8260	5.00E-03	1.00E-03	1.00E+00	5.00E+00
1,2-Dichloropropane	78-87-5	EPA 8260	5.00E-03	7.42E-02	1.00E+00	5.00E+00
1,3,5-Trimethylbenzene	108-67-8	EPA 8260	5.00E-03	1.60E-03	2.00E+00	1.23E+00
1,3-Dichlorobenzene	541-73-1	EPA 8260	5.00E-03	1.80E-02	2.00E+00	1.83E+01
1,3-Dichloropropane	142-28-9	EPA 8260	5.00E-03	3.61E+01	2.00E+00	1.22E+01
1,4-Dichlorobenzene	106-46-7	EPA 8260	5.00E-03	1.00E-01	2.00E+00	7.50E+01
2,2-Dichloropropane	594-20-7	EPA 8260	5.00E-03	7.42E-02	2.00E+00	1.65E-02
2-Butanone	78-93-3	EPA 8260	1.00E-02	7.82E-02	1.00E+01	6.97E+02
2-Chlorotoluene	95-49-8	EPA 8260	5.00E-03	4.30E-03	5.00E+00	1.22E+01
2-Hexanone	591-78-6	EPA 8260	1.00E-02	2.79E-02	1.00E+01	2.00E+02
4-Chlorotoluene	106-43-4	EPA 8260	5.00E-03	5.60E+01	5.00E+00	1.22E+01
4-Methyl-2-pentanone	108-10-1	EPA 8260	1.00E-02	4.70E+03	1.00E+01	1.99E+02
Acetone	67-64-1	EPA 8260	2.00E-02	8.00E-01	2.00E+01	5.48E+02
Benzene	71-43-2	EPA 8260	5.00E-03	2.00E-03	1.00E+00	5.00E+00
Bromobenzene	108-86-1	EPA 8260	5.00E-03	9.22E+00	2.00E+00	2.03E+00
Bromochloromethane	74-97-5	EPA 8260	5.00E-03	1.83E-01	2.00E+00	1.81E-02

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 7 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
		soil / water	so	bil	wa	ter
VOCs (continued)				1		
Bromodichloromethane	75-27-4	EPA 8260	5.00E-03	1.83E-01	1.00E+00	2.10E-01
Bromoform	75-25-2	EPA 8260	5.00E-03	4.00E-02	1.00E+00	8.30E-04
Bromomethane	74-83-9	EPA 8260	5.00E-03	1.31E+00	2.00E+00	8.66E-01
Carbon Tetrachloride	56-23-5	EPA 8260	5.00E-03	3.00E-03	1.00E+00	5.00E+00
Chlorobenzene	108-90-7	EPA 8260	5.00E-03	7.00E-02	1.00E+00	3.90E+01
Chloroethane	75-00-3	EPA 8260	5.00E-03	6.49E-01	2.00E+00	4.64E-01
Chloroform	67-66-3	EPA 8260	5.00E-03	3.00E-02	1.00E+00	8.00E+01
Chloromethane	74-87-3	EPA 8260	5.00E-03	1.56E+01	2.00E+00	6.70E-01
cis-1,2-Dichloroethene	156-92-2	EPA 8260	5.00E-03	1.46E+01	1.00E+00	7.00E+01
cis-1,3-Dichloropropene	10061-01-5	EPA 8260	5.00E-03	1.76E-01	1.00E+00	3.95E-02
Dibromochloromethane	124-48-1	EPA 8260	5.00E-03	2.55E-01	1.00E+00	3.20E-01
Dibromomethane	74-95-3	EPA 8260	5.00E-03	2.34E+01	1.00E+00	6.08E+00
Dichlorodifluoromethane	75-71-8	EPA 8260	5.00E-03	3.08E+01	1.00E+00	3.95E+01
Diisopropyl ether (DIPE)	108-20-3	EPA 8260	5.00E-03	na	1.00E+00	na
Ethylbenzene	100-41-4	EPA 8260	5.00E-03	7.40E+02	1.00E+00	7.00E+02
Ethyl-tert-butyl ether (ETBE)	637-92-3	EPA 8260	5.00E-03	3.64E+00	1.00E+00	1.10E+00
Hexachlorobutadiene	87-68-3	EPA 8260	5.00E-03	1.00E-01	5.00E+00	8.62E-02
Isopropyl Benzene	98-28-8	EPA 8260	5.00E-03	2.00E+02	2.00E+00	6.58E+01
Methylene Chloride	75-09-2	EPA 8260	5.00E-03	1.00E-03	2.00E+00	5.00E+00
Methyl-tert-butyl ether (MTBE)	1634-04-4	EPA 8260	5.00E-03	3.64E+00	1.00E+00	2.00E+01
Naphthalene	91-20-3	EPA 8260	5.00E-03	4.00E+00	2.00E+00	6.20E-01
n-Butylbenzene	104-51-8	EPA 8260	5.00E-03	2.19E+02	2.00E+00	2.43E+01
n-Propylbenzene	103-65-1	EPA 8260	5.00E-03	2.19E+02	2.00E+00	2.43E+01
p-Isopropyltoluene	99-87-6	EPA 8260	5.00E-03	9.00E+01	2.00E+00	2.06E+01
sec-Butylbenzene	135-98-8	EPA 8260	5.00E-03	1.63E+02	2.00E+00	2.43E+01
Styrene	100-42-5	EPA 8260	5.00E-03	1.80E+03	1.00E+00	1.00E+02
tert-Amyl-methyl ether (TAME)	994-05-8	EPA 8260	5.00E-03	na	1.00E+00	na

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 8 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
		soil / water	so	bil	wa	ter
				//	ug/L	
VOCs (continued)	75.05.0		mg		1	
tert-Butyl alcohol (TBA)	75-65-0	EPA 8260	1.00E-01	na	1.00E+02	na
tert-Butylbenzene	98-06-6	EPA 8260	5.00E-03	1.97E+02	2.00E+00	2.43E+01
Tetrachloroethene	127-18-4	EPA 8260	5.00E-03	3.00E-03	1.00E+00	5.00E+00
Toluene	108-88-3	EPA 8260	5.00E-03	6.00E-01	1.00E+00	1.50E+02
trans-1,2-Dichloroethene	156-60-5	EPA 8260	5.00E-03	2.35E+01	1.00E+00	1.00E+02
trans-1,3-Dichloropropene	10061-02-6	EPA 8260	5.00E-03	1.76E-01	1.00E+00	3.95E-02
Trichloroethene	79-01-6	EPA 8260	5.00E-03	3.00E-03	1.00E+00	5.00E+00
Trichlorofluoromethane	75-69-4	EPA 8260	5.00E-03	1.09E-01	1.00E+00	1.80E+01
Vinyl Chloride	75-01-4	EPA 8260	5.00E-03	7.46E-02	1.00E+00	2.00E+00
Xylenes (total)	1330-20-7	EPA 8260	5.00E-03	9.00E+01	1.00E+00	1.00E+04
SVOCs			mg	/kg	ug/L	
1,4-Dioxane	123-91-1	EPA 8270	6.60E-02	1.57E+01	2.00E-01	6.11E-01
2-Methylnaphthalene	91-57-6	EPA 8270	6.60E-03	1.88E+01	2.00E-01	6.20E-01
Acenaphthene	83-32-9	EPA 8270	6.60E-03	2.92E+03	2.00E-01	3.65E+01
Acenaphthylene	208-96-8	EPA 8270	6.60E-03	2.92E+03	2.00E-01	3.65E+01
Anthracene	120-12-7	EPA 8270	6.60E-03	2.40E+04	2.00E-01	1.83E+02
Benzo(a)anthracene	56-55-3	EPA 8270	6.60E-03	8.00E-02	2.00E-01	9.21E-03
Benzo(a)pyrene	50-32-8	EPA 8270	6.60E-03	2.11E-02	2.00E-01	2.00E-01
Benzo(b)fluoranthene	205-99-2	EPA 8270	6.60E-03	2.00E-01	2.00E-01	9.21E-03
Benzo(g,h,i)perylene	191-24-2	EPA 8270	6.60E-03	7.17E+01	2.00E-01	1.83E+01
Benzo(k)fluoranthene	207-08-9	EPA 8270	6.60E-03	2.00E+00	2.00E-01	9.21E-02
Bis(2-ethylhexyl)phthalate	117-81-7	EPA 8270	6.60E-03	1.23E+01	2.00E-01	6.00E+00
Butylbenzylphthalate	85-68-7	EPA 8270	6.60E-03	1.23E+04	2.00E-01	7.30E+02
Chrysene	218-01-9	EPA 8270	6.60E-03	8.00E+00	2.00E-01	9.21E-01
Dibenzo(a,h)anthracene	53-70-3	EPA 8270	6.60E-03	2.11E-02	2.00E-01	9.21E-04
Diethylphthalate	84-66-2	EPA 8270	6.60E-03	1.50E+00	2.00E-01	2.92E+03
Dimethylphthalate	131-11-3	EPA 8270	6.60E-03	6.16E+05	2.00E-01	3.65E+04

Table 1 List of Site-Related Chemicals and Reproting Limits Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 9 of 9

Analyte	CAS No.	Method	Lab RL	RL Goal	Lab RL	RL Goal
-		soil / water	sc	bil	wa	iter
SVOCs (continued)			mg	/kg	uç	g/L
Di-n-butylphthalate	84-74-2	EPA 8270	6.60E-03	2.70E+02	2.00E-01	3.65E+02
Di-n-octylphthalate	117-84-0	EPA 8270	6.60E-03	2.46E+03	2.00E-01	1.46E+02
Fluoranthene	206-44-0	EPA 8270	6.60E-03	2.10E+02	2.00E-01	1.46E+02
Fluorene	86-73-7	EPA 8270	6.60E-03	2.63E+03	2.00E-01	2.43E+01
Hexachlorobenzene	118-74-1	EPA 8270	6.60E-03	1.00E-01	2.00E-01	1.00E+00
Indeno(1,2,3-cd)pyrene	193-39-5	EPA 8270	6.60E-03	2.11E-01	2.00E-01	9.21E-03
Naphthalene	91-20-3	EPA 8270	6.60E-03	4.00E+00	2.00E-01	6.20E-01
Nitrobenzene	98-95-3	EPA 8270	6.60E-03	1.03E+01	2.00E-01	3.40E-01
Octachlorostyrene	29082-74-4	EPA 8270	6.60E-03	na	2.00E-01	na
Phenanthrene	85-01-8	EPA 8270	6.60E-03	9.60E+00	2.00E-01	1.80E+02
Pyrene	129-00-0	EPA 8270	6.60E-03	2.10E+02	2.00E-01	1.83E+01
Pyridine	110-86-1	EPA 8270	6.60E-03	6.16E+01	2.00E-01	3.65E+00
Asbestos			structure	s/gPM10		
Amphibole Protocol Structures	na	EPA/540/R-97/028 modified	3.00E+06	na	na	na
Chrysotile Protocol Structures	na	EPA/540/R-97/028 modified	3.00E+06	na	na	na
Formaldehyde			mg	/kg	uç	g/L
Formaldehyde	50-00-0	EPA 8315A	1.00E+03	1.0E+04	8.00E+00	5.5E+02

* RL Goal for the TEQ sum for all dioxin/furan congeners is 1000 pg/g

** Lab RLs for PCB congeners and dioxin/furan congeners will be based on sample specific EDLs. Averaged blank EDLs are provided he

All 209 PCB congeners will be reported. Only the WHO designated toxic congeners are listed in this tak

Tronox SRC list approved by NDEP on June 3, 2008.

L-5 19, 31 L-5 30, 56, 57 L-5 31 L-5 31 L-5 56 L-6 57 L-6 57 L-6 55 L-6 55 L-6 55 L-6 55 L-6 55 L-8 5 L-8 5 L-8 5 M-2 5 <th>SA123 SA123 SA167 SA167</th> <th>A123 5</th> <th>SA72-0.0 SA72-0.5 SA72-10 SA72-20 SA72-30 SA123-0.0</th> <th>(ft. bgs) 0.0 0.5 10 20</th> <th></th> <th>Borii</th> <th></th> <th>(EPA 8015B)</th> <th></th> <th>(EPA 8260B)</th> <th>Chemistry^{3.}</th> <th>(EPA 9012A)</th> <th>(EPA 8081A)</th> <th>(EPA 8270C)</th> <th>nuclides^{6.}</th> <th>Furans^{7.}</th> <th>EPA/540/R-97/028</th> <th>Tests^{9.}</th> <th></th>	SA123 SA123 SA167 SA167	A123 5	SA72-0.0 SA72-0.5 SA72-10 SA72-20 SA72-30 SA123-0.0	(ft. bgs) 0.0 0.5 10 20		Borii		(EPA 8015B)		(EPA 8260B)	Chemistry ^{3.}	(EPA 9012A)	(EPA 8081A)	(EPA 8270C)	nuclides ^{6.}	Furans ^{7.}	EPA/540/R-97/028	Tests ^{9.}	
L-519, 31L-519, 31L-519, 31L-519, 31L-530, 56, 57L-530, 56, 57L-531L-556L-556L-556L-556L-556L-556L-556L-556L-657L-657L-657L-655L-655L-655L-655L-655L-655L-655L-655L-75M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-45M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-5	SA123 SA123 SA167 SA167 SA173	A123 5	SA72-0.5 SA72-10 SA72-20 SA72-30 SA123-0.0	0.5 10			ngs are or	ganized by g	rid location	as shown	on <u>Plate A</u> - Sta	rting point is or	n the northy	vestern mos	t grid in Area	a 2 (M-2) an	d ending with	the south	neastern most grid in Area 2 (
L-519, 31L-519, 31L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-531L-531L-531L-556L-556L-556L-556L-556L-556L-556L-556L-556L-556L-657L-657L-657L-655L-655L-655L-655L-655L-655L-655L-75M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-352, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M	SA167 SA173	A123 5	SA72-10 SA72-20 SA72-30 SA123-0.0	10											M		Х	-	Boring located to evaluate LOU 37
L-519, 31L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-531L-531L-531L-556L-556L-556L-556L-556L-556L-556L-556L-556L-556L-556L-657L-657L-655L-655L-655L-655L-655L-655L-655L-655L-75M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-45M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-5 <t< td=""><td>SA167 SA173</td><td>A123 5</td><td>SA72-20 SA72-30 SA123-0.0</td><td></td><td>X X</td><td>X X</td><td>X</td><td></td><td></td><td>X X</td><td>X X</td><td></td><td>X Hold</td><td></td><td>X X</td><td>Х</td><td></td><td></td><td>the drum storage area of LOU 31</td></t<>	SA167 SA173	A123 5	SA72-20 SA72-30 SA123-0.0		X X	X X	X			X X	X X		X Hold		X X	Х			the drum storage area of LOU 31
L-519, 31L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-530, 56, 57L-531L-531L-531L-556L-556L-556L-556L-556L-657L-657L-657L-657L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-75M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-352, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-5 <td>SA167 SA173</td> <td>A123 5</td> <td>SA72-30 SA123-0.0</td> <td>20</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td>Hold</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td>	SA167 SA173	A123 5	SA72-30 SA123-0.0	20	X	X	X			X	X		Hold		X				
L-5 $30, 56, 57$ L-5 $30, 56, 57$ L-5 $30, 56, 57$ L-5 $30, 56, 57$ L-5 $31, 56, 57$ L-5 31 L-5 31 L-5 31 L-5 56 L-6 57 L-6 57 L-6 57 L-6 57 L-6 55 L-7 55 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 M-4 5 M-5 $52, 57$ M-5<	SA167 SA173			30	Х	Х	Х			Х	Х		Х		Х				
L-5 $30, 56, 57$ L-5 $30, 56, 57$ L-5 $30, 56, 57$ L-5 31 L-5 31 L-5 31 L-5 51 L-5 56 L-5 56 L-5 56 L-5 56 L-5 56 L-5 56 L-6 57 L-6 57 L-6 57 L-6 57 L-6 55 L-7 55 L-8 5 M-2 5 M-4 5 M-5 $52, 57$ </td <td>SA173</td> <td></td> <td></td> <td>0.0</td> <td>Y</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>Y</td> <td>X</td> <td></td> <td>V</td> <td></td> <td>Y</td> <td>X</td> <td>Х</td> <td></td> <td>Boring located to evaluate LOU 30</td>	SA173			0.0	Y	X	X			Y	X		V		Y	X	Х		Boring located to evaluate LOU 30
L-5 $30, 56, 57$ L-5 $30, 56, 57$ L-5 $30, 56, 57$ L-5 31 L-5 31 L-5 31 L-5 56 L-5 56 L-5 56 L-5 56 L-5 56 L-6 57 L-6 57 L-6 57 L-6 57 L-6 57 L-6 55 L-7 55 L-8 5 M-2 5 M-4 5 M-5 $52, 57$ </td <td>SA173</td> <td></td> <td>SA123-0.5 SA123-10</td> <td>0.5</td> <td>X X</td> <td>X X</td> <td>X</td> <td></td> <td></td> <td>X X</td> <td>X</td> <td></td> <td>X Hold</td> <td></td> <td>X X</td> <td>Х</td> <td></td> <td></td> <td>Old D-1 Building Wash-Down), an Process, AP Plant SI's and Transf</td>	SA173		SA123-0.5 SA123-10	0.5	X X	X X	X			X X	X		X Hold		X X	Х			Old D-1 Building Wash-Down), an Process, AP Plant SI's and Transf
L-5 $30, 56, 57$ L-5 31 L-5 31 L-5 31 L-5 56 L-5 56 L-5 56 L-5 56 L-5 56 L-5 56 L-6 57 L-6 57 L-6 57 L-6 57 L-6 57 L-6 55 L-7 55 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 $52, 57$ <td>SA173</td> <td></td> <td>SA123-20</td> <td>20</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td>Hold</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td>for LOU 56 and downslope stepou</td>	SA173		SA123-20	20	X	X	X			X	X		Hold		X				for LOU 56 and downslope stepou
L-5 31 L-5 31 L-5 56 L-6 57 L-6 57 L-6 57 L-6 57 L-6 55 L-8 5 L-8 5 L-8 5 L-8 5 M-2 5	SA173		SA123-30	30	Х	Х	Х			Х	Х		Hold		Х				
L-5 31 L-5 56 L-6 57 L-6 57 L-6 57 L-6 55 L-8 5 L-8 5 L-8 5 L-8 5 M-2	SA173		SA123-40 SA167-0.0	40	Х	Х	Х			Х	Х		Х		Х		×		Boring located to evaluate LOU 37
L-531L-556L-556L-556L-556L-556L-657L-657L-657L-657L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-655L-755L-85L-85L-85L-85L-85L-85L-85L-85L-85M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-45M-552, 57M-552, 57M-5 <t< td=""><td></td><td></td><td>SA167-0.0 SA167-0.5</td><td>0.0</td><td>Х</td><td>Х</td><td>Х</td><td></td><td></td><td>Х</td><td>Х</td><td></td><td>Х</td><td></td><td>Х</td><td>Х</td><td>Х</td><td></td><td>downslope of LOU 56. Phase A b</td></t<>			SA167-0.0 SA167-0.5	0.0	Х	Х	Х			Х	Х		Х		Х	Х	Х		downslope of LOU 56. Phase A b
L-5 56 L-5 56 L-5 56 L-5 56 L-6 57 L-6 55 L-7 5 L-8 5 L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 <			SA167-10	10	X	X	X			X	X		X		X				
L-556L-556L-556L-556L-657L-657L-657L-657L-655L-655L-655L-655L-655L-655L-655L-85L-85L-85L-85L-85L-85L-85M-25M-45M-45M-45M-552, 57M-552, 57M-552, 57M-552, 57M-55, 57M-55, 57M-55, 57M-55, 57M-55, 57M-55, 57M-55, 57	04/70		SA173-0.0	0.0													Х		Boring located to evaluate LOU 56
L-5 56 L-5 56 L-6 57 L-6 55 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 <td< td=""><td>0.4.7-0</td><td></td><td>SA173-0.5 SA173-10</td><td>0.5</td><td>X X</td><td>X X</td><td>X</td><td></td><td></td><td>X</td><td>X</td><td></td><td>X X</td><td></td><td>X X</td><td>Х</td><td></td><td></td><td>evaluate potiential runoff releases</td></td<>	0.4.7-0		SA173-0.5 SA173-10	0.5	X X	X X	X			X	X		X X		X X	Х			evaluate potiential runoff releases
L-556L-657L-657L-657L-657L-657L-655L-655L-655L-655L-655L-655L-655L-85L-85L-85L-85L-85M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-25M-45M-45M-45M-45M-552, 57M-552, 57M-55, 57M-55, 57M-55, 57M-55, 57	SA179		SA179-0.0	0.0	~	~	~	-		~	~		~		~		Х		Boring located to evaluate LOU 56
L-657L-657L-657L-657L-657L-655L-655L-655L-655L-655L-85L-85L-85L-85L-85M-25M-45M-45M-45M-45M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-552, 57M-55, 57M-55, 57M-55, 57M-55, 57M-55, 57M-55, 57M-55, 57		5	SA179-0.5	0.5	Х	Х	Х			Х	Х		Х		Х	Х			evaluate potiential runoff releases
L-657L-657L-657L-655L-655L-655L-655L-655L-655L-655L-85L-85L-85L-85L-85M-25M-45M-552,57M-552,57M-552,57M-552,57M-55,57M-55,57M-55,57M-55,57M-55,57M-55,57	0.170		SA179-10	10	Х	Х	Х			Х	Х		Х		Х		X		
L-6 57 L-6 57 L-6 57 L-6 55 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-5 </td <td>SA73</td> <td></td> <td>SA73-0.0 SA73-0.5</td> <td>0.0</td> <td>Х</td> <td>х</td> <td>Х</td> <td></td> <td></td> <td>х</td> <td>Х</td> <td></td> <td>Х</td> <td></td> <td>Х</td> <td>Х</td> <td>Х</td> <td></td> <td>Boring located to evaluate LOU 57 Process, AP Plant SIs and Transfe</td>	SA73		SA73-0.0 SA73-0.5	0.0	Х	х	Х			х	Х		Х		Х	Х	Х		Boring located to evaluate LOU 57 Process, AP Plant SIs and Transfe
L-6 57 L-6 55 L-6 55 L-6 55 L-6 55 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 $52, 57$ M-5 $5, 57$ M-5 $5, 57$ M-5 $5, 57$ M-5 $5, 57$			SA73-10	10	X	X	X			X	X		Hold		X	~			There are the the the the the the the the the th
L-6 55 L-6 55 L-6 55 L-6 55 L-6 55 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 <td></td> <td></td> <td>SA73-20</td> <td>20</td> <td>Х</td> <td>Х</td> <td>Х</td> <td></td> <td></td> <td>Х</td> <td>Х</td> <td></td> <td>Hold</td> <td></td> <td>Х</td> <td></td> <td></td> <td></td> <td></td>			SA73-20	20	Х	Х	Х			Х	Х		Hold		Х				
L-6 55 L-6 55 L-6 55 L-6 55 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 52, 57 M-5	RSAL6		SA73-25	25	Х	Х	Х			Х	Х		Х		Х		×		Device leasted to such state I OU 5
L-6 55 L-6 55 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 52, 57 M-5 52, 57 <td< td=""><td>RSALD</td><td></td><td>RSAL6-0.0 RSAL6-0.5</td><td>0.0</td><td>Х</td><td>х</td><td>Х</td><td>Х</td><td></td><td>х</td><td>Х</td><td></td><td>Х</td><td>х</td><td>Х</td><td>Х</td><td>Х</td><td></td><td>Boring located to evaluate LOU 55 Phase A boring SA20 located in the</td></td<>	RSALD		RSAL6-0.0 RSAL6-0.5	0.0	Х	х	Х	Х		х	Х		Х	х	Х	Х	Х		Boring located to evaluate LOU 55 Phase A boring SA20 located in the
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			RSAL6-10	10	X	X	X	X		X	X		Hold	X	X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Х	r nace it beinig ei ze leeatea in a
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			RSAL6-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
L-8 5 L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 5, 57	SA131		RSAL6-25 SA131-0.0	25 0.0	Х	Х	Х	Х		Х	Х		Х	Х	Х		Х		Boring located to evaluate LOU 5
L-8 5 L-8 5 L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 5, 57 M-5 5, 57 <	SAISI		SA131-0.0 SA131-0.5	0.0	Х	х	Х	Х		Х	Х	Х	Х	Х	х	Х	^		releases from off-site sources to the
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			SA131-10	10	Х	X	Х	X		X	X	X	Hold	X	X				
L-8 5 M-2 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 5, 57			SA131-20	20	X	X	X	X		X	X	X	Hold	X	X				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			SA131-30 SA131-35	30 35	X	X X	X	X		X	X	X	Hold X	X	X X				
M-2 5 M-4 5 M-4 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 5, 57	SA66		SA66-0.0	0.0	X	~	Λ	~ ~		X	Λ	~	X	~	Χ		Х		Boring located to evaluate LOU 5
M-2 5 M-4 5 M-5 52, 57 M-5 5, 57			SA66-0.5	0.5	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х			to the west. Also, a point of comp
M-2 5 M-4 5 M-5 52, 57 M-5 5, 57			SA66-10	10	X	X	X	X	X	X	X		Hold	X	X				
M-2 5 M-4 5 M-5 52, 57 M-5 5, 57			SA66-20 SA66-30	20 30	X X	X X	X	X	X	X X	X		Hold Hold	X X	X X				
M-2 5 M-2 5 M-2 5 M-2 5 M-4 5 M-5 52, 57 M-5 5, 57			SA66-40	40	X	X	X	X	X	X	X		X	X	X				
M-2 5 M-2 5 M-2 5 M-2 5 M-4 5 M-5 52, 57 M-5 5, 57	SA67		SA67-0.0	0.0													Х		Boring located to evaluate LOU 5
M-2 5 M-2 5 M-2 5 M-4 5 M-5 52, 57 M-5 5, 57			SA67-0.5 SA67-10	0.5	X X	X X	X X	X X	X	X X	X X		X Hold	X	X X	Х			ditch and possible run on from are
M-2 5 M-2 5 M-4 5 M-5 52, 57 M-5 5, 57			SA67-10	20	X	X	X	X	X	X	X		Hold	X	X				
M-4 5 M-4 5 M-4 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 5, 57			SA67-30	30	Х	Х	Х	Х	Х	Х	Х		Hold	Х	Х				
M-4 5 M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 5, 57	04400		SA67-40	40	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х		X		Design laws to the second second second
M-4 5 M-4 5 M-4 5 M-5 52, 57 M-5 5, 57	SA128		SA128-0.0 SA128-0.5	0.0	Х	х	Х	Х		х	Х	Х	Х	х	Х	Х	Х		Boring located to evaluate LOU 5 Diversion Ditch to evaluate inflow
M-4 5 M-5 52, 57 M-5 5, 57			SA128-10	10	X	X	X	X		X	X	X	Hold	X	X	X		Х	
M-4 5 M-5 52, 57 M-5 5, 57 M-5 5, 57 M-5 5, 57 M-5 5, 57			SA128-20	20	Х	Х	Х	Х		Х	Х	Х	Hold	Х	Х				
M-5 52, 57 M-5 5, 57			SA128-30 SA128-35	30 35	X X	X X	X X	X		X X	X	X	Hold X	X X	X X				
M-5 52, 57 M-5 5, 57 M-5 5, 57 M-5 5, 57 M-5 5, 57	SA65		SA65-0.0	0.0	^	^	^	^		^	^	^	^	^	^		Х		Boring located to evaluate LOU 52
M-5 52, 57 M-5 52, 57 M-5 52, 57 M-5 5, 57			SA65-0.5	0.5	Х	Х	Х			Х	Х		Х	Х	Х	Х			
M-5 52, 57 M-5 52, 57 M-5 5, 57	1		SA65-10	10	X	X	X			X	X		Hold	X	X				Process, AP Plant SIs and Transfe
M-5 52, 57 M-5 5, 57 M-5 5, 57 M-5 5, 57 M-5 5, 57			SA65-20 SA65-30	20 30	X X	X X	X			X X	X		Hold Hold	X X	X X				and for general coverage of LOU
M-5 5, 57 M-5 5, 57			SA65-35	35	X	X	X			X	X		X	X	X				
M-5 5, 57			SA70-0.0	0.0													Х		Boring located to evaluate LOU 5 (Be
	SA70		SA70-0.5 SA70-10	0.5	X X	X X	X X			X	X		X Hold	X X	X X	Х			Transfer Lines to Sodium Chlorate coverage of LOU 57 and as a dow
	SA70		SA70-10 SA70-20	10 20	X	X	X			X X	X X		Hold	X	X				coverage or LOU or and as a dow
M-5 5, 57	SA70		SA70-30	30	X	X	X			X	X		Hold	X	X				
M-5 5, 57	SA70		SA70-35	35	Х	Х	Х			Х	Х		Х	Х	Х			-	
M-5 5, 57 M-5 5, 57			SA104-0.0	0.0	v	~	v			v	v		v	v	v	v	Х		Boring located to evaluate Lou 5 (SIs and Transfer Lines). Located
M-5 5, 57 M-5 5, 57	SA70		SA104-0.5 SA104-10	0.5	X X	X X	X X			X X	X		X Hold	X X	X X	Х			ois and transier Lines). Located
M-5 5, 57		5	SA104-10	20	X	X	X			X	X		Hold	X	X				
M-5 5, 57		5		30	Х	Х	Х			Х	Х		Hold	Х	Х				
M-5 5, 57 M-5 5, 57			SA104-30 SA104-35	35	Х	Х	Х			Х	Х		Х	Х	Х		X		Boring located to evaluate LOU 5

2 (S-7).

J 31 and as a down gradient boring for LOU 19. (Drum Crushing and Recycling Area). Located i 31 and in an accessible low area down slope of LOU 19 to evaluate potential releases.

J 30 (AP Area Pad 35), LOU 56 (AP Plant Area and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate insfer Lines). Located at logical runoff point for releases from LOU 30 pad as an upslope stepout pout for LOU 57.

J 31 (Drum Crushing and Recycling Area). Located at former drum chrusher location and A boring SA19 is located downslope of the drum storage area.

J 56 (AP Plant Area Old D-1 Building Wash-Down). Located adjacent to LOU 56 bourndary to ses to the west. Phase A boring SA19 is located downslope of the drum storage area.

J 56 (AP Plant Area Old D-1 Building Wash-Down). Located adjacent to the LOU 56 boundary to ses to the east. Phase A boring SA19 is located downslope of the drum storage area.

J 57 (AP Plant Transfer Lines to Sodium Chlorate nsfer Lines). Located as a downslope stepout to the north of LOU 57 for area wide coverage.

J 55 (Area Affected by July 1990 Fire). Random location within the LOU to evaluate area wide n the northwest protion of LOU 55.

J 5 (Beta Ditch). Located in ditch bottom near downstream end of the Beta Ditch to evaluate to the east and from on-site processess at the Tronox facility.

J 5 (Beta Ditch). Located in the western ditch bottom to evaluate releases from off-site sources mparison for discharge to the downstream Western Diversion Ditch.

J 5 (Beta Ditch). Located on the south bank to evaluate possible overflow releases from LOU 5 areas to the south into the ditch.

J 5 (Beta Ditch). Located in the LOU 5 ditch bottom just downstream from the Western ow from the western and southwestern parts of Tronox and off-site facilities to the west.

J 52 (AP Plant Screening Building, Dryer Building

nsfer Lines). Located within LOU 52 in damaged pavement area to evaluate potiential releases DU 57.

(Beta Ditch) and LOU 57 (AP Plant Transfer and Associated Piping) and LOU 57 (AP Plant rate Lines to Sodium Chlorate Process, AP Plant SIs and Transfer Lines).Located for general downslope stepout for possible releases from LOU 5.

5 (Beta Ditch) and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant and in a low area near existing LOU 57 piping and as an upslope stepout fro LOU 5.

J 5 (Beta Ditch), LOU 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths ^{1.} (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH- DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs ^{2.} (EPA 8260B)	Wet Chemistry ^{3.}	Total Cyanide (EPA 9012A)	OCPs ^{4.} (EPA 8081A)	SVOCs ^{5.} (EPA 8270C)	Radio- nuclides ^{6.}	Dioxins/ Furans ^{7.}	Asbestos ^{8.} EPA/540/R-97/028	Geo- technical Tests ^{9.}	
					1	Bori	ings are o	rganized by g	rid location	as shown	on Plate A - Sta	arting point is or	the north	western mos	st grid in Are	a 2 (M-2) ar	nd ending with	the south	heastern most grid in Area 2 (S-7).
M-5	5, 57		SA129-0.5	0.5	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х			SIs and Transfer Lines). Located in a low spot within
M-5	5, 57		SA129-10	10	X	Х	X	X		X	X	X	Hold	X	X				
M-5 M-5	5, 57 5, 57		SA129-20 SA129-30	20 30	X	X	X	X X		X	X	X X	Hold Hold	X X	X X				
M-5	5, 57		SA129-35	35	X	X	X	X		X	X	X	X	X	X				
M-5	5, 57	RSAM5	RSAM5-0.0	0.0													Х		Boring located to evaluate LOU 5 (Beta Ditch) and L
M-5	5, 57		RSAM5-0.5	0.5	Х	Х	Х	Х		Х	X		Х	Х	Х	Х			SIs and Transfer Lines). Randomly located as an up
M-5 M-5	5, 57 5, 57		RSAM5-10 RSAM5-20	10 20	X	X	X	X		X	X		Hold Hold	X	X				
M-5	5, 57		RSAM5-20 RSAM5-30	30	X	X	X	X		X	X		Hold	X	X				
M-5	5, 57		RSAM5-35	35	X	X	X	X		X	X		X	X	X				
M-6	16, 17, 57, 60	SA64	SA64-0.0	0.0													Х		Boring located to evaluate LOUs 16 and 17 (Ponds /
M-6	16, 17, 57, 60		SA64-0.5	0.5	X	X	X			X	X		X	X	X	Х		V	Plant Transfer Lines to Sodium Chlorate Process, A
M-6 M-6	16, 17, 57, 60 16, 17, 57, 60		SA64-10 SA64-20	10 20	X	X	X			X	X		Hold Hold	X	X			Х	Located in a low spot of bottom of LOU 16 and 17 for releases, and for general coverage of LOU 57.
M-6	16, 17, 57, 60		SA64-30	30	X	X	X			X	X		X	X	X				
M-6	5, 16,17, 18	SA175	SA175-0.0	0.0													Х		Boring located to evaluate LOU 5 (Beta Ditch), LOU
M-6	5, 16,17, 18		SA175-0.5	0.5	X	Х	Х			Х	Х		Х	Х	Х	Х			Lines), and LOU 18 (Pond AP-4). Located in a low s
M-6 M-6	5, 16,17, 18 5, 16,17, 18		SA175-10 SA175-20	10 20	X	X	X			X	X X		Hold Hold	X	X				potential overflow releases from LOUs 5, 16, and 17
M-6	5, 16, 17, 18		SA175-20	30	x	X	X			X	X		X	X	X				
M-6	57	RSAM6	RSAM6-0.0	0.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~	~			~			~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Х		Boring located to evaluate LOU 57 (AP Plant Transf
M-6	57		RSAM6-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			Lines). Randomly located for general coverage of L
M-6	57		RSAM6-10	10	X	Х	X	X		X	X		Hold	X	X				
M-6 M-6	57 57		RSAM6-20 RSAM6-30	20 30	X	X	X	X		X	X		Hold Hold	X	X				
M-6	57		RSAM6-30	30	× ×	X	X	X		X	X		X	X	X				
M-6	16, 17, 57	SA197	SA197-0.0	0.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~	~	~~~~~		~			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Х		Boring located to evaluate LOUs 16 and 17 (Ponds /
M-6	16, 17, 57		SA197-0.5	0.5	Х	Х	Х			Х	Х		Х	Х	Х	Х			(AP Plant Transfer Lines to Sodium Chlorate Proces
M-6	16, 17, 57		SA197-10	10	X	X	X			X	X		Hold	X	X				of bottom of LOU 16 and 17 to evaluate worst case of
M-6 M-6	16, 17, 57 16, 17, 57		SA197-20 SA197-30	20 30	X	X X	X			X	X		Hold Hold	X	X X				
M-6	16, 17, 57		SA197-30 SA197-35	35	X	X	X			X	X		X	X	X				
M-6	16, 17, 57, 60	SA198	SA198-0.0	0.0													Х		Boring located to evaluate LOU 16 and 17 (Ponds A
M-6	16, 17, 57, 60		SA198-0.5	0.5	Х	Х	Х			Х	Х		Х	Х	Х	Х			Plant Transfer Lines to Sodium Chlorate Process, A
M-6 M-6	16, 17, 57, 60		SA198-10 SA198-20	10 20	X	X	X			X	X		Hold Hold	X	X			-	Located in a low spot of bottom of LOU 16 and 17 to and adjacent to the LOU 60 pipeline to evaluate poti
M-6	16, 17, 57, 60 16, 17, 57, 60		SA198-20 SA198-30	30	X	X	X			X	X		Hold	X	X				
M-6	16, 17, 57, 60		SA198-35	35	X	X	X			X	X		X	X	X				
M-7	18, 57	SA63	SA63-0.0	0.0													Х		Boring located to evaluate LOU 18 (Pond AP-4), and
M-7 M-7	18, 57		SA63-0.5	0.5	X	X	X			X	X		X Hold		X	Х			AP Plant SIs and Transfer Lines). Located in a low s
M-7	18, 57 18, 57		SA63-10 SA63-20	20	X	X	X			X	X		Hold		X				for general coverage of LOU 57.
M-7	18, 57		SA63-30	30	X	X	X			X	X		X		X				
M-7	5, 57	SA86	SA86-0.0	0.0													Х		Boring located to evaluate LOU 5 (Beta Ditch) and L
M-7	5, 57		SA86-0.5	0.5	X	Х	Х	X		Х	X	X	Х	X	X	Х			AP Plant SIs and Transfer Lines). Located in the bot
M-7 M-7	5, 57 5, 57		SA86-10 SA86-20	10 20	X	X	X	X		X	X	X	Hold Hold	X X	X				coverage of LOU 57.
M-7	5, 57		SA86-20 SA86-25	20	X	X	X	X		X	X	X	X	X	X				
M-7	5, 20	SA92	SA92-0.0	0.0													Х		Boring located to evaluate LOU 20 (Pond C-1 and A
M-7	5, 20		SA92-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			Eastern Diversion Ditche to evaluate upstream tribut
M-7 M-7	5, 20 5, 20		SA92-10 SA92-20	10 20	X	X	X	X		X	X		Hold Hold	X	X				
M-7	5, 20		SA92-20 SA92-30	30	× ×	X	X	X		X	X		X	X	X				
M-7	22, 23, 57	SA155	SA155-0.0	0.0	~	~	~	Χ		~	X		X	X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Х		Boring located to evaluate LOU 22 (Pond WC-West
M-7	22, 23, 57		SA155-0.5	0.5	Х	Х	Х			Х	Х		Х		Х	Х			and LOU 57 (AP Plant Transfer Lines to Sodium Ch
M-7	22, 23, 57		SA155-10	10	Х	Х	Х			Х	Х		Х		Х				potiential LOU 22 and 23 piping releases and for ger
M-7 M-7	5, 57 5, 57	RSAM7	RSAM7-0.0 RSAM7-0.5	0.0	Х	x	х	Х		х	х		х	Х	х	х	Х		Boring located to evaluate LOU 5 (Beta Ditch) and L AP Plant SIs and Transfer Lines). Randomly located
M-7	5, 57		RSAM7-0.5	10	X	X	X	X		X	X		Hold	X	X	^			coverage for LOU 57, and for site wide coverage.
M-7	5, 57		RSAM7-20	20	X	X	X	X		X	X		Hold	X	X				
M-7	5, 57		RSAM7-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
M-7	5, 57	04.00	RSAM7-35	35	Х	Х	Х	Х		Х	Х		Х	Х	Х		~		
M-8 M-8	20 20	SA62	SA62-0.0 SA62-0.5	0.0	Х	x	х	х		x	Х		х		х	х	Х		Boring located to evaluate LOU 20 (Pond C-1 and A inflow piping outlet to evaluate worst case conditions
M-8	20		SA62-0.5 SA62-10	10	X	X	X	X		X	X		Hold		X	^			mile worst case conditions
M-8	20		SA62-20	20	X	X	X	X		X	X		Hold		X				
M-8	20		SA62-22	22	Х	Х	Х	Х		Х	Х		Х		Х				
M-8	5, 20	SA71	SA71-0.0	0.0	~	~	~			~	~				~	~	Х		Boring located to evaluate LOU 5 (Beta Ditch) and L
M-8 M-8	5, 20 5, 20		SA71-0.5 SA71-10	0.5	X	X	X			X	X		X Hold		X	Х			possible overflow releases from historical LOU 5 Bet of SA71.
	J. 20		571-10	10	^	X	X		1	X	X	l	Hold	1	X			1	

2 (S-7).

ed in a low spot within LOU 5 to evaluate flow releases from the western half of the Tronox site.

5 (Beta Ditch) and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant omly located as an upslope stepout for LOU 5 and general coverage for LOU 57.

Is 16 and 17 (Ponds AP-1 through AP-3 and Associated Transfer Lines), LOU 57 (AP Chlorate Process, AP Plant SIs and Transfer Lines), and LOU 60 (Acid Drain System). n of LOU 16 and 17 for worst case coverage, near LOU 60 to evaluate possible piping rage of LOU 57.

5 (Beta Ditch), LOU 16 and 17 (Ponds AP-1 through AP-3 and Associated Transfer). Located in a low spot downslope of LOU 16 and 17. Upslope of LOU 5 to evaluate n LOUs 5, 16, and 17.

57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant SIs and Transfer eneral coverage of LOU 57 and for site wide coverage.

Is 16 and 17 (Ponds AP-1 through AP-3 and Associated Transfer Lines) and LOU 57 dium Chlorate Process, AP Plant SIs and Transfer Lines). Located in a low spot evaluate worst case conditions and for general coverage of LOU 57.

16 and 17 (Ponds AP-1 through AP-3 and Associated Transfer Lines), LOU 57 (AP Chlorate Process, AP Plant SIs and Transfer Lines), and LOU 60 (Acid Drain System) of LOU 16 and 17 to evaluate worst case conditions and for general coverage of LOU 57 eline to evaluate potiential local releases.

18 (Pond AP-4), and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate Process, s). Located in a low spot in the bottom of LOU 18 to evaluate worst case conditions and

5 (Beta Ditch) and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate Process, s). Located in the bottom of LOU 5 to evaluate upstream sources, and for general

20 (Pond C-1 and Associated Piping) and LOU 5 (Beta Ditch). Located in bottom of aluate upstream tributary releases and potiential overflow releases from LOU 20.

22 (Pond WC-West Associated Piping), LOU 23 (Pond WC-East Associated Piping), r Lines to Sodium Chlorate Process, AP Plant SIs and Transfer Lines). To evaluate g releases and for general stepout coverage of LOU 57. 5 (Beta Ditch) and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate Process, s). Randomly located to provide downslope overflow releases from LOU 5, general

20 (Pond C-1 and Associated Piping). Located in a low spot in the bottom and near an worst case conditions.

J 5 (Beta Ditch) and LOU 20 (Pond C-1 and Associated Piping). Located to evaluate n historical LOU 5 Beta Ditch and overflows from Iou 20; both LOUs are upslope

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths ^{1.} (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH- DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs ^{2.} (EPA 8260B)	Wet Chemistry ^{3.}	Total Cyanide (EPA 9012A)	OCPs ^{4.} (EPA 8081A)	SVOCs ^{5.} (EPA 8270C)	Radio- nuclides ^{6.}	Dioxins/ Furans ^{7.}	Asbestos ^{8.} EPA/540/R-97/028	Geo- technical Tests ^{9.}	
				r.				rganized by g	rid location	ř		arting point is or	î.	western mos		ea 2 (M-2) an	nd ending with	the south	eastern most grid in Area 2 (S
M-8	5, 20	01111	SA71-22	22	Х	Х	Х			Х	Х		Х		Х		~		
M-8 M-8	5, 20 5, 20	SA144	SA144-0.0 SA144-0.5	0.0	Х	х	х	Х		Х	Х		Х		Х	Х	Х		Boring located to evaluate LOU 5 possible overflow releases from hi
M-8	5, 20		SA144-10	10	X	X	X	X		X	X		Hold		X	~			of LOU 20 for worst case condition
M-8	5, 20		SA144-20	20	Х	Х	Х	Х		Х	Х		Hold		Х				
M-8	5, 20	04445	SA144-22 SA145-0.0	22	Х	Х	Х	Х		Х	Х		Х		Х		×		Denie z le cette d te curelucte I OII 20
M-8 M-8	20 20	SA145	SA145-0.0 SA145-0.5	0.0	Х	х	Х	Х		Х	х		Х		Х	Х	Х		Boring located to evaluate LOU 20 inlet pipe for worst case conditions
M-8	20		SA145-10	10	X	X	X	X		X	X		Hold		X				
M-8	20		SA145-20	20	Х	Х	Х	Х		Х	Х		Hold		Х				
M-8 M-8	20 20	RSAM8	SA145-22 RSAM8-0.0	22 0.0	Х	Х	Х	Х		Х	Х		Х		Х		Х		Boring located to evaluate LOU 20
M-8	20	NGAINO	RSAM8-0.5	0.0	Х	Х	Х	Х		Х	х		Х	Х	Х	Х	^		releases from LOU 20 and for site
M-8	20		RSAM8-10	10	X	X	X	Х		X	Х		Hold	X	X				
M-8	20		RSAM8-20	20	X	Х	Х	X		Х	X		Hold	X	X				
M-8 M-8	20 20		RSAM8-30 RSAM8-35	30 35	X X	X	X	X X		X	X		Hold X	X X	X X				
N-4	5	SA165	SA165-0.0	0.0	~	~	~	~		~	X		~	~	~		х		Boring located to evaluate LOU 5
N-4	5		SA165-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			discharging to the Western Diversi
N-4	5		SA165-10	10	X	X	X	X		X	X		Hold	X	X				
N-4 N-4	5 5		SA165-20 SA165-30	20 30	X X	X	X X	X X		X X	X		Hold Hold	X X	X X				
N-4	5		SA165-35	35	X	X	X	X		X	X		X	X	X				
N-5	57	SA58	SA58-0.0	0.0													Х		Boring located to evaluate LOU 57
N-5	57		SA58-0.5	0.5	X	Х	Х			Х	X		Х	Х	Х	Х			Lines). Located as an upslope step
N-5 N-5	57		SA58-10 SA58-20	10	X X	X	X X			X	X X		Hold Hold	X X	X X				
N-5 N-5	57 57		SA58-20 SA58-30	20 30	X	X	X			X	X		Hold	X	X				
N-5	57		SA58-35	35	X	X	X			X	X		X	X	X				
N-5	57	SA94	SA94-0.0	0.0													Х		Boring located to evaluate LOU 57
N-5	57		SA94-0.5	0.5	X	X	X			X	X		X	X	X	Х			Lines). Located to evaluate potent
N-5 N-5	57 57		SA94-10 SA94-20	10 20	X X	X	X			X	X		Hold Hold	X X	X X				
N-5	57		SA94-30	30	X	X	X			X	X		Hold	X	X				
N-5	57		SA94-35	35	Х	Х	Х			Х	Х		Х	Х	Х				
N-5	57	SA113	SA113-0.0	0.0	Y	V	v			V	×		v		V	V	Х		Boring located to evaluate LOU 57
N-5 N-5	57 57		SA113-0.5 SA113-10	0.5 10	X X	X	X			X X	X		X Hold		X X	Х			Lines). Located adjacent to LOU 5
N-5	57		SA113-20	20	X	X	X			X	X		Hold		X				
N-5	57		SA113-30	30	Х	Х	Х			Х	Х		Hold		Х				
N-5	57	DOANS	SA113-35	35	Х	Х	Х			Х	Х		Х		Х		~		
N-5 N-5	NA NA	RSAN5	RSAN5-0.0 RSAN5-0.5	0.0	Х	Х	х	Х		Х	х		Х	Х	Х	Х	Х		Boring located to evaluate general
N-5	NA		RSAN5-10	10	X	X	X	X		X	X		Hold	X	X	~			
N-5	NA		RSAN5-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
N-5	NA		RSAN5-30	30	X	X	X	X X		X	X		Hold	X	X				
N-5 N-5	NA 57	SA196	RSAN5-35 SA196-0.0	35 0.0	Х	Х	Х	~		Х	~		Х	Х	Х		Х		Boring located to evaluate LOU 57
N-5	57	0,1100	SA196-0.5	0.5	Х	Х	Х			Х	Х		Х	Х	Х	Х	X		Lines). Located along associated p
N-5	57		SA196-10	10	Х	Х	Х			Х	Х		Х	Х	Х				
N-6	53, 57	SA60	SA60-0.0	0.0	х	v	х			×	Х		х	v	х	х	Х		Boring located to evaluate LOU 53 Chlorate Process, AP Plant SI's ar
N-6 N-6	53, 57 53, 57		SA60-0.5 SA60-10	0.5 10	X	X	X			X	X		Hold	X	X	×			(see LOU 53 summary for historica
N-6	53, 57		SA60-20	20	X	X	X			X	X		Hold	X	X				(
N-6	53, 57		SA60-30	30	Х	Х	Х			Х	Х		Hold	Х	Х				
N-6	53, 57	04405	SA60-35 SA105-0.0	35	Х	Х	Х			Х	Х		Х	Х	Х		Х		Boring located to evaluate LOU 53
N-6 N-6	53, 57 53, 57	SA105	SA105-0.0 SA105-0.5	0.0	Х	Х	х	Х		Х	Х		Х		Х	Х	~		Chlorate Process, AP Plant SI's ar
N-6	53, 57		SA105-10	10	X	X	X	X		X	X		Hold		X	~			(see LOU 53 summary for historica
N-6	53, 57		SA105-20	20	Х	Х	Х	Х		Х	Х		Hold		Х				
N-6	53, 57		SA105-30	30	X	X	X	X		X	X		Hold		X				
N-6 N-6	53, 57 NA	SA150	SA105-37 SA150-0.0	37 0.0	Х	Х	Х	Х		Х	Х		Х		Х		Х		Boring located to evaluate general
N-6	NA	0/100	SA150-0.0	0.0	Х	Х	Х	Х		Х	х	х	Х	Х	Х	Х	^		Bornig located to evaluate gellela
N-6	NA		SA150-10	10	Х	Х	Х	Х		Х	Х	Х	Hold	Х	Х				
N-6	NA		SA150-20	20	X	X	X	X		X	X	X	Hold	X	X				
N-6 N-6	NA NA		SA150-30 SA150-35	30 35	X X	X	X X	X X		X X	X	X X	Hold X	X X	X X				
N-6	NA	RSAN6	RSAN6-0.0	0.0	^	^	^	^		^	^	^	^	^	^		х		Boring located to evaluate general
N-6	NA		RSAN6-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			
N-6 N-6	NA		RSAN6-10	10	Х	Х	Х	Х		Х	X		Hold	Х	Х				
	NA	1	RSAN6-20	20	Х	Х	Х	Х	1	Х	Х		Hold	Х	Х	1	1	1	1

2 (S-7<u>)</u>.

U 5 (Beta Ditch) and LOU 20 (Pond C-1 and Associated Piping). Located to evaluate n historical LOU 5 (before LOU 20 was constructed) and a low spot in bottom litions.

J 20 (Pond C-1 and Associated Piping). Located in a lowspot at the bottom and near an ions in LOU 20.

J 20 (Pond C-1 and Associated Piping). Randomly located to evaluate possible overflow site wide coverage.

J 5 (Beta Ditch). Located in the bottom of the ditch to evaluate upstream sources ersion Ditch portion of LOU 5.

J 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant SIs and Transfer stepout for general coverage of LOU 57.

1 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant SIs and Transfer ential releases from historical piping releases associated with LOU 57.

J 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant SIs and Transfer U 57 associated pipeline to evaluate potential releases.

eral site wide subsurface soil conditions; not associated with a specific LOU.

J 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant SIs and Transfer ed piping for LOU 57 and as an upslope stepout to LOU 57.

J 53 (AP Plant Area Tank Farm) and LOU 57 (AP Plant Transfer Lines to Sodium s and Transfer Lines). Located at a low spot at location of former tanks in LOU 53 prical source) to evaluate worst case conditions, and for general coverage of LOU 57.

J 53 (AP Plant Area Tank Farm) and LOU 57 (AP Plant Transfer Lines to Sodium s and Transfer Lines). Located at a low spot at location of former tanks in LOU 53 prical source) to evaluate worst case conditions, and for general coverage of LOU 57.

eral Site-wide conditions, is not associated with a specific LOU.

eral Site-wide conditions. Randomly located boring not associated with a specific LOU.

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths ^{1.} (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH- DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs ^{2.} (EPA 8260B)	Wet Chemistry ^{3.}	Total Cyanide (EPA 9012A)	OCPs ^{4.} (EPA 8081A)	SVOCs ^{5.} (EPA 8270C)	Radio- nuclides ^{6.}	Dioxins/ Furans ^{7.}	Asbestos ^{8.} EPA/540/R-97/028	Geo- technical Tests ^{9.}	
				(**3*)		Bori	ngs are o	ganized by g	rid location	as shown	on <u>Plate A</u> - St	arting point is o	n the north	western mos	st grid in Ar	ea 2 (M-2) ar	nd ending with	the south	neastern most grid in Area 2 (S
N-6	NA		RSAN6-30	30	X	Х	Х	Х		Х	Х		Hold	Х	X				
N-6 N-6	NA 20	SA151	RSAN6-35 SA151-0.0	35 0.0	Х	Х	Х	Х		Х	Х		Х	Х	Х		Х		Boring located to evaluate LOU 20
N-6	20	SAISI	SA151-0.0 SA151-0.5	0.0	Х	х	Х	х		х	х		х	Х	Х	Х	^		potential releases.
N-6	20		SA151-10	10	X	X	X	X		X	X		X	X	X				P
N-7	5, 57	SA49	SA49-0.0	0.0													Х		Boring located to evaluate LOU 5
N-7 N-7	5, 57 5, 57		SA49-0.5 SA49-10	0.5 10	X X	X X	X			X X	X		X Hold		X X	Х			AP Plant SIs and Transfer Lines). and for general coverage of LOU
N-7	5, 57		SA49-10 SA49-20	20	X	X	X X			X	X		Hold		X				and for general coverage of LOO :
N-7	5, 57		SA49-30	30	X	X	X			X	X		Hold		X				
N-7	5, 57		SA49-35	35	Х	Х	Х			Х	Х		Х		Х				
N-7	5	SA154	SA154-0.0	0.0	X	v	V	×		V	×		V	×	Y	V	Х		Boring located to evaluate LOU 5
N-7 N-7	5		SA154-0.5 SA154-10	0.5 10	X X	X X	X X	X X		X	X		X Hold	X	X X	Х			upstream tributary source flows in
N-7	5		SA154-20	20	X	X	X	X		X	X		Hold	X	X				
N-7	5		SA154-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
N-7	5		SA154-40	40	Х	Х	Х	Х		Х	Х		Х	Х	Х				
N-7 N-7	5	SA107	SA107-0.0 SA107-0.5	0.0	Х	Х	Х			х	Х		х	X	х	Х	Х		Boring located to evaluate LOU 5 upstream tributary source flows in
N-7	5		SA107-0.5	10	X	X	X			X	X		Hold	X	X	^			upstream indutary source nows in
N-7	5		SA107-20	20	X	X	X			X	X		Hold	X	X				
N-7	5		SA107-30	30	Х	Х	Х			Х	Х		Hold	Х	Х				
N-7	5	DOANIZ	SA107-40	40	Х	Х	Х			Х	Х		Х	Х	Х		X		
N-7 N-7	5, 20, 22, 23 5, 20, 22, 23	RSAN7	RSAN7-0.0 RSAN7-0.5	0.0	х	х	Х	Х		х	Х		х	Х	х	х	Х		Boring located to evaluate LOU 5 Associated Piping), and LOU 23 (F
N-7	5, 20, 22, 23		RSAN7-0.5	10	X	X	X	X		X	X		Hold	X	X	^			Diversion Ditch of LOU 5 to evalua
N-7	5, 20, 22, 23		RSAN7-20	20	X	X	X	X		X	X		Hold	X	X				releases from LOUs 22 and 23 pip
N-7	5, 20, 22, 23		RSAN7-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
N-7	5, 20, 22, 23	0101	RSAN7-35	35	Х	Х	Х	Х		Х	Х		Х	Х	Х		X		
N-8 N-8	20 20	SA61	SA61-0.0 SA61-0.5	0.0	Х	х	х	Х		х	Х		х		х	Х	Х		Boring located to evaluate LOU 20 inflow piping to evaluate possible p
N-8	20		SA61-10	10	X	X	X	X		X	X		Hold		X	~			overflow releases.
N-8	20		SA61-20	20	X	X	X	X		X	X		Hold		X				
N-8	20		SA61-30	30	Х	Х	Х	Х		Х	Х		Х		Х				
N-8	5, 20	SA158	SA158-0.0	0.0	X	v	V	×		V	×		V		Y	V	Х		Boring located to evaluate LOU 20
N-8 N-8	5, 20 5, 20		SA158-0.5 SA158-10	0.5 10	X X	X	X X	X X		X X	X		X Hold		X X	Х			inflow piping to evaluate possible overflow releases.
N-8	5, 20		SA158-20	20	X	X	X	X		X	X		Hold		X				
N-8	5, 20		SA158-30	30	Х	Х	Х	Х		Х	Х		Х		Х				
0-4	n/a	SA54	SA54-0.0	0.0	X	X	X	X		X	X		X	× ×	× ×	X	Х		Boring located to evaluate general
0-4 0-4	n/a n/a		SA54-0.5 SA54-10	0.5 10	X X	X	X X	X X		X	X		X Hold	X	X X	Х			
0-4	n/a		SA54-20	20	X	X	X	X		X	X		Hold	X	X				
0-4	n/a		SA54-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
0-4	n/a		SA54-37	37	Х	Х	Х	Х		Х	Х		Х	Х	Х				
O-5 O-5	45, 59, 60 45, 59, 60	SA41	SA41-0.0 SA41-0.5	0.0	х	х	х	х		х	Х		х	Х	х	X	Х		Boring located to evaluate LOU 45 System). Located on the perimeter
0-5 0-5	45, 59, 60		SA41-0.5	10	X	X	X	X		X	X		Hold	X	X	^			for historic details) and between L
0-5	45, 59, 60		SA41-20	20	X	X	X	X		X	X		Hold	X	X				
O-5	45, 59, 60		SA21-30	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
0-5	45, 59, 60	0444	SA21-40	40	Х	Х	Х	Х	-	Х	Х	-	Х	Х	Х		V		Design la sette d'éta esselvente l'OLL 45
O-5 O-5	45 45	SA44	SA44-0.0 SA44-0.5	0.0	Х	Х	Х	Х		х	Х		Х	Х	х	Х	Х		Boring located to evaluate LOU 45 aboveground storage tank to evalu
0-5	45		SA44-10	10	X	X	X	X		X	X		Hold	X	X	~			
O-5	45		SA44-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
0-5	45		SA44-30	30	X	X	X	X		X	X		Hold	X	Х				
O-5 O-5	45 45, 60	SA45	SA44-40 SA45-0.0	40 0.0	Х	Х	Х	Х	-	Х	Х		Х	Х	Х		х		Boring located to evaluate LOU 45
0-5 0-5	45, 60	0/40	SA45-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х	~		of a former tank to evaluate potent
O-5	45, 60		SA45-10	10	Х	Х	Х	Х		Х	Х		Hold	Х	Х				location.
O-5	45, 60		SA45-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
O-5	45, 60		SA45-30	30	X	X	X	X		X	X		Hold	X	X				
O-5 O-5	45, 60 8, 60	SA50	SA45-40 SA50-0.0	40	Х	Х	Х	Х	-	Х	Х		Х	Х	Х	1	х		Boring located as a westward step
0-5 0-5	8,60	57.50	SA50-0.0 SA50-0.5	0.0	Х	х	Х	Х	1	х	х		х	Х	Х	х	^		site conditions and possible overflo
O-5	8, 60		SA50-10	10	X	X	X	X		X	X		Hold	X	X				LOU 60 (former Acid Drain System
O-5	8, 60		SA50-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				-
0-5	8,60	0.4.50	SA50-30	30	Х	Х	Х	Х		Х	Х		Х	Х	Х				Design to the second second
O-5 O-5	7, 8, 9 7, 8, 9	SA53	SA53-0.0 SA53-0.5	0.0	х	х	х	х		х	Х		X	x	х	X	Х		Boring located to evaluate LOU 7 Facilities), and LOU 9 (New P-2 Po
	1,0,9				X	X	X	X		X	X		Hold	X	X	-			evaluate potential overflow surface
0-5	7, 8, 9		SA53-10	10	X					· ·									levaluate potential overnow surrace

Rationale 2 (S-7). 20 (Pond C-1 and Associated Piping). Located along LOU 20 piping to evaluate 5 (Beta Ditch) and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate Process, es). Located as a downslope stepout for LOU 5 to evaluate potential overflows releases 00 57. 5 (Beta Ditch). Located in the bottom of the Eastern Diversion Ditch to evaluate s in the ditch. 5 (Beta Ditch). Located in the bottom of the Eastern Diversion Ditch to evaluate in the ditch. 5 (Beta Ditch), LOU 20 (Pond C-1 and Associated Piping), LOU 22 (Pond WC-West 3 (Pond WC-East Associated Piping). Randomly located in a low spot of the Eastern aluate possible releases and overflow runoff from LOU 20. Also to evaluate potential piping. 20 (Pond C-1 and Associated Piping). Located adjacent to a sharp bend in LOU 20 ble pipeline releases at this high risk location and upslope of LOU 20 to evaluate 20 (Pond C-1 and Associated Piping). Located adjacent to a sharp bend in LOU 20 ble pipeline releases at this high risk location and upslope of LOU 20 to evaluate eral site wide subsurface soil conditions and not associated with a specific LOU. 45 (Diesel Storage Tanks), LOU 59 (Storm Sewer System), and LOU 60 Acid Drain neter of the former aboveground storage tank to evaluate potential releases (see text n LOUs 59 and 60 to evaluate possible piping releases. J 45 (Diesel Storage Tanks), System). Located on the perimeter of the former valuate potential releases (see text for historic details). J 45 (Diesel Storage Tanks) and LOU 60 (Acid Drain System). Located within the footprint tential subsurface releases and near LOU 60 manhole which is a high risk release step out to LOU 8 (Old P-3 Pond and Associated Conveyance Facilities). For general erflow release of surface runoff. Borin will also serve to evaluate potential releases from stem). 7 (Old P-2 Pond and Associated Conveyance Pond and Associated Conveyance Pond and Associated Piping). Located downslope between all three LOUs to

face runoff releases.

Grid Location	LOU Numbe	Phase B Boring No.	Sample ID Number	Sample Depths ^{1.} (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH- DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs ^{2.} (EPA 8260B)	Wet Chemistry ^{3.}	Total Cyanide (EPA 9012A)	OCPs ^{4.} (EPA 8081A)	SVOCs ^{5.} (EPA 8270C)	Radio- nuclides ^{6.}	Dioxins/ Furans ^{7.}	Asbestos ^{8.} EPA/540/R-97/028	Geo- technical Tests ^{9.}	
				(11. 693)		Bori	ngs are o		rid location	as shown	on <u>Plate A</u> - St	arting point is or	n the north	western mos	st grid in Area	a 2 (M-2) ar	nd ending with		eastern most grid in Area 2 (
O-5	7, 8, 9		SA53-30	30	Х	Х	Х	Х		Х	Х		Х	Х	Х				
O-5	7, 60	SA102	SA102-0.0	0.0													Х		Boring located to evaluate LOU 7
0-5	7, 60		SA102-0.5	0.5	X	Х	Х			Х	X		Х	X	X	Х			and LOU 60 (Acid Drain System).
0-5	7,60		SA102-10	10	X	X	X			X	X		Hold	X	X			Х	for piping releases.
0-5	7, 60 45	SA153	SA102-20	20 0.0	Х	Х	Х			Х	Х		Х	Х	Х		v		Paring logated to evoluate LOLL 46
O-5 O-5	45	5A155	SA153-0.0 SA153-0.5	0.0	Х	х	х	Х		Х	х		Х	Х	х	Х	Х		Boring located to evaluate LOU 45 tank to evaluate subsurface release
0-5	45		SA153-0.5	10	X	X	X	X		X	X		Hold	X	X	~			
O-5	45		SA153-20	20	X	X	X	X		X	X		Hold	X	X				
0-5	45		SA153-30	30	Х	Х	Х	Х		Х	Х		Х	Х	Х				
O-5	45, 59, 60	SA172	SA172-0.0	0.0													Х		Boring located to evaluate LOU 45
O-5	45, 59, 60		SA172-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			System). Located beneath the foo
0-5	45, 59, 60		SA172-10	10	X	Х	Х	Х		Х	X		Hold	Х	X				summary for historical data).
0-5	45, 59, 60	-	SA172-20	20	X	X	X	X		X	X		Hold	X	X				
0-5 0-5	45, 59, 60 45, 59, 60		SA172-30 SA172-35	30 35	X	X	X	X		X	X		Hold X	X	X X				
0-5 0-5	45, 59, 60	RSAO5	RSA05-0.0	0.0	^	^	^	^	-	^	^		^	^	^		х		Boring located to evaluate LOU 45
0-5	45	ROADS	RSA05-0.5	0.5	х	Х	Х	Х		Х	Х		Х	х	Х	Х	X		surface runoff releases and to evaluate
0-5	45		RSA05-10	10	X	X	X	X		X	X		Hold	X	X	~			
0-5	45		RSA05-20	20	X	X	X	X		X	X		Hold	X	X				
O-5	45		RSAO5-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
O-5	45		RSAO5-35	35	Х	Х	Х	Х		Х	Х		Х	Х	Х				
O-5	45	SA185	SA185-0.0	0.0													Х		Boring located to evaluate LOU 45
O-5	45		SA185-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			aboveground storage tank to eval
0-5	45		SA185-10	10	X	Х	Х	Х		Х	X		Hold	Х	X				
0-5	45	-	SA185-20	20	X	X	X	X		X	X		Hold	X	X				
0-5	45	-	SA185-30	30	X	X	X	X		X	X		Hold	X	X				
0-5	45 45	SA186	SA185-35	35 0.0	Х	Х	Х	Х		Х	Х		Х	Х	Х		Х		Paring loopted to evolute LOLL4
O-5 O-5	45	5A100	SA186-0.0 SA186-0.5	0.0	Х	х	х	Х		Х	х		Х	Х	Х	Х	^		Boring located to evaluate LOU 44 aboveground storage tank to eval
0-5 0-5	45		SA186-10	10	X	X	X	X		X	X		Hold	X	X	Λ			aboveground storage tank to evan
0-5	45		SA186-20	20	X	X	X	X		X	X		Hold	X	X				
0-5	45		SA186-30	30	X	X	X	X		X	X		Hold	X	X				
O-5	45		SA186-35	35	Х	Х	Х	Х		Х	Х		Х	Х	Х				
O-5	45, 59, 60	SA187	SA187-0.0	0.0													Х		Boring located to evaluate LOU 45
O-5	45, 59, 60		SA187-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			System). Located on the perimeter
0-5	45, 59, 60		SA187-10	10	Х	Х	Х	X		Х	X		Hold	X	X				for historic details) and between L
0-5	45, 59, 60	-	SA187-20	20	X	X	X	X		X	X		Hold	X	X				
0-5	45, 59, 60	-	SA187-30	30	X	X	X	X		X	X		Hold	X	X				
0-5 0-5	45, 59, 60 45, 59, 60	SA188	SA187-35 SA188-0.0	35 0.0	Х	Х	Х	Х	-	X	Х		Х	Х	Х		Х		Boring located to evaluate LOU 4
0-5 0-5	45, 59, 60	54100	SA188-0.5	0.5	х	Х	Х	х		Х	Х		Х	Х	х	Х	~		System). Located beneath the foo
0-5	45, 59, 60		SA188-10	10	X	X	X	X		X	X		Hold	X	X	~			summary for historical data).
O-5	45, 59, 60		SA188-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
O-5	45, 59, 60		SA188-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
O-5	45, 59, 60		SA188-35	35	Х	Х	Х	Х		Х	Х		Х	Х	Х				
O-6	45, 59, 60	SA40	SA40-0.0	0.0													Х		Boring located to evaluate LOU 45
0-6	45, 59, 60		SA40-0.5	0.5	X	Х	Х	X		Х	X		X	X	X	Х			System). Located on the perimeter
0-6	45, 59, 60		SA40-10	10	X	X	X	X		X	X		Hold	X	X				for historic details) and between L
0-6	45, 59, 60		SA40-20	20 30	X	X	X	X		X X	X		Hold	X	X X				
O-6 O-6	45, 59, 60 45, 59, 60	-	SA40-30 SA40-40	40	X	X	X X	X		X	X		Hold X	X	X				
0-6	45, 60	SA42	SA40-40 SA42-0.0	0.0	^	^	^	^		^	^		^	^	^		х		Boring located to evaluate LOU 45
0-6	45, 60	0/112	SA42-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		within the footprint of former above
0-6	45, 60		SA42-10	10	X	X	X	X		X	X		Hold	X	X	~			possible local piping releases.
O-6	45, 60		SA42-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
O-6	45, 60		SA42-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
O-6	45, 60		SA42-40	40	Х	Х	Х	Х		Х	Х		Х	Х	Х				
O-6	45	SA43	SA43-0.0	0.0													Х		Boring located to evaluate LOU 45
0-6	45	-	SA43-0.5	0.5	X	Х	Х	X		Х	X		Х	X	X	Х			System). Located on the perimeter
0-6	45	-	SA43-10	10	X	X	X	X		X	X		Hold	X	X				for historic details) and between L
0-6	45 45		SA43-20 SA43-30	20 30	X	X X	X	X X		X X	X		Hold Hold	X X	X X				
O-6 O-6	45	1	SA43-30 SA43-40	30 40	X	X	X X	X		X	X		Hold	X	X				
0-6 0-6	45	SA51	SA43-40 SA51-0.0	0.0	^	^	^	^		^	^	1	^	^	^		х		Boring located to evaluate LOU 14
0-6	14	5651	SA51-0.5	0.0	х	Х	Х	х		Х	х		Х	Х	х	Х	~		bottom of LOU 14 to evaluate wor
0-6	14		SA51-10	10	X	X	X	X	1	X	X	1	Hold	X	X				
0-6	14	1	SA51-20	20	X	X	X	X	1	X	X		Hold	X	X			1	
0-6	14		SA51-30	30	X	X	X	X		X	X		X	X	X				
O-6	13	RSAO6	RSAO6-0.0	0.0													Х		Boring located to evaluate LOU 13
0-6	13		RSAO6-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			worst case conditions and site wid
O-6	13		RSAO6-10	10	Х	Х	Х	Х		Х	Х		Hold	Х	Х				

2 (S-7<u>)</u>.

J 7 (Old P-2 Pond and Associated Conveyance Facilities), LOU 8 (Old P-3 Facilities), m). Located at a lowspot in bottom of LOU 7 for worst case evaluation and near LOU 60

I 45 (Diesel Storage Tanks). Located beneath the footprint of a aboveground storage eases (See LOU 45 summary for historical data).

J 45 (Diesel Storage Tanks) and LOU 59 (Storm Sewer System), and LOU 60 (Acid Drain footprint of a aboveground storage tank to evaluate subsurface releases (See LOU 45

45 (Diesel Storage Tanks). Randomly located within LOU 45 to evaluate possible evaluate site wide conditions.

I 45 (Diesel Storage Tanks), System). Located on the perimeter of the former valuate potential releases (see text for historic details).

J 45 (Diesel Storage Tanks), System). Located on the perimeter of the former valuate potential releases (see text for historic details).

U 45 (Diesel Storage Tanks), LOU 59 (Storm Sewer System), and LOU 60 Acid Drain meter of the former aboveground storage tank to evaluate potential releases (see text en LOUs 59 and 60 to evaluate possible piping releases.

J 45 (Diesel Storage Tanks) and LOU 59 (Storm Sewer System), and LOU 60 (Acid Drain footprint of a aboveground storage tank to evaluate subsurface releases (See LOU 45

U 45 (Diesel Storage Tanks), LOU 59 (Storm Sewer System), and LOU 60 Acid Drain meter of the former aboveground storage tank to evaluate potential releases (see text en LOUs 59 and 60 to evaluate possible piping releases.

145 (Diesel Storage Tanks) and LOU 60 (Acid Drain System). Located at a low spot oveground storage tank to evaluate potential releases and near LOU 60 piping to evaluate

J 45 (Diesel Storage Tanks), LOU 59 (Storm Sewer System), and LOU 60 Acid Drain neter of the former aboveground storage tank to evaluate potential releases (see text n LOUs 59 and 60 to evaluate possible piping releases.

1 14 (Pond P-1 and Associated Conveyance Piping). Located in a low spot in the vorst case conditions.

J 13 (Pond S-1). Random boring in a lowspot in the bottom of LOU 13 to evaluate wide conditions.

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths ^{1.} (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH- DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs ^{2.} (EPA 8260B)	Wet Chemistry ^{3.}	Total Cyanide (EPA 9012A)	OCPs ^{4.} (EPA 8081A)	SVOCs ^{5.} (EPA 8270C)	Radio- nuclides ^{6.}	Dioxins/ Furans ^{7.}	Asbestos ^{8.} EPA/540/R-97/028	Geo- technical Tests ^{9.}	
				(11. 593)		Bori	ngs are o	, ,	rid location	as shown o	on Plate A - St	arting point is or	n the north	western mos	st grid in Are	ea 2 (M-2) a	nd ending with		neastern most grid in Area 2 (S
O-6	13		RSAO6-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
0-6	13		RSAO6-30	30	X	Х	Х	X		Х	X		Hold	X	X				
O-6 O-6	13 9	SA200	RSAO6-35 SA200-0.0	35 0.0	Х	Х	Х	Х		Х	Х		Х	Х	Х		Х		Boring located to evaluate LOU 9 (
0-6	9	3A200	SA200-0.0 SA200-0.5	0.0	Х	х	Х	Х		х	Х		Х	Х	Х	Х	^		to evaluate worst case conditions.
0-6	9		SA200-10	10	X	X	X	X		X	X		Hold	X	X	~~~~~			
O-6	9		SA200-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
0-6	9	04404	SA200-30	30	Х	Х	Х	Х	-	Х	Х		Х	Х	Х		×		
Q-5 Q-5	11 11	SA124	SA124-0.0 SA124-0.5	0.0	х	Х	х			х	Х		Х	Х	х	Х	X		Boring located to evaluate LOU 11 at a likely runoff location to evaluat
Q-5	11		SA124-10	10	X	X	X			X	X		Hold	X	X	~			
Q-5	11		SA124-20	20	Х	Х	Х			Х	Х		Hold	Х	Х				
Q-5	11		SA124-30	30	X	X	Х			X	X		Hold	Х	X				
Q-5 Q-5	11 59	RSAQ5	SA124-35 RSAQ5-0.0	35 0.0	Х	Х	Х			Х	Х		Х		Х		Х		Boring located to evaluate LOU 59
Q-5	59	Nonqu	RSAQ5-0.5	0.0	Х	Х	Х	х		Х	Х		Х	Х	Х	Х	^		possible piping releases and for sit
Q-5	59		RSAQ5-10	10	X	X	X	X		X	X		Hold	X	X	~			
Q-5	59		RSAQ5-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
Q-5	59		RSAQ5-30	30	X	X	X	X		X	X		Hold	X	X				
Q-5 Q-6	59 15, 60	SA126	RSAQ5-35 SA126-0.0	35 0.0	Х	Х	Х	Х		Х	Х		Х	Х	Х		Х		Boring located to evaluate LOU 15
Q-6	15, 60	3A120	SA126-0.0	0.0	Х	х	Х	Х		х	Х		Х	Х	Х	Х	^		possible and downslope of LOU 15
Q-6	15, 60		SA126-10	10	X	X	X	X		X	X		Hold	X	X	X			evaluate local piping releases.
Q-6	15, 60		SA126-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
Q-6	15, 60		SA126-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	X				
Q-6	15, 60	DCAOC	SA126-35	35	Х	Х	Х	Х	-	Х	Х		Х	Х	Х		×		Design lagested as early 1 OU 42 (U
Q-6 Q-6	43, 59, 60 43, 59, 60	RSAQ6	RSAQ6-0.0 RSAQ6-0.5	0.0	Х	Х	х	Х		х	Х		Х	Х	Х	Х	Х		Boring located nearby LOU 43 (Ur Sewer System), and LOU 60 (Acid
Q-6	43, 59, 60		RSAQ6-10	10	X	X	X	X		X	X		Hold	X	X	~			releases and near LOU 60 piping t
Q-6	43, 59, 60		RSAQ6-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
Q-6	43, 59, 60		RSAQ6-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
Q-6	43, 59, 60	04400	RSAQ6-35	35	Х	Х	Х	Х	-	Х	Х		Х	Х	Х		×		
R-5 R-5	36 36	SA133	SA133-0.0 SA133-0.5	0.0	Х	х	х	Х		х	Х		Х		Х	Х	Х		Boring located to evaluate LOU 36 damaged pavement area within LC
R-5	36		SA133-10	10	X	X	X	X		X	X		Hold		X	~			damaged pavement area within EC
R-5	36		SA133-20	20	Х	Х	Х	Х		Х	Х		Hold		Х				
R-5	36		SA133-30	30	X	Х	Х	X		Х	X		Hold		X				
R-5 R-6	36	SA30	SA133-35	35	Х	Х	Х	Х		Х	Х		Х		Х		×		
R-6	59, 60 59, 60	5A30	SA30-0.0 SA30-0.5	0.0	Х	Х	х	Х		х	Х		Х	Х	х	Х	X		Boring located to evaluate LOU 59 and 60 piping to evaluate possible
R-6	59, 60		SA30-10	10	X	X	X	X		X	X		Hold	X	X	~		Х	
R-6	59, 60		SA30-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
R-6	59, 60		SA30-30	30	X	X	X	X		Х	X		Hold	X	X				
R-6 R-6	59, 60 43	SA31	SA30-35 SA31-0.0	35 0.0	Х	Х	Х	Х		Х	Х		Х	Х	Х		Х		Boring located to evaluate LOU 43
R-6	43	0/101	SA31-0.5	0.5	Х	х	Х			х	Х		Х		Х	Х	~		upslope as a stepout for LOU 43 a
R-6	43		SA31-10	10	X	X	X			X	X		Hold		X				
R-6	43		SA31-20	20	Х	Х	Х			Х	Х		Hold		Х				
R-6	43		SA31-30	30	X	X	X			X	X		Hold		X				
R-6 R-6	43 43, 60	SA32	SA31-35 SA32-0.0	35 0.0	Х	Х	Х			Х	Х		Х		Х		Х		Boring located to evaluate LOU 43
R-6	43, 60	07.02	SA32-0.0	0.5	Х	Х	Х	х		Х	Х		Х		Х	Х	~		(Acid DrainSystem). Located within
R-6	43, 60		SA32-10	10	X	X	X	X		X	X		Hold		X				piping to evaluate local piping relea
R-6	43, 60		SA32-20	20	Х	Х	Х	Х		Х	Х		Hold		Х				
R-6	43, 60		SA32-30	30	X	X	X	X		X	X		Hold		Х				
R-6 R-6	43, 60 12, 59, 60	SA125	SA32-35 SA125-0.0	35 0.0	Х	Х	Х	Х		Х	Х		Х		Х		х		Boring located to evaluate LOU 12
R-6	12, 59, 60	3A123	SA125-0.0	0.0	Х	Х	Х	х		Х	Х		Х	Х	Х	Х	^		(Acid DrainSystem). Located down
R-6	12, 59, 60		SA125-10	10	X	X	X	X		X	X		Hold	X	X				piping to evaluate high risk release
R-6	12, 59, 60		SA125-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
R-6	12, 59, 60		SA125-30	30	X	X	X	X		Х	X		Hold	X	Х				
R-6 R-6	12, 59, 60 43	SA161	SA125-35 SA161-0.0	35 0.0	Х	Х	Х	Х		Х	Х		Х	Х	Х		Х		Boring located to evaluate LOU 43
R-6	43	JAIOI	SA161-0.0 SA161-0.5	0.0	Х	х	х			х	Х		Х		х	Х	^		Colocated with SG70 to compare \
R-6	43		SA161-10	10	X	X	X			X	X	1	Hold		X				
R-6	43		SA161-20	20	Х	Х	Х			Х	Х		Hold		Х				
R-6	43		SA161-30	30	X	X	X			X	X		Hold		X				
R-6	43	SA208	SA161-35	35	Х	Х	Х			Х	Х		Х	+	Х	+	~		Paring logated to such stal 011.42
R-6 R-6	43 43	SAZUO	SA208-0.0 SA208-0.5	0.0	Х	Х	Х			х	Х		Х		Х	Х	Х		Boring located to evaluate LOU 43 in the basement footprint of LOU 4
R-6	43		SA208-10	10	X	X	X			X	X	1	Hold		X	~ ~			
R-6	43		SA208-20	20	X	X	X			X	X		Hold	1	X		1		

Rationale 2 (S-7). 9 (New P-2 Pond and Associated Piping). Located in a lowspot in the bottom of LOU 9 11 (Sodium Chlorate Filter Cake Holding Area). Located adjacent to LOU 11 pad luate possible release runoff. Phase A boring SA05 located north (downslope) of LOU 11. 59 (Storm Sewer System). Random boring located near LOU 59 piping to evaluate site wide conditions. 15 (Platinum Drying Unit) and LOU 60 (Acid Drain System). Located as close as J 15 to evaluate potential surface runoff releases and adjacent to LOU 60 piping to 3 (Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning), LOU 59 Storm Acid Drain System). Located downslope of OU 43 to evaluate potential subsurface ng to evaluate local piping releases. J 36 (Former Satellite Accumulation Point, Unit 3, Maintenance Shop). Located in LOU 36 to evaluate worst case location of surface releases. 59 (Storm Sewer System) and LOU 60 (Acid 'Drain System). Located near LOU 59 ble local piping releases and for general site coverage in Unit Buildings area. 43 (Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning). Located 13 and colocated with SG43 to compare VOC results, and for general site coverage. 43 (Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning), and LOU 60 ithin the footprint of LOU 43 as a worst case location and also located near LOU 60 eleases near a manhole. J 12 (Hazardous Waste Storage Area), LOU 59 (Storm Sewer System), and LOU 60 ownslope of LOU 12 to evaluate surface runoff releases and adjacent to LOU 59 and 60 ase locations (Manhole). 43 (Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning). re VOC results, and for general site coverage. 43 (Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning). Located U 43 as a worst case location to evaluate surface releases.

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths ^{1.} (ft. bgs)	Perchlorate (EPA 314.0)		Hex Cr (EPA 7199)	TPH- DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)		Wet Chemistry ^{3.}	Total Cyanide (EPA 9012A)	OCPs ^{4.} (EPA 8081A)	SVOCs ^{5.} (EPA 8270C)	Radio- nuclides ^{6.}	Dioxins/ Furans ^{7.}	Asbestos ^{8.} EPA/540/R-97/028	Geo- technical Tests ^{9.}	
						Bor	ings are o	rganized by g	rid location	as shown	on Plate A - St	arting point is o	n the north	western mos	st grid in <u>Are</u>	<u>a 2 (M-2)</u> a	nd ending with	the south	eastern most grid in Area 2 (S
R-6	43		SA208-30	30	Х	Х	Х			Х	Х		Hold		Х				
R-6	43		SA208-35	35	Х	Х	Х			Х	Х		Х		Х				
R-6	43, 59, 60	RSAR6	RSAR6-0.0	0.0													Х		Boring located to evaluate LOU 43
R-6	43, 59, 60		RSAR6-0.5	0.5	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х			and LOU 59 (Storm Sewer System
R-6	43, 59, 60		RSAR6-10	10	Х	Х	Х	Х		Х	Х		Hold	Х	Х				stepout for general coverage, adja
R-6	43, 59, 60		RSAR6-20	20	Х	Х	Х	Х		Х	Х		Hold	Х	Х				wide coverage.

2 (S-7).

U 43 (Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning), stem) and LOU 60 (Acid Drain System). Random boring located near LOU 43 as a adjacent to LOU 59 and 60 piping to evaluate high risk release area (junction) and for site

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths ^{1.} (ft. bgs)	Perchlorate (EPA 314.0)			TPH- DRO/ORO (EPA 8015B)		VOCs ^{2.} (EPA 8260B)	Wet Chemistry ^{3.}	Total Cyanide (EPA 9012A)	OCPs ^{4.} (EPA 8081A)	SVOCs ^{5.} (EPA 8270C)	Radio- nuclides ^{6.}	Dioxins/ Furans ^{7.}	Asbestos ^{8.} EPA/540/R-97/028	Geo- technical Tests ^{9.}	
									rid location	as shown (arting point is or	1	western mos		a <u>2 (M-2)</u> ai	nd ending with	the south	eastern most grid in Area 2 (S
R-6	43, 59, 60		RSAR6-30	30	Х	Х	Х	Х		Х	Х		Hold	Х	Х				
R-6	43, 59, 60		RSAR6-35	35	Х	Х	Х	Х		Х	Х		Х	Х	Х				
S-7	29	SA122	SA122-0.0	0.0													Х		Boring located to evaluate LOU 29
S-7	29		SA122-0.5	0.5	Х	Х	Х			Х	Х		Х		Х	Х			between the two active dumpsters
S-7	29		SA122-10	10	Х	Х	Х			Х	Х		Х		Х				
S-7	29	SA170	SA170-0.0	0.0	X		× ×				X		×	-			Х		Boring located to evaluate LOU 29
S-7 S-7	29 29		SA170-0.5 SA170-10	0.5 10	X	X	X			X	X X		X		X	Х			stained area to evaluate visible su
	er of Borings:	82	SA170-10	10	X	Х	Х			Х	X		Х		X				
		-	dure (SPLP) Sa	10.															
					1									1	1				Soil sample collected from the southe
L-6	55	RSAL6	RSAL6-10	10	Х	Х	Х	Х		Х	Х		х	Х	Х			Х	analytes from Alluvium (Qal) soils. Ex
				DD+															Optional sample - only to be collecte
L-6	55	RSAL6	RSAL6-DD	DD* = depth (ft)	Х	х	Х	Х		х	Х		Х	Х	Х			х	Contact between Qal & MCfg1 is appr
				depth (It)															type: Calichified Gravelly Sand.
M-4	5	SA128	SA128-10	10	х	х	х	х		х	х	х	Х	х	х			х	Soil sample collected from within LOU
IVI Ŧ	5	0/120	0/120 10	10	Λ	~	~	Λ		~	Λ	~	Χ	~	~			~	System) to evaluate leaching potentia
	-			DD* =	X	N/					X								Optional sample - only to be collecte
M-4	5	SA128	SA128-DD	depth (ft)	Х	Х	Х	Х		Х	Х	х	Х	Х	х			Х	Contact between Qal & MCfg1 is appr type: Sand.
	5, 16, 17, 57,			,										1					Soil sample collected from within LOU
M-6	60	SA64	SA64-10	10	Х	Х	Х			х	Х		Х	Х	Х			Х	Site-related analytes from Alluvium (C
																			Optional sample - only to be collecte
M-6	5, 16, 17, 57,	SA64	SA64-DD	DD* =	х	х	Х			х	х		х	х	х			Х	Contact between Qal & MCfg1 is appr
	60			depth (ft)															type: Calichified Gravelly Sand.
O-5	7	SA102	SA102-10	10	х	х	х			х	Х		х	Х	х			х	Soil sample collected within the bound
0-5	'	SATUZ	3A102-10	10	^	^	^			^	^		^	^	^			^	Site-related analytes. Expected soil ty
	_			DD* =															Optional sample - only to be collecte
O-5	7	SA102	SA102-DD	depth (ft)	х	Х	Х			Х	х		Х	Х	х			Х	Contact between Qal & MCfg1 is appr
																			type: Calichified Gravel. Soil sample collected west of LOU 43
R-6	59, 60	SA30	SA30-10	10	Х	Х	Х			х	Х		Х	Х	Х			Х	related analytes. Expected soil type:
																			Optional sample - only to be collecte
R-6	59, 60	SA30	SA30-DD	DD* =	х	х	х			х	х		х	х	х			х	Contact between Qal & MCfg1 is appr
	,			depth (ft)															type: Sand.
Numb	er of Samples:				375	375	375	248	10	375	375	26	174	281	375	82	42	10	
		QA/QC Sam																	_
		Field Duplic			38	38	38	25	1	38	38	3	18	29	38	9	5	0	4
		Field Blanks			1	1	1	1	1	1	1	1	1	1	1	1	1	0	4
			Rinsate Blanks	8	30	30	30	30	30	30	30	30	30	30	30	30	30	0	4
		Trip Blank S			0	0	0	0	6	15	0	0	0	0	0	0	0	0	4
		Matrix Spike			19	19	19	13	1	19	19	2	9	15	19	1	0	0	4
			Duplicate (5%)		19 482	19	19	13 330	1 50	19	19 482	2 64	9	15 371	19 482	1	0	0	4
Notes:		Total Samp	e count:		482	482	482	330	50	497	482	64	241	3/1	482	124	78	10	1

Notes:

n/a Not applicable - boring is not associated with a specific LOU but is located to evaluate soil for general area-wide coverage.

X Sample will be collected and analyzed.

No sample collected under Phase B sampling program.

DD* Sample depth to be determined in the field where DD = sample depth (ft).

PH-DRO/ORO Total petroleum hydrocarbons - Diesel-Range Organics/Oil-Range Organics.

1. The 0.5 ft bgs sample will be collected from the 0.0 to 0.5 ft bgs interval, unless the area is paved. If area is paved, samples will be collected at 0.5 feet below or from a representative depth beneath the pavement. Alternately, if an unpaved area is within a reasonable distance, the sample will be moved to the unpaved area. 2. Samples for VOC analysis will be preserved in the field using sodium bisulfate (or DI water) and methanol preservatives per EPA Method 5035.

Consists of wet chemistry parameters (including pH) listed on Table 1 of the Phase B Source Area Work Plan.

Consists of were chemistry parameters (including pH) listed on Table 1 of the Phase B Sot
 Organochlorine Pesticides (includes analysis for hexachlorobenzene).

Organochionne Pesticides (includes analysis for nexact
 Semi-volatile Organic Compounds

Radionuclides consists of alpha spec reporting for isotopic thorium and isotopic uranium, and Radium-226, plus Radium-228 by beta counting (per NDEP).

Provided for 90% of the samples and full data packages for 10% of the samples.

8. Soil samples for asbestos analyses will be collected from a depth of 0 to 2-inches bgs.

Geotechnical Tests consist of: moisture content (ASTM D-2216), grain size analysis (ASTM D-422 and C117-04), Soil Dry Bulk Density (ASTM D-2937), Grain Density (ASTM D-854, Soil-Water Filled Porosity (ASTM D-2216); Vertical Hydraulic Conductivity (ASTM D-5084/USEPA 9100).
 SPLP samples will be analyzed by EPA method 1312 using two preparation methods: 1) with extraction fluid #2 (reagent water at pH 5.00±0.05), and 2) with extraction method #3 (reagent water); per NDEP.

Rationale

2 (S-7<u>)</u>.

29 (Solid Waste Dumpsters). Located within the footprint of LOU 29 at a ers.

29 (Solid Waste Dumpsters). Located within the footprint of LOU 29 at a surface release area.

theast corner of LOU 55 (Area Affected by July 1990 Fire) to evaluate leaching potential of Site-related Expected soil type: Gravelly Sand.

ected if soil type is different than at 10 ft bgs; **no sample will be collected within the capillary fringe**. approximately 36 feet bgs. Groundwater is expected to occur at approximately 37 feet bgs. Expected soil

.OU 5 (Beta Ditch) at the confluence of the Stauffer Extension and the out-flow from LOU 59 (Storm Sewer ntial of Site-related analytes. Expected soil type: Sand.

ected if soil type is different than at 10 ft bgs; **no sample will be collected within the capillary fringe**. approximately 30 feet bgs. Groundwater is expected to occur at approximately 35 feet bgs. Expected soil

LOU 16 and 17 (Ponds AP-1 through AP-3 and Associated Transfer Lines) to evaluate leaching potential of n (Qal) soils. Expected soil type: Gravelly Sand.

ected if soil type is different than at 10 ft bgs; **no sample will be collected within the capillary fringe**. approximately 26 feet bgs. Groundwater is expected to occur at approximately 26 feet bgs. Expected so

oundaries of LOU 7 (Old P-2 Pond and Associated Conveyance Facilities) to evaluate leaching potential of oil type: Gravelly Sand.

ected if soil type is different than at 10 ft bgs; **no sample will be collected within the capillary fringe**. approximately 39 feet bgs. Groundwater is expected to occur at approximately 41 feet bgs. Expected soil

J 43 (Old Sodium Plant Decommissioning and Unit-4 Basement) to evaluate leaching potential of Sitepe: Sand with caliche lens.

ected if soil type is different than at 10 ft bgs; **no sample will be collected within the capillary fringe**. approximately 33 feet bgs. Groundwater is expected to occur at approximately 40 feet bgs. Expected soil

Grid Location	Location Area	Monitoring Well No.	Screen Interval (ft bgs)	Soil Type Expected Across Screen Interval ¹	for Phase A? (y/n)	Perchlorate (EPA 314.0)	Hex Cr (EPA 7199)	Metals	VOCs ² (EPA 8260)	Wet Chemistry (a)	OCPs ³ (EPA 8081A)	SVOCs ⁴ (EPA 8270C)	Radionuclid es⁵	Rationale
							1				_			nd ending with the southeastern-most grid covering Area II (S-7).
L4	IIE	M-14A	20 - 40	Qal/MCfg1	no	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout to LOU 5; and for general Site coverage.
L5	IIN	I-B	17.8 - 42.5	Qal/MCfg1	no	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout to LOUs 30 and 56 and for general Site coverage.
L5		I-AR	25 - 45	Qal/MCfg1	yes	X	X	X	X	X	X	X	X	Located as an upgradient stepout for LOUs 30, 31, and 56; and LOU 58 and for general Site coverage.
L6	IIN	M-55	14.6 - 44.6	Qal/MCfg1	yes	Х	Х	Х	Х	Х	Х	Х	Х	Located as a downgradient stepout to LOU 55; and for general Site coverage.
L6	IIN	M-78	21.5 - 41.5	Qal/MCfg1	no	Х	Х	Х	Х	Х	Х	Х	Х	Located as a downgradient stepout to LOU 55; and for general Site coverage.
L6	II	M-64	12.7 - 37.3	Qal/MCfg1	no	Х	Х	Х	Х	Х	Х	Х	Х	Located to evaluate LOU 55; as a downgradient stepout for LOUs 30 and 56 and for general Site coverage.
L6	П	M-25	24 - 39	Qal/MCfg1	no	Х	Х	Х	X	Х	Х	Х	Х	Located to serve as a downgradient stepout for LOUs 16, 19 and 53 as an upgradient stepout for LOU 55; and for general Site coverage.
L6	II	M-38	20 - 35	Qal/MCfg1	no	Х	Х	Х	Х	Х	Х	Х	Х	Located to serve as a downgradient stepout for LOUs 16, 17, 19, and LOU 57; and for general Site coverage.
L8	IIN	M-68	11.2 - 39.8	Qal/MCfg1	no	Х	Х	Х	Х	Х	Х	Х	Х	Located to serve as a downgradient stepout for LOU 5; and for general Site coverage.
L9	IIN	CLD2-R	20 - 40.27	Qal	no	Х	Х	Х	Х	Х	Х	Х	Х	Located to serve as a downgradient stepout for LOU 5; and for general Site coverage.
M2	IIN	TR-4	124.5 - 144.5	MCfg1	no	Х	Х	Х	Х	Х	Х	Х	Х	Located to serve as a downgradient stepout for LOU 5; and for general Site coverage.
M3	IIN	M-125	TBD	TBD	new well	Х	х	Х	х	Х	х	Х	х	Located to serve as a downgradient stepout for LOU 5; and for general Site coverage.
M5	П	M-110	30 - 40	Qal/MCfg1	no	х	х	х	х	Х	х	х	х	Located to evaluate LOU 57 as a downgradient stepout for LOU 5; and for general Site coverage.
M5	П	M-111A*	29.7 - 39.7	Qal/MCfg1	new well	Х	х	Х	х	Х	х	х	х	Replacement well for M-111 which was destroyed by site grading and located to evaluate LOU 57; a downgradient stepout for LOU 52; as an upgradient stepout for LOUs 5 and 19; and for general Site coverage.
M6	11	M-89	18 - 38.2	Qal/MCfg1	yes	Х	х	Х	х	Х	х	Х	Х	Located to evaluate LOU 57; as a downgradient stepout for LOUs 5, 16, 17, and 53; and for general Site coverage.
M7	П	M-22A	16 - 36	Qal/MCfg1	no	х	х	Х	х	Х	х	х	х	Located to evaluate LOU 57; as a downgradient stepout for LOUs 5, and 16 through 18; and for general Site coverage.
M8	IIN	M-39	24.9 - 39.9	Qal/MCfg1	yes	х	х	х	х	Х	х	х	Х	Located as a downgradient stepout for LOUs 5, 20, 22 (pipelines in Area II) and LOU 23 (pipelines in Area II); and for general Site coverage.
M8	II	M-19	14.5 - 34.5	Qal/MCfg1	no	х	x	х	x	х	х	х	х	Located to serve as an upgradient stepout for LOUs 5 and 20; to evaluate LOUs 22 and 23 and potential offsite sources to the east; and as general Site coverage.
N4	IIN	M-142	TBD	TBD	new well	х	х	х	х	х	х	х	х	Located to serve as an upgradient stepout for LOU 5; and for general Site coverage.
N5	II	M-75	34.6 - 49.3	Qal/MCfg1	no	х	х	х	x	х	х	х	х	Located to serve as a downgradient stepout for LOUs 7, 8, 9, and 45; as an upgradient stepout for LOUs 16, 17, 19, 53 and 57; and for general Site coverage.
N5	II	M-76	34.6 - 49.3	MCcg1	yes	Х	х	х	x	х	х	Х	х	Located to serve as a downgradient stepout for LOUs 8 and 45; as an upgradient stepout for LOUs 53 and 57; and for general Site coverage.
N6	II	M-2A*	nr	nr	yes	Х	х	х	x	Х	х	х	х	Located as a downgradient stepout for LOUs 7, 8, 9, 13, 14, 20, 34, and 45; as an upgradient stepout for LOUs 16, 17, 18, 22, 23, 53, and 57; and for general Site coverage.
N6	II	M-17A	35 - 45	Qal/MCfg1	no	Х	х	х	х	Х	x	х	х	Located to evaluate LOU 57; as an upgradient stepout for LOUs 5, 16, 17, 18, 22, and 23; and for general Site coverage.
N7	II	M-34	25 - 40	Qal/MCfg1	no	Х	х	х	х	Х	х	х	х	Located to evaluate the outfall of the culvert that empties into the Eastern Diversion segment of LOU 5; as a downgradient stepout for LOUs 13 and 14 as un upgradient step out for LOUs 20, 22, and 23; and for general Site coverage.
N7	IIS	M-35	25 - 40	Qal/MCfg1	no	Х	х	х	x	Х	x	х	х	Located to evaluate LOUs 5, 20, 22, and 23; and for general Site coverage.
O2	IIS	M-123	TBD	TBD	new well	Х	х	х	х	х	х	Х	х	Located to serve as an upgradient stepout for LOU 5; and for general Site coverage.
O5	II	M-21	18 - 38	MCfg1	no	Х	х	х	x	х	х	х	х	Located to evaluate LOU 45; as an upgradient stepout for LOUs 7, 9, 13 and 14; as a downgradient stepout for LOU 59; and for general Site coverage.
O6	II	M-50	39.6 - 59.6	MCfg1	no	Х	х	х	x	х	х	х	х	Located to serve as a downgradient stepout for a segment of LOU 59 located in Area II as a ??? well for LOUs 13 and 14; and for general Site coverage.
P5	IIS	M-97	35 - 45	MCfg1/MCcg1	yes	Х	х	х	х	Х	х	х	х	Located to serve as an upgradient stepout for LOU 45 and segments of LOU 59 located in Area II; and for general Site coverage.

Grid Location	Location Area	Monitoring Well No.	Screen Interval (ft bgs)	Soil Type Expected Across Screen Interval ¹	Well Sampled for Phase A? (y/n)	Perchlorate (EPA 314.0)	Hex Cr (EPA 7199)	Metals	VOCs ² (EPA 8260)	Wet Chemistry (a)	OCPs ³ (EPA 8081A)	SVOCs ⁴ (EPA 8270C)	Radionalcina A an ⁵ Rationale
			Wells are orga	anized by grid l	ocation as sl	nown on Pla	te A - Startii	ng point is	s on the no	rthwesterr	n-most gri	id in Area	rea II (L-4) and ending with the southeastern-most grid covering Area II (S-7).
P7	IIE	M-52	34.5 - 44.5	MCfg1	no	х	х	х	x	х	х	х	X Located to evaluate LOUs 43, 11, 12, and 15; and for general Site coverage.
Q5	П	M-13	40 - 50	Qal/MCfg1	yes	х	х	х	x	х	х	х	X Located to serve as a downgradient stepout for LOU 60; as an upgradient stepout for LOUs 36 and 45; and for general Site coverage.
Q6	11	M-12A	28 48	MCfg1	yes	Х	х	Х	х	х	х	х	X Located as a downgradient stepout for LOUs 12, 15, 29, 36, 43, 59 and 60; and for general Site coverage.
Q7	IIN	M-11	33.3 - 53	Qal/MCfg1	yes	Х	х	х	x	Х	Х	х	X Located to serve as a downgradient stepout for LOUs 29 and 43; and for general Site coverage.
R5	IIS	M-144	TBD	TBD	new well	Х	х	х	x	Х	х	х	X Co-located with Boring SA133 as an upgradient stepout for LOU 60; and for general Site coverage.
R5	II	M-146	TBD	TBD	no	Х	х	х	x	Х	х	х	X Located to evaluate LOU 36; and for general Site coverage.
Τ7	IIS	M-10	43 - 63	MCcg1	no	Х	х	х	х	Х	х	х	X Located to serve as an upgradient stepout for LOUs 29, 43 and segments of LOU 60 in Area II; and for general Site coverage.
1 2 3 4 5	licates (10 ks Rinsate Bla Samples ike (5%) te Duplicate ples: Sample wi It is anticip VOCs = V OCPs = C SVOCs = Radionucl	ill be collected bated that the la /olatile organic Drganochlorine Semi volatile o ides consists o	arge majority of th compounds (to in pesticides (to inco organic compound f alpha spec repo	nclude analysis fo	or naphthalene) hexachlorober Thorium and is	i. izene).							2 33 0 2 2 2 79
nr TBD (a) Qal MCfg1	Not record To be dete Complete Quaternar Muddy Cre	ded in the All W ermined when y list of wet cher y Alluvium eek Formation	/ells Database (Je well is constructe	une 2008). Id s are shown on Ta d facies		ndwater samp	les will have p	H measure	d in the field				

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LOU	Closure Goal
LOU 5	Closure for future commercial and industrial uses.
LOU 7, 8, 9, 13, and 14	Closure for future commercial and industrial uses.
LOU 16, 17, 18, 19, 52, 53, and 57	Closure for future commercial and industrial uses.
LOU 20	Continuation of current use - regulatory closure not presently requested.
LOU 22 and 23	Continuation of current use - regulatory closure not presently requested.
LOU 29	Continuation of current use – regulatory closure not presently requested.
LOU 11, 12, 15, and 43	Closure for future commercial and industrial uses.
LOU 36	Closure for future commercial and industrial uses.
LOU 30 and 56	Closure for future commercial and industrial uses.
LOU 31	Closure for future commercial and industrial uses.
LOU 45	Closure for future commercial and industrial uses.
LOU 55	Restricted closure for commercial and industrial uses.
LOU 59	Continuation of current use – regulatory closure not presently requested.
LOU 60	Closure for future commercial/industrial use.

ENSR | AECOM

Table 5

Soil Borings Not Associated With An LOU But Included As Part of the Site-wide Investigation

Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada

1 of 1

Soil Boring No.	Grid Location	Area
RSA N5	N-5	II
RSA N6	N-6	II
SA 150	N-6	II
SA 54	O-4	II

Table 6 Sample Containers, Analytical Methods, and Holding Times for Soil Samples Phase B Source Area Investigation Work Plan - Area II

Tronox Facility - Henderson, Nevada Page 1 of 1

Analyte	Method	Container (Minimum Volume)	Holding Time
Asbestos	EPA/540/R-97/028	I kilogram in plastic bag or glass jar, no preservative	6 months
Cyanide	EPA 9012A	4-oz. glass jar	14 days
Dioxins/Furans	EPA Method 8290	4-oz. glass jar	30 days
Formaldehyde	EPA Method 8315A	4-oz. glass jar	14 days
General Chemistry Anions/Cations	Prep method 1:10 Di leach / various analytical methods****	4-oz. glass jar	None (leachate holdtime per water methods)
Hexavalent Chromium	EPA 7199 by ion chromatography, EPA 3060A for digestion	4-oz. glass jar	28 days to digestion, then 4 days to analysis of digestate
Metals*	EPA 6010 / 6020	4-oz. glass jar	6 months
Organochlorinated Pesticides	EPA Method 8081A	4-oz. glass jar	14 days
PCBs as Aroclors	EPA Method 8082	4-oz. glass jar	14 days
PCBs as congeners	EPA Method 1668A	4-oz. glass jar	1 year
SVOCs	EPA Method 8270	4-oz. glass jar	14 days
Total Organic Carbon	Lloyd Kahn method	4-oz. glass jar	28 days
TPH***	EPA 8015B (EPA 5035 for GRO fraction)	(3) Methanol preserved VOA vials for GRO; glass jar for DRO/ORO.	14 days
VOCs	EPA 8260B/5035	4 40-mL VOA vials**	14 days
Radionuclides:			
Radium-226	EPA 903.1 modified	4-oz. poly jar, no preservative	6 months
Radium-228	EPA 904.0 modified	4-oz. poly jar, no preservative	6 months
Thorium (Isotopic)	EML HASL 300 Alpha Spec	4-oz. poly jar, no preservative	6 months
Uranium (Isotopic)	EML HASL 300 Alpha Spec	4-oz. poly jar, no preservative	6 months
Note:	•		

Note:

* Includes the metals listed on Table 1.

For samples listing 4-oz. glass jar, one metal sleeve can be substituted.

** Three VOA vials preserved with DI water and one VOA vial preserved with methanol.

*** TPH includes GRO, DRO, and ORO.

***** See analytes in GW list (except TSS, TOC, cyanide, and conductance)

Table 7 Sample Containers, Analytical Methods, and Holding Times for Groundwater Samples Phase B Source Area Investigation Work Plan - Area II Tronox Facility - Henderson, Nevada Page 1 of 1

Analyte	Method	Container (Minimum Volume)	Holding Time
Perchlorate	EPA 314.0	(1) 125-ml plastic bottle	28 days
Formaldehyde	EPA 8315A	(1) 1-liter amber glass/ no preservative	3 days
Hexavalent Chromium	EPA 218.6	(1) 250-ml plastic bottle w/buffer, field filtered	24 hours
Metals*	EPA 6010B / 6020	(1) 500-ml plastic bottle w/ HNO3	6 months
Organochlorine Pesticides	EPA 8081A	(1) 1-liter amber glass/ no preservative	7 days
PCBs as Aroclors	EPA 8082	(1) 1-liter amber glass/ no preservative	7 days
PCBs as congeners	EPA 1668A	(1) 1-liter amber glass/ no preservative	1 year
SVOCs	EPA 8270	(1) 1-liter amber glass/ no preservative	7 days
VOCs	EPA 8260B	(3) 40-ml VOA vials w/HCl	14 days
General Water Chemistry			
Alkalinity	SM 2320B	500-ml plastic no preservative	14 days
Ammonia	EPA 350.1	500-ml plastic w/H2SO4	28 days
Bromide	EPA 9056	125-ml plastic bottle/ no preservative	28 days
Chlorate	EPA 300.1	125-ml plastic bottle/ no preservative	28 days
Chloride	EPA 9056	**(2) liter plastic bottles	28 days
Cyanide	EPA 9012A	(1) 500-ml plastic bottle w/ NaOH	14 days
Electrical Conductivity	EPA 9050	125-ml plastic no preservative	28 days
Nitrate	EPA 9056	**Use same bottles	48 hours
Nitrite	EPA 9056	125-ml plastic no preservative	48 hours
рН	EPA 9040B	125-ml plastic no preservative	15 minutes
Phosphate	EPA 365.1	125-ml plastic bottle, no preservative	48 hours
Sulfate	EPA 9056	**Use same bottles	28 days
Surfactants (MBAS)	SM 5540C	125-ml plastic no preservative	48 hours
TDS	SM 2540C	125-ml plastic no preservative	28 days
Total Organic Carbon	EPA 9060	(2) 40-ml VOA vials w/H2SO4	28 days
TSS	SM 2540D	125-ml plastic no preservative	7 days
Radionuclides:			
Radium-226	EPA 903.1	(1) 1-liter poly bottle (must be full), Preservative pH <2 HNO3	6 months
Radium-228	EPA 904.0	(1) 1-liter poly bottle (must be full), Preservative pH <2 HNO3	6 months
Thorium (Isotopic)	EML HASL 300 Alpha Spec	(1) 1-liter poly bottle (must be full), Preservative pH <2 HNO3	6 months
Uranium (Isotopic)	EML HASL 300 Alpha Spec	(1) 1-liter poly bottle (must be full), Preservative pH <2 HNO3	6 months

* Includes the metals listed on Table.
 ** Chloride, Nitrate, Nitrate, Bromide, and Sulfate use same bottle for all these samples. Sample containers are (2) liter plastic bottles.

Phase B Source Area Investigation Work Plan Area III

Tronox Facility - Henderson, Nevada

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Well ⁽¹⁾	Owner	x	Y	TOC Elevation	Ground Elevation	Casing Stickup ²	Muddy Creek Elevation ³	QAL Thickness ⁴	Hole Total Depth	Well Total Depth	Depth to Screen Top	Depth to Screen Bottom	Screen Interval	Status	Туре	Aquifer
Note: Proposed Pr	nase B wells for	Area II are listed o	n Table 3 and are hig	hlighted in BOLI	below.		•		•				•	•	•	
ARP-1	Kerr-McGee	828593.16400	26728365.51400	1613.32	1613.33	-0.01	1573.3	40.0	45.0	44.2	14.0	44.0	30.0	Active	Monitoring	Qal
ARP-2	Kerr-McGee	828726.35300	26728363.61200	1612.79	1613.03	-0.24	1562.0	51.0	52.0	51.2	16.0	51.0	35.0	Active	Monitoring	Qal
ARP-3	Kerr-McGee	828860.76500	26728364.88700	1612.17	1612.38	-0.21	1570.4	42.0	45.0	44.2	14.0	44.0	30.0	Active	Monitoring	Qal
ARP-4	Kerr-McGee	829171.78600	26728363.72300	1613.01	1613.13	-0.12	1576.1	37.0	45.0	45.2	15.0	45.0	30.0	P&A	Monitoring	Qal
ARP-4A	Tronox	829167.88600	26728411.80800	1615.47	1615.72	-0.25	1583.2	32.5	35.0	33.0	17.7	32.7	15.0	Active	Monitoring	Qal
ARP-5 ARP-5A	Kerr-McGee	829395.33800 829375.00500	26728452.84200 26728458.42700	1615.01 1616.10	1615.41 1616.50	-0.40 -0.40	<1576.4 1579.0	>29.0 37.5	29.0 40.0	29.2 38.0	14.0 12.7	29.0 37.7	15.0 25.0	P&A Active	Monitoring	Qal Qal
ARP-6	Tronox Kerr-McGee	829531.51000	26728496.98500	1615.28	1615.48	-0.19	<1575.5	>40.0	40.0	39.2	14.0	39.0	25.0	P&A	Monitoring Monitoring	Qal
ARP-6A	Kerr-McGee	829514.77800	26728480.20000	1614.11	1614.27	-0.17	<1576.27	>38.0	38.2	38.2	18.0	38.0	20.0	P&A	Monitoring	Qal
ARP-6B	Tronox	829520.51600	26728499.91700	1615.56	1615.70	-0.15	1573.7	42.0	43.0	43.0	27.7	42.7	15.0	Active	Monitoring	Qal
ARP-7	Kerr-McGee	829668.21600	26728501.08000	1613.20	1613.39	-0.19	1571.4	42.0	45.0	39.2	14.0	39.0	25.0	Active	Monitoring	Qal
ART-1	Kerr-McGee	828543.96100	26728122.70700	1614.47	1615.57	-1.10	1562.6	53.0	58.0	56.0	14.0	54.0	40.0	Active	Recovery	Qal
ART-1A	Kerr-McGee	828536.78090	26728122.21220	1614.40	1615.80	-1.40	1561.8	54.0	58.0	56.0	19.0	54.0	35.0	Active	Recovery	Qal
ART-2	Kerr-McGee	828625.02500	26728084.71200	1617.10	1617.42	-0.32	1562.4	55.0	57.0	56.0	19.0	54.0	35.0	Active	Recovery	Qal
ART-2A	Kerr-McGee	828618.82410	26728085.55750	1616.81	1618.33	-1.52	1561.3	57.0	58.0	58.0	21.0	56.0	35.0	Active	Recovery	Qal
ART-3	Kerr-McGee	828775.42200	26728085.17000	1617.94	1617.61	0.33	1572.6	45.0	48.5	47.0	15.0	45.0	30.0	Active	Recovery	Qal
ART-3A ART-4	Kerr-McGee	828768.70360	26728084.69710	1617.60	1619.14 1617.91	-1.54	1566.1 1573.9	53.0 44.0	58.0 48.0	55.0 46.0	18.0 19.0	53.0	35.0	Active	Recovery	Qal Qal
ART-4 ART-4A	Kerr-McGee Kerr-McGee	828850.69300 828844.48660	26728085.25800 26728084.58090	1617.46 1617.46	1617.91	-0.45 -1.45	1573.9	44.0	48.0 48.0	46.0	19.0	44.0 44.0	25.0 25.0	Active Active	Recovery Recovery	Qal
ART-5	Kerr-McGee	829369.97600	26728128.79100	1614.06	1614.18	-0.12	1589.2	25.0	28.0	27.0	15.0	25.0	10.0	Active	Recovery	Qal
ART-6	Kerr-McGee	829472.90500	26728140.59900	1615.31	1616.25	-0.94	1582.3	34.0	38.0	36.0	14.0	34.0	20.0	Active	Recovery	Qal
ART-6A	Kerr-McGee	829478.82640	26728140.78980	1614.71	1616.26	-1.55	1582.3	34.0	38.0	36.0	19.0	34.0	15.0	Active	Recovery	Qal
ART-7	Kerr-McGee	829576.52100	26728145.70600	1615.38	1616.32	-0.94	1577.3	>39.0	38.9	38.9	16.9	36.9	20.0	Active	Recovery	Qal
ART-7A	Kerr-McGee	829582.79470	26728143.19440	1614.78	1616.35	-1.57	1575.0	>41.0	40.0	41.0	18.0	38.0	20.0	Active	Recovery	Qal
ART-8	Kerr-McGee	828697.72000	26728084.09600	1617.69	1618.54	-0.85	1567.5	51.0	54.0	50.5	18.0	48.0	30.0	Active	Recovery	Qal
ART-8A	Kerr-McGee	828691.88650	26728083.30800	1617.10	1618.53	-1.43	1566.5	52.0	58.0	54.0	22.0	52.0	30.0	Active	Recovery	Qal
ART-9	Tronox	829525.56800	26728143.32400	1615.06	1616.16	-1.10	1576.2	40.0	45.0	43.0	20.5	40.5	20.0	Active	Recovery	Qal
B-1	Kerr-McGee	828417.50000	26728049.50000		1616.02		1577.5	38.5	50.5					P&A	Boring	
B-2 B-3	Kerr-McGee Kerr-McGee	828808.50000 829209.90000	26728095.50000 26728102.80000		1616.10 1613.92		1572.1 1592.4	44.0 21.5	54.5 33.5					P&A P&A	Boring Boring	
B-3 B-4	Kerr-McGee	829599.10000	26728102.80000		1615.92		1592.4	42.0	54.5					P&A P&A	Boring	
B-5	Kerr-McGee	829209.95000	26728070.85500		1617.01		1595.0	22.0	29.3					P&A	Boring	
B-6	Kerr-McGee	829219.21700	26728071.17300		1617.09		1595.1	22.0	46.0					P&A	Boring	
B-7	Kerr-McGee	829448.04200	26728078.31600		1617.06		1584.1	33.0	41.0					P&A	Boring	
B-8	Kerr-McGee	829456.62800	26728079.61200		1617.03		1583.5	33.5	56.0					P&A	Boring	
I-A	Kerr-McGee	827188.26900	26719753.34900	1753.20	1750.10	3.10	1732.1	18.0	42.5	41.0	21.2	40.5	19.3	P&A	Recovery	MCfg1
I-AA	Tronox	827174.40000	26719770.85000	1753.93	1751.08	2.86	1721.1	30.0	47.0	46.0	23.7	43.7	20.0	Active	Recovery	MCfg1
I-A-R	Kerr-McGee	827414.35000	26719429.52000	1758.35	1758.02	0.33	1731.0	27.0	45.0	45.0	25.0	45.0	20.0	Active	Recovery	MCfg1
I-B	Kerr-McGee	827282.89000	26719808.09000	1752.70	1750.00	2.70	1723.0	27.0	46.0	43.0	17.8	42.5	24.7	Active	Recovery	Qal/MCfg1
I-C I-D	Kerr-McGee Kerr-McGee	827486.47200 827582.20700	26719791.89800 26719805.21000	1752.80 1752.70	1752.00 1750.00	0.80 2.70	1724.5 1721.0	27.5 29.0	44.5 47.0	43.0 45.0	13.2 16.0	42.5 44.5	29.3 28.5	Active Active	Recovery	MCfg1 Qal/MCfg1
I-D I-E	Kerr-McGee	827582.20700	26719805.21000	1752.70	1750.00	2.70	1721.0	29.0	47.0	45.0 44.0	21.5	44.5 43.5	28.5	Active	Recovery Recovery	MCfg1
I-E	Kerr-McGee	827879.69900	26719825.57900	1749.70	1747.70	2.40	1723.0	30.0	50.0	43.8	11.8	43.3	31.5	Active	Recovery	Qal/MCfg1
I-G	Kerr-McGee	828030.70200	26719866.33400	1752.50	1749.20	3.30	1721.2	28.0	43.5	39.3	9.5	38.8	29.3	Active	Recovery	Qal/MCfg1
I-H	Kerr-McGee	828177.54600	26719887.12500	1753.20	1750.30	2.90	1721.8	28.5	47.0	43.6	13.6	43.1	29.5	Active	Recovery	MCfg1
I-I	Kerr-McGee	828375.03600	26719914.40400	1745.50	1742.30	3.20	1715.8	26.5	45.0	41.0	11.3	40.5	29.2	Active	Recovery	Qal/MCfg1
I-J	Kerr-McGee	828573.93500	26719940.33200	1750.10	1746.50	3.60	1718.5	28.0	45.0	41.0	11.2	40.5	29.3	Active	Recovery	Qal/MCfg1
I-K	Kerr-McGee	828738.08900	26719962.86700	1746.00	1750.08	-4.08	1725.6	24.5	43.0	35.8	7.0	35.2	28.2	Active	Recovery	MCfg1
I-L	Kerr-McGee	827352.85500	26719803.22900	1751.70	1748.30	3.40	1720.3	28.0	45.0	40.0	9.0	39.0	30.0	Active	Recovery	Qal/MCfg1
I-M	Kerr-McGee	827669.83400	26719817.41600	1752.90	1749.20	3.70	1719.2	30.0	45.0	40.0	9.0	39.0	30.0	Active	Recovery	Qal/MCfg1
I-N I-O	Kerr-McGee	827802.25100	26719837.84600	1751.40	1747.80	3.60	1713.8	34.0	45.0	38.0	7.0	37.0	30.0	Active	Recovery	Qal/MCfg1
I-O I-P	Kerr-McGee Kerr-McGee	828263.13000 828221.65800	26719897.99700 26719892.08400	1752.80 1751.70	1749.00 1749.20	3.80 2.50	1719.0 1716.2	30.0 33.0	40.0 45.0	40.0 44.5	9.0 14.0	39.0 44.0	30.0 30.0	Active Active	Recovery	Qal/MCfg1 Qal/MCfg1
I-P I-Q	Kerr-McGee	828221.65800	26719892.08400	1751.70	1749.20	2.50 3.70	1716.2	28.0	45.0 40.0	44.5	9.6	44.0 39.6	30.0	Active	Recovery Recovery	Qal/MCfg1
I-Q I-R	Kerr-McGee	827316.05500	26719855.17400	1751.35	1749.06	2.29	1721.4	28.0	40.0	40.0	9.8 9.8	39.8	30.0	Active	Recovery	Qal/MCfg1
I-S	Kerr-McGee	827404.20400	26719799.87400	1750.03	1747.57	2.46	1721.1	26.5	45.2	45.2	12.0	42.0	30.0	Active	Recovery	Qal/MCfg1
I-T	Kerr-McGee	828073.49500	26719873.65600	1751.66	1749.03	2.63	1718.0	31.0	60.0	45.2	12.0	42.0	30.0	Active	Recovery	Qal/MCfg1
I-U	Kerr-McGee	828118.59900	26719879.67000	1752.17	1749.54	2.63	1721.0	28.5	45.0	45.0	12.0	42.0	30.0	Active	Recovery	Qal/MCfg1
I-V	Kerr-McGee	828326.27500	26719894.96600	1752.13	1749.46	2.67	1717.0	32.5	55.0	45.0	12.0	42.0	30.0	Active	Recovery	Qal/MCfg1
I-W	Kerr-McGee	828245.87050	26719895.87300	1751.50	1749.12	2.38	1727.1	33.0	51.0	50.5	20.0	50.0	30.0	Active	Monitoring	Qal/MCfg1

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Well ⁽¹⁾	Owner	x	Y	TOC Elevation	Ground Elevation	Casing Stickup ²	Muddy Creek Elevation ³	QAL Thickness⁴	Hole Total Depth	Well Total Depth	Depth to Screen Top	Depth to Screen Bottom	Screen Interval	Status	Туре	Aquifer
Note: Proposed Ph	hase B wells for J	Area II are listed o	n Table 3 and are hig	hlighted in BOLI	D below.											
I-X	Kerr-McGee	827840.22800	26719843.07900	1748.60	1746.22	2.38	1713.2	33.0	51.0	50.5	20.0	50.0	30.0	Active	Monitoring	Qal/MCfg1
I-Y	Kerr-McGee	827334.68650	26719800.77900	1751.40	1748.89	2.51	1720.9	28.0	50.5	50.5	20.0	50.0	30.0	Active	Monitoring	Qal/MCfg1
I-Z	Kerr-McGee	828467.92100	26719923.37400	1743.78	1742.19	1.59	1718.8	25.0	40.0	35.0	15.0	35.0	20.0	Active	Recovery	Qal/MCfg1
L615 L617	Tronox	830280.21280	26727856.50052	1619.20	1619.40	-0.20	1597.4	22.0 34.0	32.0					P&A P&A	Monitoring	
L617 L619	Tronox Tronox	830105.32150 829913.42552	26727862.29666 26727855.47570	1618.00 1618.30	1618.10 1618.50	-0.10 -0.20	1584.1 1588.0	34.0 31.0	43.0 51.0					P&A P&A	Monitoring	
L619 L621	Tronox	829913.42552	26727855.48554	1617.10	1617.30	-0.20	1585.3	32.0	52.0					P&A P&A	Monitoring Monitoring	
L623	Tronox	829534.68875	26727856.30282	1617.00	1617.10	-0.10	1583.1	34.0	48.0					P&A	Monitoring	
L625	Tronox	829351.63002	26727855.35871	1616.00	1616.10	-0.10	1589.1	27.0	43.0				38957.0	P&A	Monitoring	
L627	Tronox	829147.14303	26727855.42052	1615.50	1615.70	-0.20	1591.7	24.0	310.0				39020.0	P&A	Monitoring	
L629	Tronox	828965.23638	26727851.33802	1615.50	1615.70	-0.20	1591.0	25.0	35.0					P&A	Monitoring	
L631	Tronox	828743.74648	26727840.82158	1615.80	1616.00	-0.20	1575.0	41.0	50.0				18264.0	P&A	Monitoring	
L631T	Tronox	828696.88123	26727746.52445	1617.60	1617.80	-0.20	1567.8	50.0	59.0					P&A	Monitoring	
L633	Tronox	828491.72328	26727840.25215	1616.20	1616.40	-0.20	1553.4	63.0	78.0					P&A	Monitoring	
L635	Tronox	828302.27900	26727839.45800	1620.94	1621.27	-0.33	1584.9	33.0	148.0					Active	Monitoring	
L637 L639	Tronox Tronox	828110.00300 827905.57507	26727839.46500 26727838.22455	1621.60 1619.50	1621.85 1619.50	-0.25 0.00	1589.6 1594.5	29.0 25.0	39.5 38.0				39020.0	Active Active	Monitoring	
L639 L641	Tronox	827905.57507 827709.46654	26727836.07889	1619.50	1619.50	-0.34	1601.6	25.0 18.0	25.0				39020.0 38947.0	Active	Monitoring Monitoring	
L643	Tronox	827511.16200	26727836.04500	1619.10	1619.30	-0.20	1608.3	11.0	21.0					P&A	Monitoring	
L643T	Tronox	827473.38300	26727731.08300	1620.40	1620.60	-0.20	1605.6	15.0	20.0					P&A	Monitoring	
L645	Tronox	827310.02508	26727833.00475	1625.21	1625.55	-0.34	1608.2	14.0	31.0	0.0	5.0	15.0	38852.0	P&A	Monitoring	
L647	Tronox	827105.86200	26727830.12600	1623.60	1623.80	-0.20	1604.8	19.0	25.0				38920.0	P&A	Monitoring	
L649	Tronox	826903.00300	26727824.74600	1624.00	1624.20	-0.20	1604.2	20.0	25.0					P&A	Monitoring	
L651	Tronox	826708.65161	26727828.13599	1629.02	1629.63	-0.61	1609.2	17.0	25.0					P&A	Monitoring	
L653	Tronox	826510.58500	26727825.33500	1630.71	1631.15	-0.44	1608.6	19.0	25.0					P&A	Monitoring	
L676	Tronox	824194.88000	26727814.72500	1640.90	1641.10	-0.20	1602.0	39.0	45.0					P&A	Monitoring	
M-1	Kerr-McGee	828079.15800	26718315.28100	1794.43	1793.04	1.39	1753.0	40.0	50.0	45.3	34.8	44.8	10.0	P&A	Monitoring	Qal/MCfg1
M-2	Kerr-McGee	827986.30000	26718824.50000					40.5	46.0	39.5	29.0	39.0	10.0	P&A	Monitoring	Qal
M-2A	Kerr-McGee	827984.74600	26718769.56400	1781.16 	1780.23	0.92	1740.2	40.0	46.0 45.0	45.0	30.0	40.0	10.0	Active P&A	Monitoring	Qal Qal
M-3 M-4	Kerr-McGee Kerr-McGee	827712.86250 827547.93194	26718750.71528 26718711.65278					42.0 39.5	45.0 45.0	40.0 40.0	30.0 30.0	40.0 40.0	10.0 10.0	P&A P&A	Monitoring Monitoring	Qal
M-4 M-5	Kerr-McGee	826179.53090	26720017.02902					31.0	43.5	38.5	28.0	38.0	10.0	P&A	Monitoring	Qal/MCfg1
M-5A	Kerr-McGee	826179.28500	26719961.11800	1751.80	1749.69	2.11	1718.7	31.0	50.0	50.0	40.0	50.0	10.0	Active	Monitoring	MCfg1
M-6	Kerr-McGee	825984.60676	26721065.45592	0.00	0.00	0.00	0.0	0.0	36.0	35.0	26.0	36.0	10.0	P&A	Monitoring	MCfq1
M-6A	Kerr-McGee	825984.53600	26721013.68700	1733.19	1730.84	2.35	1696.8	34.0	46.0	43.6	26.8	41.5	14.7	Active	Monitoring	Qal/MCfg1
M-7	Kerr-McGee	826117.07948	26721040.85384	0.00	0.00	0.00	0.0	0.0	36.0	36.0	26.0	36.0	10.0	P&A	Monitoring	Qal/MCfg1
M-7A	Kerr-McGee	826117.87500	26720989.78400	1733.00	1731.00	2.00	1705.5	25.5	39.0	37.1	21.0	35.1	14.1	P&A	Monitoring	Qal/MCfg1
M-7B	Kerr-McGee	826106.49700	26720979.66100	1732.83	1730.35	2.48	1700.9	29.5	52.5	52.5	25.5	50.5	25.0	Active	Monitoring	Qal/MCfg1
M-8	Kerr-McGee	828162.08125	26718870.07292					43.0	45.5	41.0	30.5	40.5	10.0	P&A	Monitoring	Qal/MCfg1
M-9	Kerr-McGee	827843.07083 828536.17500	26718802.79861				1007.4	42.0 27.0	46.5	41.0 67.0	30.5	40.5	10.0	P&A	Monitoring	Qal
M-10 M-11	Kerr-McGee Kerr-McGee	828536.17500 828617.02700	26716636.63300 26717608.55900	1836.21 1815.53	1834.11 1813.45	2.10 2.08	1807.1 1768.5	45.0	75.0 60.0	67.0 58.0	43.0 33.3	63.0 53.0	20.0 19.7	Active Active	Monitoring Monitoring	MCcg1 Qal/MCfg1
M-12	Kerr-McGee	828179.44236	26717574.49999			2.06		38.0	65.0	52.0	33.3 37.0	47.0	10.0	P&A	Monitoring	MCfg1
M-12A	Kerr-McGee	828178.52100	26717575.29100	1812.76	1812.72	0.04	1767.7	45.0	50.0	50.0	40.0	50.0	10.0	Active	Monitoring	MCfg1
M-13	Kerr-McGee	827806.03000	26717477.65500	1814.89	1813.49	1.40	1776.0	37.5	55.0	52.5	28.0	48.0	20.0	Active	Monitoring	Qal/MCfg1
M-14	Kerr-McGee	827039.03300	26719392.04100	1759.83	1758.48	1.35	1730.5	28.0	37.0	37.0	22.0	37.0	15.0	P&A	Monitoring	MCfg1
M-14A	Kerr-McGee	827045.36120	26719382.66590	1760.93	1758.38	2.55	1730.4	28.0	40.2	40.2	20.0	40.0	20.0	Active	Monitoring	Qal/MCfg1
M-15	Kerr-McGee	827778.41800	26719831.96900	1750.97	1749.55	1.42	1715.6	34.0	41.0	41.0	26.0	41.0	15.0	P&A	Monitoring	MCfg1
M-16	Kerr-McGee	827691.16111	26719314.95139					23.0	37.0	37.0	22.0	37.0	15.0	P&A	Monitoring	MCfg1
M-17	Kerr-McGee	828017.30300	26719095.97000	1770.92	1767.68	3.24	1732.7	35.0	42.0	42.0	27.0	42.0	15.0	P&A	Monitoring	MCfg1
M-17A M-18	Kerr-McGee	828061.72100	26719053.73600	1768.99	1768.95	0.04	1725.0	44.0	45.0	45.0	35.0	45.0	10.0	Active	Monitoring	Qal/MCfg1 Qal
	Kerr-McGee	828665.45200 828846.18700	26720182.87100	1740.48	1738.95	1.53	1715.5	23.5	28.0	28.0	14.0	24.0	10.0	Active	Monitoring	aa
M-19 M-20	Kerr-McGee Kerr-McGee	828846.18700 828941.16112	26719350.02600 26718097.50347	1766.77	1764.41	2.36	1733.9	30.5 39.5	40.0 45.0	40.0 44.4	14.5 20.4	34.5 40.4	20.0 20.0	Active P&A	Monitoring Monitoring	Qal/MCfg1 Qal
M-20 M-21	Kerr-McGee	828941.16112 827792.85900	26718097.50347 26718359.30400	1792.07	1790.37	1.70	1753.4	39.5 37.0	45.0 43.0	44.4 43.0	20.4 18.0	40.4 38.0	20.0 20.0	Active	Monitoring	MCfg1
M-22	Kerr-McGee	828269.36443	26719587.46518					28.5	35.0	35.0	11.0	31.0	20.0	P&A	Monitoring	Qal/MCfg1
M-22A	Kerr-McGee	828270.10900	26719531.62700	1759.46	1758.90	0.56	1730.4	28.5	37.0	36.4	16.0	36.0	20.0	Active	Monitoring	Qal/MCfg1
M-23	Kerr-McGee	827373.96196	26721391.24598	1720.35	1717.54	2.81	1680.0	37.5	43.0	43.0	9.4	37.4	28.0	Active	Monitoring	Qal
M-24	Kerr-McGee	827896.23924	26718405.66319	0.00	0.00	0.00		36.0	40.0	39.0	24.0	39.0	15.0	P&A	Monitoring	Qal/MCfg1
M-25	Kerr-McGee	827677.80400	26719503.56900	1759.93	1756.89	3.04	1731.9	25.0	40.0	39.0	24.0	39.0	15.0	Active	Monitoring	Qal/MCfg1

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				тос	Ground	Casing	Muddy Creek	QAL	Hole Total	Well Total	Depth to	Depth to	Screen			
Well ⁽¹⁾	Owner	X	Y	Elevation	Elevation	Stickup ²	Elevation ³	Thickness ⁴	Depth	Depth	Screen Top	Screen Bottom	Interval	Status	Туре	Aquifer
Note: Proposed Ph	ase B wells for <i>I</i>	Area II are listed o	n Table 3 and are hig	hlighted in BOLD) below.											
M-26	Kerr-McGee	827345.02395	26719751.14931	0.00	0.00	0.00		35.0	40.0	39.0	24.0	39.0	15.0	P&A	Monitoring	Qal/MCfg1
M-27	Kerr-McGee	827811.51500	26720201.50000	1742.25	1739.09	3.16	<1699.10	>40.00	40.0	39.0	24.0	39.0	15.0	P&A	Monitoring	Qal
M-28	Kerr-McGee	829027.00000	26717765.00000	0.00	1816.00			31.0	50.5	49.0	39.0	49.0	10.0	P&A	Monitoring	MCfg1
M-29	Kerr-McGee	828999.00000	26717598.00000	1806.60	1816.60	-10	1781.6	25.0	42.0	42.0	22.0	42.0	20.0	Active	Monitoring	MCfg1
M-30	Kerr-McGee	829195.06737	26717251.14929					35.0	46.5	44.7	34.7	44.7	10.0	P&A	Monitoring	MCfg1
M-31	Kerr-McGee	828353.44200	26718328.79200	1789.63	1787.95	1.68	1753.0	35.0	45.0	45.0	30.0	45.0	15.0	P&A	Monitoring	Qal/MCfg1
M-31A M-32	Kerr-McGee Kerr-McGee	828368.37100 828592.63300	26718289.57800 26718354.06900	1796.87 1799.86	1796.94 1795.89	-0.07 3.97	1753.9 1761.9	43.0 34.0	55.0 45.0	55.0 45.0	35.0 30.0	55.0 45.0	20.0 15.0	Active Active	Monitoring Monitoring	MCfg1 MCfg1
M-33	Kerr-McGee	828784.12200	26718382.72600	1800.29	1797.03	3.26	1762.0	35.0	45.0	45.0	30.0	45.0	15.0	Active	Monitoring	MCfg1
M-34	Kerr-McGee	828318.24600	26718833.45100	1777.10	1774.04	3.06	1739.0	35.0	40.0	40.0	25.0	40.0	15.0	Active	Monitoring	Qal/MCfg1
M-35	Kerr-McGee	828509.37100	26718840.12500	1775.95	1773.05	2.90	1739.6	33.5	40.0	40.0	25.0	40.0	15.0	Active	Monitoring	Qal/MCfg1
M-36	Kerr-McGee	828069.09200	26719556.62800	1759.82	1756.89	2.93	1729.4	27.5	35.0	35.0	20.0	35.0	15.0	Active	Monitoring	MCfg1
M-37	Kerr-McGee	827414.22300	26719422.01200	1761.06	1758.13	2.93	1731.1	27.0	35.0	35.0	20.0	35.0	15.0	Active	Monitoring	MCfg1
M-38	Kerr-McGee	827877.65500	26719523.27300	1759.73	1757.82	1.91	1732.3	25.5	35.0	35.0	20.0	35.0	15.0	Active	Monitoring	Qal/MCfg1
M-39	Kerr-McGee	828548.82100	26719525.34100	1761.13	1758.61	2.52	1724.6	34.0	40.0	40.0	24.9	39.9	15.0	Active	Monitoring	Qal/MCfg1
M-40	Kerr-McGee	828397.53490	26718038.58417					32.0	45.0	45.0	30.0	45.0	15.0	P&A	Monitoring	MCfg1
M-44	Kerr-McGee	827005.60968	26722699.15346	1698.31	1695.74	2.57	1675.7	20.0	35.0	35.0	5.0	35.0	30.0	Active	Monitoring	Qal/MCfg1
M-46 M-47	Kerr-McGee Kerr-McGee	827600.23776 827279.12948	26721491.04564 26721601.59989	1717.97 1716.90	1715.04 1714.21	2.93 2.69	1674.0 1673.2	41.0 41.0	45.0 45.0	44.2 40.1	4.2 5.1	44.2 40.1	40.0 35.0	P&A P&A	Monitoring Monitoring	Qal/MCfg1 Qal
M-48	Kerr-McGee	828303.84855	26721337.51577	1710.90	1714.21	2.35	1686.4	32.0	45.0 36.1	36.1	6.1	36.1	30.0	Active	Monitoring	Qal/MCfg1
M-49	Kerr-McGee	827945.93588	26721315.70479	1720.78	1718.30	2.33	1678.3	40.0	46.5	46.5	4.0	44.0	40.0	P&A	Monitoring	Qal/MCfg1
M-50	Kerr-McGee	828083.46900	26718315.58400	1795.64	1793.08	2.56	1753.1	40.0	40.0 60.0	60.0	39.6	59.6	20.0	Active	Monitoring	MCfg1
M-52	Kerr-McGee	828394.47700	26717985.38500	1801.92	1799.34	2.58	1767.3	32.0	45.0	45.0	34.5	44.5	10.0	Active	Monitoring	MCfg1
M-53	Kerr-McGee	827090.47700	26719738.56400	1753.00	1751.31	1.69	1723.3	28.0	41.0	40.9	20.9	40.9	20.0	P&A	Monitoring	Qal/MCfg1
M-54	Kerr-McGee	827370.11900	26719780.70700	1750.47	1748.59	1.88	1718.4	30.2	46.0	44.8	14.8	44.8	30.0	P&A	Monitoring	Qal/MCfg1
M-55	Kerr-McGee	827683.03700	26719819.35800	1750.88	1749.43	1.45	1718.4	31.0	46.0	44.6	14.6	44.6	30.0	Active	Monitoring	Qal/MCfg1
M-56	Kerr-McGee	827980.36200	26719859.51500	1750.83	1749.65	1.18	1725.2	24.5	40.0	40.0	15.0	40.0	25.0	Active	Monitoring	Qal/MCfg1
M-57	Kerr-McGee	826991.77600	26719724.91500	1753.82	1752.27	1.55	1729.3	23.0	41.0	40.1	20.8	40.1	19.3	P&A	Monitoring	MCfg1
M-57A	Kerr-McGee	826993.30680	26719716.73860	1753.44	1751.23	2.21	1726.2	25.0	40.2	40.2	20.0	40.0	20.0	Active	Monitoring	MCfg1
M-58 M-59	Kerr-McGee Kerr-McGee	828276.61900 828475.10700	26719900.55100 26719923.90900	1751.25 1744.60	1748.72 1742.39	2.53 2.21	1719.2 1717.9	29.5 24.5	45.0 40.0	45.0 40.0	15.0 5.0	45.0 40.0	30.0 35.0	Active P&A	Monitoring Monitoring	Qal/MCfg1 Qal/MCfg1
M-60	Kerr-McGee	828475.10700 828079.11000	26719923.90900 26719872.47500	1744.60	1742.39	1.63	1717.9	24.5 27.5	40.0	40.0	5.0 17.8	40.0 42.8	35.0 25.0	Active	Monitoring	MCfg1
M-60	Kerr-McGee	828671.93700	26719953.96500	1746.83	1744.26	2.57	1717.8	26.5	41.0	39.0	9.3	38.8	29.5	Active	Monitoring	Qal/MCfg1
M-62	Kerr-McGee	827101.19600	26719638.59400	1753.76	1752.21	1.55	1730.7	21.5	33.0	33.0	18.0	32.8	14.8	P&A	Monitoring	Qal/MCfg1
M-63	Kerr-McGee	827267.68000	26719662.20600	1752.44	1752.58	-0.14	1725.1	27.5	40.0	39.5	19.6	39.3	19.7	P&A	Monitoring	Qal/MCfg1
M-64	Kerr-McGee	827601.30000	26719748.40000	1749.76	1748.80	0.96	1725.8	23.0	38.0	37.5	12.7	37.3	24.6	Active	Monitoring	Qal/MCfg1
M-65	Kerr-McGee	827899.71600	26719746.36100	1753.91	1751.84	2.07	1722.8	29.0	40.0	39.2	14.4	39.0	24.6	Active	Monitoring	Qal/MCfg1
M-66	Kerr-McGee	828183.64200	26719787.46600	1754.24	1751.70	2.54	1719.2	32.5	43.0	42.5	17.5	42.3	24.8	Active	Monitoring	Qal/MCfg1
M-67	Kerr-McGee	828508.51800	26719829.71700	1745.91	1743.64	2.27	1721.1	22.5	38.0	38.0	7.8	37.8	30.0	Active	Monitoring	Qal/MCfg1
M-68	Kerr-McGee	828751.00100	26719864.47200	1750.23	1747.16	3.07	1722.7	24.5	41.0	41.0	11.2	39.8	28.6	Active	Monitoring	Qal/MCfg1
M-69	Kerr-McGee	827265.73300	26719885.27600	1749.75	1747.80	1.95	1718.3	29.5	40.0	40.0	19.9	39.3	19.4	Active	Monitoring	Qal/MCfg1
M-70	Kerr-McGee	827567.35200	26719904.69100	1748.25	1746.00	2.25	1715.5	30.5 32.5	41.0	40.2 42.2	15.3 17.5	40.0	24.7	Active	Monitoring	Qal/MCfg1
M-71 M-72	Kerr-McGee Kerr-McGee	827859.70900 828172.12600	26719943.62600 26719977.13500	1747.04 1746.49	1744.87 1744.62	2.17 1.87	1712.4 1720.1	32.5 24.5	43.0 36.0	42.2 35.0	17.5 10.1	42.0 34.8	24.5 24.7	Active Active	Monitoring Monitoring	Qal/MCfg1 Qal/MCfg1
M-72 M-73	Kerr-McGee	828427.82300	26720018.46600	1740.49	1738.87	2.27	1720.1	24.0	36.0	36.0	11.0	34.8	24.7	Active	Monitoring	Qal/MCfg1
M-73 M-74	Kerr-McGee	828713.65100	26720062.17900	1741.14	1742.51	1.87	1714.5	24.0	39.0	39.0	9.2	38.8	29.6	Active	Monitoring	MCfg1
M-75	Kerr-McGee	827718.81700	26718702.64100	1784.21	1781.92	2.29	1733.9	48.0	51.5	51.5	34.6	49.3	14.7	Active	Monitoring	Qal/MCfg1
M-76	Kerr-McGee	827550.73400	26718659.92300	1785.22	1781.68	3.54	1744.7	37.0	51.4	51.4	34.6	49.3	14.7	Active	Monitoring	MCfg1
M-77	Kerr-McGee	828932.32000	26718045.99500	1800.17	1798.09	2.08	1759.1	39.0	45.9	45.9	29.0	43.8	14.8	Active	Monitoring	Qal/MCfg1
M-78	Kerr-McGee	827777.45300	26719838.17000	1751.50	1749.54	1.96	1718.0	31.5	43.6	43.6	21.5	41.5	20.0	Active	Monitoring	Qal/MCfg1
M-79	Kerr-McGee	827382.09900	26720048.91700	1742.53	1742.57	-0.04	1715.6	27.0	37.6	37.6	10.8	35.4	24.6	Active	Monitoring	Qal/MCfg1
M-80	Kerr-McGee	827759.78600	26720112.87400	1746.04	1743.66	2.38	1711.7	32.0	43.7	43.7	11.5	41.5	30.0	Active	Monitoring	Qal/MCfg1
M-81	Kerr-McGee	828142.40000	26720231.20000					31.5	42.9	42.9	11.2	40.7	29.5	P&A	Monitoring	Qal/MCfg1
M-81A	Kerr-McGee	828139.67100	26720176.85200	1744.16	1742.58	1.58	1711.1	31.5	40.0	40.0	30.0	40.0	10.0	Active	Monitoring	Qal/MCfg1
M-82	Kerr-McGee	827383.31988	26720183.55061					22.5	33.3	33.3	11.1	31.1	20.0	P&A	Monitoring	Qal/MCfg1
M-82A M-83	Kerr-McGee Kerr-McGee	827379.76600 827584.70300	26720125.64600 26720159.91800	1740.21 1742.36	1739.27 1739.89	0.94 2.47	1716.8 1707.4	22.5 32.5	35.0 42.5	35.0 42.5	25.0 10.8	35.0 40.3	10.0 29.5	P&A Active	Monitoring Monitoring	Qal/MCfg1 Qal/MCfg1
M-84	Kerr-McGee	827566.69700	26720159.91800	1742.36	1739.89	2.47	1707.4	24.5	42.5	42.5	10.8	40.3 34.1	29.5	Active	Monitoring	Qal/MClg1
M-85	Kerr-McGee	827962.62900	26720219.87900	1741.03	1730.46	2.55	1714.0	24.5 26.0	36.6	30.0	10.4	35.0	22.3	Active	Monitoring	Qal/MCfg1
M-86	Kerr-McGee	828141.81700	26720238.99400	1744.23	1741.60	2.63	1709.6	32.0	43.0	43.0	11.3	40.9	29.6	Active	Monitoring	MCfg1
			_0.20200.00400			2.00		02.0					20.0		moning	

Phase B Source Area Investigation Work Plan Area III

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Well ⁽¹⁾	Owner	x	Y	TOC Elevation	Ground Elevation	Casing Stickup ²	Muddy Creek Elevation ³	QAL Thickness ⁴	Hole Total Depth	Well Total Depth	Depth to Screen Top	Depth to Screen Bottom	Screen Interval	Status	Туре	Aquifer
Note: Proposed Pr	hase B wells for <i>I</i>	Area II are listed o	n Table 3 and are hig	hlighted in BOLD) below.	L							l			
M-87	Kerr-McGee	828358.13000	26720276.12500	1744.13	1741.51	2.62	1711.5	30.0	41.0	41.0	9.3	38.8	29.5	Active	Monitoring	MCfg1
M-88	Kerr-McGee	828588.74500	26720313.96400	1739.35	1736.93	2.42	1708.9	28.0	39.0	39.0	7.3	36.8	29.5	Active	Monitoring	Qal/MCfg1
M-89	Kerr-McGee	827890.08100	26719294.83900	1766.19	1763.69	2.50	1727.7	36.0	40.0	38.2	18.0	38.2	20.2	Active	Monitoring	Qal/MCfg1
M-90	Kerr-McGee	827244.40000	26720146.60000		1738.00		1714.0	24.0	31.0	31.0	15.4	30.4	15.0	P&A	Monitoring	Qal/MCfg1
M-91	Kerr-McGee	827165.00000	26720131.10000		1738.60		1715.6	23.0	30.0	30.0	14.4	29.4	15.0	P&A	Monitoring	Qal/MCfg1
M-92	Kerr-McGee	827138.09200	26717531.94100	1800.76	1797.99	2.77	1778.0	20.0 23.5	45.5	45.5	34.9	44.9	10.0	Active	Monitoring	MCfg1
M-93 M-94	Kerr-McGee Kerr-McGee	827143.44100 827222.84600	26717685.91800 26722695.81400	1797.54 1695.07	1797.81 1695.27	-0.27 -0.20	1774.3 1674.3	23.5	46.0 25.5	46.0 22.0	35.4 12.0	45.4 22.0	10.0 10.0	Active Active	Monitoring Monitoring	MCfg1 Qal
M-94 M-95	Kerr-McGee	827222.04000	26722701.69200	1694.09	1694.52	-0.43	1674.5	23.0	23.0	22.0	12.0	22.0	10.0	Active	Monitoring	Qal
M-96	Kerr-McGee	827626.07800	26722700.29800	1693.52	1693.80	-0.28	1673.3	20.5	22.0	20.5	10.5	20.5	10.0	Active	Monitoring	Qal
M-97	Kerr-McGee	827492.46700	26717795.18200	1800.85	1798.35	2.50	1776.4	22.0	50.0	45.5	35.0	45.0	10.0	Active	Monitoring	MCfg1/MCcg1
M-98	Kerr-McGee	826873.45000	26720914.14000	1731.90	1729.49	2.41	1700.5	29.0	31.0	31.0	19.0	29.0	10.0	Active	Monitoring	Qal
M-99	Kerr-McGee	827309.68800	26720851.71800	1730.74	1728.29	2.45	1698.3	30.0	34.0	33.0	16.0	31.0	15.0	Active	Monitoring	Qal
M-100	Kerr-McGee	827659.98600	26720820.26400	1730.93	1728.63	2.30	1699.6	29.0	31.0	30.5	19.0	29.0	10.0	Active	Monitoring	Qal
M-101	Kerr-McGee	828060.82600	26720786.74200	1730.81	1728.57	2.24	1701.6	27.0	30.0	29.0	17.0	27.0	10.0	Active	Monitoring	Qal
M-102	Kerr-McGee	828437.97900	26720705.95900	1740.24	1738.18	2.06	1699.7	38.5	42.0	41.4 90.0	19.4	39.4	20.0	Active	Monitoring	Qal
M-103 M-104	Kerr-McGee Kerr-McGee	828728.34000 827868.44850	26715622.48000 26719945.61150	1866.91 1747.69	1864.53 1745.13	2.38 2.56	1821.5 1710.1	43.0 35.0	90.0 88.0	90.0 88.0	69.5 75.0	89.5 85.0	20.0 10.0	Active P&A	Monitoring Monitoring	MCcg1 Qal/MCfg1
M-104 M-105	Kerr-McGee	827878.06850	26719949.00550	1748.42	1745.13	2.36	1710.1	35.0	67.0	67.0	73.0 54.0	64.0	10.0	P&A P&A	Monitoring	Qal/MCfg1
M-106	Kerr-McGee	827005.94400	26722689.27400	1698.61	1696.07	2.54	1676.1	20.0	78.0	78.0	65.0	75.0	10.0	P&A	Monitoring	Qal/MCfg1
M-107	Kerr-McGee	827008.25400	26722678.94600	1698.53	1696.09	2.44	1676.1	20.0	57.0	57.0	44.0	54.0	10.0	P&A	Monitoring	Qal/MCfg1
M-108	Kerr-McGee	828262.47700	26719992.70900	1748.64	1746.36	2.28	1714.4	32.0	87.0	87.0	74.3	84.3	10.0	P&A	Monitoring	Qal/MCfg1
M-109	Kerr-McGee	827339.00300	26719915.12900	1748.62	1748.62	0.00	1718.6	30.0	87.0	87.0	74.7	84.7	10.0	P&A	Monitoring	Qal/MCfg1
M-110	Kerr-McGee	827431.41900	26719319.32400	1762.48	1760.78	1.70	1725.8	35.0	40.0	40.0	30.0	40.0	10.0	Active	Monitoring	Qal/MCfg1
M-111	Kerr-McGee	827457.88000	26719091.06500	1764.94	1765.05	-0.11	1732.6	32.5	40.0	40.0	30.0	40.0	10.0	Active	Monitoring	Qal/MCfg1
M-111A	Tronox	827447.18500	26719134.85700	1768.77	1766.25	2.53	1736.2	30.0	40.0	40.0	29.7	39.7	10.0	Active	Monitoring	MCfg1
M-115	Kerr-McGee	827243.64760	26718612.90180	1783.44	1787.64	-4.20	1749.6	38.0	45.2	45.2	35.0	45.0	10.0	Active	Monitoring	Qal/MCfg1
M-116 M-117	Tronox Tronox	828584.24810 828917.05710	26716286.07990 26715198.28890	 1880.31	1844.44 1877.98	2.34	1815.4 1831.0	29.0 47.0	50.0 157.0	155.0	130.0	 150.0	20.0	P&A Active	Boring Monitoring	 MCfq2
M-117 M-118	Tronox	828036.39740	26715068.01190	1876.91	1874.53	2.34	1822.5	52.0	167.0	163.0	130.0	158.0	20.0	Active	Monitoring	MCfg2
M-119	Tronox	826740.83760	26716076.79160		1838.75		1806.8	32.0	50.0					P&A	Boring	
M-120	Tronox	828387.79210	26715162.90030	1878.58	1875.81	2.77	1826.8	49.0	107.0	105.0	80.0	100.0	20.0	Active	Monitoring	MCcg1
M-121	Tronox	827694.57120	26715011.23690	1875.63	1872.90	2.73	1827.9	45.0	107.0	102.0	77.0	97.0	20.0	Active	Monitoring	MCcg1
M-126	Tronox	826569.37000	26719505.56900	1759.01	1756.40	2.61	1736.4	20.0	50.0	40.0	19.7	39.7	20.0	Active	Monitoring	MCfg1
M-131	Tronox	827158.07700	26719770.56600	1754.13	1751.05	3.07	1721.1	30.0	40.0	39.0	28.7	38.7	10.0	Active	Monitoring	MCfg1
M-132	Tronox	828714.60900	26720048.49100	1744.27	1741.41	2.86	1719.4	22.0	90.0	90.0	79.7	89.7	10.0	Active	Monitoring	MCfg1
M-133	Tronox	828698.60800	26720067.29200	1743.62	1740.93	2.69	1718.9	22.0	70.0	70.0	59.7	69.7	10.0	Active	Monitoring	MCfg1
M-134	Tronox	827144.35300	26719889.13800	1752.14	1749.39	2.76	1719.4	30.0	70.0	70.0	59.7	69.7	10.0	Active	Monitoring	MCfg1
M-135 M-136	Tronox Tronox	827154.48200	26719890.17300	1751.85	1749.17 1749.09	2.69 2.78	1719.2 1718.6	30.0 30.5	39.0 90.0	39.0 90.0	28.7 79.7	38.7 89.7	10.0 10.0	Active	Monitoring	MCfg1
M-136 MW-16	Tronox	827165.34200 826447.63900	26719889.77400 26719904.41400	1751.87 1754.81	1749.09	2.78	1718.6 1726.0	30.5 26.0	90.0 40.0	90.0 40.0	79.7 24.7	89.7 39.7	10.0	Active Active	Monitoring Monitoring	MCfg1 MCfg1
PC-1	Kerr-McGee	830925.11300	26730308.64612	1599.13	1596.68	2.03	1565.7	31.0	32.0	30.0	14.7	29.7	15.0	Active	Monitoring	Qal
PC-2	Kerr-McGee	830443.45385	26730209.58464	1597.07	1593.79	3.28	1562.8	31.0	35.0	30.0	14.0	29.0	15.0	Active	Monitoring	Qal
PC-3	Kerr-McGee	830727.23281	26730271.95656		1596.53		1566.5	30.0	31.0					P&A	Boring	
PC-4	Kerr-McGee	831171.80214	26730353.41637	1600.42	1597.13	3.29	1553.6	43.5	45.0	43.0	17.7	42.7	25.0	Active	Monitoring	Qal
PC-5	Kerr-McGee	830583.32234	26730236.33327		1594.49		1568.5	26.0	27.0					P&A	Boring	
PC-6	Kerr-McGee	831073.25903	26730334.84685		1597.84		1556.8	41.0	43.0					P&A	Boring	
PC-7	Kerr-McGee	831271.35902	26730372.48457		1598.92		1556.9	42.0	45.0					P&A	Boring	
PC-8	Kerr-McGee	831129.42033	26730316.39545		1592.68		1556.7	36.0	37.0					P&A	Boring	
PC-9 PC-10	Kerr-McGee Kerr-McGee	830329.04135 829891.09100	26727966.33125 26727968.37500	 1618.95	1622.02 1619.59	-0.64	1598.0 1585.3	24.0 34.0	25.0 34.5	34.0	 13.8	 33.8	20.0	P&A P&A	Boring	 Qal
PC-10 PC-11	Kerr-McGee	829891.09100 829541.60526	26727965.78007		1619.59	-0.04	1585.3	34.0	34.5 38.0	0.0	0.0	33.8 0.0	20.0	P&A P&A	Monitoring Boring	Qai
PC-12	Kerr-McGee	829430.43000	26728102.91900	1616.37	1616.94	-0.57	1587.2	29.5	31.0	30.0	14.8	29.8	15.0	Active	Monitoring	Qal
PC-12 PC-13	Kerr-McGee	829430.43000	26728097.92876		1616.39	-0.57	1588.9	23.5	29.0					P&A	Boring	
PC-14	Kerr-McGee	829037.20339	26728095.96682		1617.27		1590.3	27.0	28.0					P&A	Boring	
PC-15	Kerr-McGee	828936.83613	26728094.17548		1617.29		1580.3	37.0	38.0					P&A	Boring	
PC-16	Kerr-McGee	828837.45969	26728091.02916		1618.48		1571.5	47.0	48.0					P&A	Boring	
PC-17	Kerr-McGee	828732.62900	26728089.22900	1617.00	1617.89	-0.89	1569.3	48.0	55.0	51.0	10.5	50.5	40.0	Active	Monitoring	Qal/MCfg1
PC-18	Kerr-McGee	828636.24600	26728079.97300	1618.47	1618.55	-0.08	1566.7	52.0	53.0	52.0	11.5	51.5	40.0	Active	Monitoring	Qal
PC-19	Kerr-McGee	828510.28000	26728053.18900	1617.62	1618.07	-0.45	1560.5	58.0	62.0	60.3	15.0	60.0	45.0	P&A	Monitoring	Qal/MCfg1

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Well ⁽¹⁾	Owner	x	Y	TOC Elevation	Ground Elevation	Casing Stickup ²	Muddy Creek Elevation ³	QAL Thickness ⁴	Hole Total Depth	Well Total Depth	Depth to Screen Top	Depth to Screen Bottom	Screen Interval	Status	Туре	Aquifer
Note: Proposed Ph	ase B wells for A	Area II are listed o	n Table 3 and are hig	hlighted in BOLD	below.											
PC-20	Kerr-McGee	828413.11999	26728053.07320		1618.36		1577.4	41.0	43.0					P&A	Boring	
PC-21	Kerr-McGee	829269.52904	26721332.71919	1724.52	1722.20	2.32	1688.7	33.5	35.0	34.4	14.2	34.2	20.0	P&A	Monitoring	Qal/MCfg1
PC-21A	Kerr-McGee	829269.52904	26721332.71919	1724.52	1722.20	2.32	1688.7	33.5	35.0	34.4	14.0	34.0	20.0	Active	Monitoring	Qal/MCfg1
PC-22	Kerr-McGee	830320.92457	26726737.30812		1637.15		1610.2	27.0	28.5					P&A	Boring	
PC-23 PC-24	Kerr-McGee Kerr-McGee	829921.73246 829524.18404	26726732.92164 26726729.82126	 1633.48	1635.62 1633.95	-0.47	1606.6 1606.0	29.0 28.0	30.0 30.2					P&A Active	Boring	 Qal
PC-24 PC-25	Kerr-McGee	829124.49652	26726727.18347		1632.84	-0.47	1611.8	28.0	25.0	30.2	15.0 	30.0	15.0	P&A	Monitoring Boring	Qai
PC-26	Kerr-McGee	828768.98214	26721339.27101		1720.22		1690.2	30.0	35.0					P&A	Boring	
PC-27	Kerr-McGee	829016.49149	26725386.51686		1652.46		1624.5	28.0	30.0					P&A	Boring	
PC-28	Kerr-McGee	828530.64928	26725375.66714	1650.85	1651.17	-0.32	1633.2	18.0	22.0	20.0	10.0	19.5	9.5	Active	Monitoring	Qal
PC-29	Kerr-McGee	828014.47905	26725372.95389		1652.66		1618.7	34.0	35.0					P&A	Boring	
PC-30	Kerr-McGee	827268.73251	26725197.56710		1655.79		1618.3	37.5	42.0					P&A	Boring	
PC-31	Kerr-McGee	826781.65344	26725195.83154	1657.86	1658.13	-0.27	1608.1	50.0	52.0	50.0	14.5	49.5	35.0	Active	Monitoring	Qal
PC-32	Kerr-McGee	826259.63020	26725193.83680		1661.46		1621.0	40.5	43.0					P&A	Boring	
PC-33	Kerr-McGee	827200.69459	26723264.46729		1685.34		1664.3	21.0	23.0					P&A	Boring	
PC-34	Kerr-McGee	826888.57251	26723615.34258		1680.33		1660.8	19.5	21.0					P&A	Boring	
PC-35	Kerr-McGee	826148.26888	26724416.15790		1672.36		1614.4	58.0	60.0					P&A	Boring	
PC-36	Kerr-McGee	827110.62916	26722171.38221	 1707.72	1703.89	1.09	1662.9	41.0 41.0	45.0	42.0	16.9			P&A	Boring	
PC-37 PC-38	Kerr-McGee Kerr-McGee	826612.09669 826119.65345	26722172.23851 26722160.75559		1706.64 1708.47	1.08	1665.6 1662.5	46.0	44.0 55.0	42.0	16.8 	41.8	25.0	Active P&A	Monitoring Boring	Qal
PC-38	Kerr-McGee	826484.84957	26723470.95966		1684.37		1640.4	40.0	46.0					P&A	Boring	
PC-40	Kerr-McGee	826476.77872	26723971.04397	1679.23	1677.05	2.18	1621.1	56.0	60.0	55.2	15.0	55.0	40.0	Active	Monitoring	Qal
PC-41	Kerr-McGee	827490.29047	26722210.05995		1702.19		1664.7	37.5	39.0					P&A	Boring	
PC-42	Kerr-McGee	825983.11501	26723950.53876		1679.60		1622.6	57.0	60.0					P&A	Boring	
PC-43	Kerr-McGee	823403.60901	26727715.41968		1650.99		1608.0	0.0	43.0					P&A	Boring	
PC-44	Kerr-McGee	823708.14908	26727327.09040		1650.78		1609.8	41.0	43.0					P&A	Boring	
PC-45	Kerr-McGee	824003.14521	26727056.06076		1655.39		1612.4	43.0	45.0					P&A	Boring	
PC-46	Kerr-McGee	824279.86382	26726757.65585		1656.65		1614.7	42.0	43.0					P&A	Boring	
PC-47	Kerr-McGee	824592.93406	26726429.95965		1657.66		1619.7	38.0	40.0					P&A	Boring	
PC-48	Kerr-McGee	824943.32706	26726042.07329		1659.68		1622.7	37.0	40.0					P&A	Boring	
PC-49	Kerr-McGee	828726.53800	26726725.60539		1634.48		1596.5	38.0	40.0					P&A	Boring	
PC-50 PC-51	Kerr-McGee Kerr-McGee	828326.94234 828027.39241	26726722.29502 26726719.02075	1633.46	1633.49 1634.96	-0.03	1598.5 1602.0	35.0 33.0	44.0 35.0	42.0	11.8	41.8	30.0	Active P&A	Monitoring	Qal/MCfg1
PC-51 PC-52	Kerr-McGee	830190.60331	26730231.26767		1593.10		1560.1	33.0	35.0					P&A P&A	Boring Boring	
PC-53	Kerr-McGee	829941.58478	26730225.28999	1595.03	1593.14	1.89	1561.1	32.0	35.0	33.0	13.0	32.5	19.5	Active	Monitoring	Qal
PC-54	Kerr-McGee	828296.33873	26722067.78662	1704.43	1704.40	0.03	1664.9	39.5	38.0	35.0	9.5	34.5	25.0	Active	Monitoring	Qal
PC-55	Kerr-McGee	828530.49300	26728056.65900	1617.19	1617.39	-0.20	1566.0	52.0	55.0	54.9	4.0	54.0	50.0	Active	Monitoring	Qal/MCfg1
PC-56	Kerr-McGee	830645.28744	26732289.42956	1568.25	1568.99	-0.74	1517.0	52.0	58.0	55.0	4.8	54.8	50.0	Active	Monitoring	Qal/MCfg1
PC-57	Kerr-McGee	830831.26804	26732239.49856		1568.21		1518.2	50.0	53.0					P&A	Boring	
PC-58	Kerr-McGee	831123.77500	26732118.19900	1568.01	1568.24	-0.22	1536.8	31.5	36.0	33.0	7.8	32.8	25.0	Active	Monitoring	Qal
PC-59	Kerr-McGee	830150.30155	26732452.69367	1567.92	1568.34	-0.42	1536.3	32.0	38.0	35.0	4.8	34.8	30.0	Active	Monitoring	Qal/MCfg1
PC-60	Kerr-McGee	830405.14356	26732358.75357	1568.38	1568.80	-0.42	1529.8	39.0	43.0	40.0	4.5	39.5	35.0	Active	Monitoring	Qal
PC-61	Kerr-McGee	830524.66104	26732323.18277		1568.70		1523.7	45.0	48.0					P&A	Boring	 Ool/MCf=4
PC-62	Kerr-McGee Kerr-McGee	829764.27542	26732733.52316 26732553.25449	1567.83	1568.45 1567.95	-0.62	1533.5 1534.0	35.0 34.0	38.0	38.0	7.6	37.6	30.0	Active P&A	Monitoring	Qal/MCfg1
PC-63 PC-64	Kerr-McGee	829925.70555 827916.51993	26723702.43886	1675.29	1675.51	-0.22	1534.0 1656.5	34.0 19.0	36.0 20.0	19.5	4.0	19.0	15.0	Active	Boring Monitoring	 Qal
PC-65	Kerr-McGee	828386.90285	26723682.73746	1675.29	1675.51	-0.22 -0.86	1657.1	19.0	20.0	19.5	4.0	19.0	14.6	Active	Monitoring	Qal
PC-65 PC-66	Kerr-McGee	828779.39878	26723966.95277	1673.53	1674.05	-0.52	1649.6	24.5	22.0	27.3	6.9	26.9	20.0	Active	Monitoring	Qal/MCfg1
PC-67	Kerr-McGee	829207.80016	26723846.87099	1673.82	1674.38	-0.56	1638.4	36.0	38.0	36.0	11.0	35.6	24.6	Active	Monitoring	Qal
PC-68	Kerr-McGee	829616.95944	26732906.82006	1566.97	1567.66	-0.69	1517.7	50.0	55.3	55.3	9.9	54.9	45.0	Active	Monitoring	Qal/MCfg1
PC-69	Kerr-McGee	829478.04896	26733074.08022		1568.19		1516.2	52.0	54.0					P&A	Boring	Ŭ
PC-70	Kerr-McGee	828700.19000	26728084.93500	1617.93	1618.27	-0.34	1566.3	52.0	52.0	50.5	18.5	48.5	30.0	P&A	Monitoring	Qal
PC-71	Kerr-McGee	826805.89700	26722687.72200	1698.73	1696.11	2.62	1676.6	19.5	33.0	30.4	13.4	28.4	15.0	Active	Monitoring	Qal/MCfg1
PC-72	Kerr-McGee	826604.72100	26722688.81500	1699.43	1696.89	2.54	1662.9	34.0	38.0	37.0	15.0	35.0	20.0	Active	Monitoring	Qal
PC-73	Kerr-McGee	826404.90300	26722694.93200	1699.50	1697.56	1.94	1653.6	44.0	48.0	47.5	20.0	45.0	25.0	Active	Monitoring	Qal
PC-74	Kerr-McGee	829203.52000	26734003.52000	1565.34	1564.54	0.80	1508.5	56.0	70.0	50.0	39.5	49.5	10.0	Active	Monitoring	Qal
PC-75	Kerr-McGee	829194.53000	26734004.98000		1564.48		1508.5	56.0	40.0					P&A	Boring	
PC-76	Kerr-McGee	829183.79000	26734006.74000	1565.10	1564.51	0.59	1508.5	56.0	22.0	20.5	15.0 29.5	20.0	5.0	Active	Monitoring	Qal
PC-77 PC-78	Kerr-McGee	829031.63000	26733568.07000	1566.90	1566.63	0.27	<1521.63	>45	45.0 22.0	40.0 22.0		39.5	10.0	Active	Monitoring	Qal Qal
PU-78	Kerr-McGee	829033.25000	26733560.32000	1566.72	1566.64	0.08	<1521.64	>45	22.0	22.0	11.5	21.5	10.0	Active	Monitoring	Qai

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Well ⁽¹⁾	Owner	x	Y	TOC Elevation	Ground Elevation	Casing Stickup ²	Muddy Creek Elevation ³	QAL Thickness ⁴	Hole Total Depth	Well Total Depth	Depth to Screen Top	Depth to Screen Bottom	Screen Interval	Status	Туре	Aquifer
Note: Proposed Ph	ase B wells for A	Area II are listed o	n Table 3 and are hig	hlighted in BOLD	below.											
PC-79	Kerr-McGee	829815.15300	26733246.69700	1564.06	1564.53	-0.47	1519.3	45.0	73.0	45.0	34.5	44.5	10.0	Active	Monitoring	Qal
PC-80	Kerr-McGee	829823.81800	26733250.46200	1564.18	1564.49	-0.31	1519.1	45.0	32.0	30.0	19.5	29.5	10.0	Active	Monitoring	Qal
PC-81	Kerr-McGee	829833.40100	26733254.76900	1563.96	1564.27	-0.31	1519.0	45.0	18.0	15.0	9.5	14.5	5.0	Active	Monitoring	Qal
PC-82	Kerr-McGee	830316.92700	26733194.96300	1559.15	1559.40	-0.24	1503.4	56.0	67.0	57.5	47.0	57.0	10.0	Active	Monitoring	Qal
PC-83	Kerr-McGee	830325.42900	26733201.37400	1559.22	1559.58	-0.36	1503.5	56.0	37.0	31.0	20.5	30.5	10.0	Active	Monitoring	Qal
PC-84	Kerr-McGee	830332.58000	26733208.53000	1559.20	1559.14	0.06	1503.1	56.0	17.0	15.0	4.5	14.5	10.0	P&A	Monitoring	Qal
PC-85	Kerr-McGee	830816.05000	26733185.56000	1553.65	1553.70	-0.05	1506.7	47.0	67.0	43.0	32.5	42.5	10.0	Active	Monitoring	Qal
PC-86 PC-87	Kerr-McGee Kerr-McGee	830826.99000 830837.82000	26733185.76000 26733185.37000	1553.85 1554.00	1554.08 1554.09	-0.23 -0.09	1507.1 1507.1	47.0 47.0	30.0 15.0	28.0 13.0	17.5 2.5	27.5 12.5	10.0 10.0	Active Active	Monitoring	Qal Qal
PC-87 PC-88	Kerr-McGee	830837.82000	26733185.37000	1554.00	1550.91	-0.09	1499.9	47.0 51.0	62.0	50.5	2.5 40.0	12.5 50.0	10.0	Active	Monitoring Monitoring	Qal
PC-88	Kerr-McGee	831264.70000	26733184.33000	1551.10	1550.91	0.10	1499.9	51.0	39.0	35.0	24.5	34.5	10.0	P&A	Monitoring	Qal
PC-90	Kerr-McGee	831271.92000	26733192.63000	1550.46	1550.53	-0.07	1499.5	51.0	18.0	15.0	4.5	14.5	10.0	Active	Monitoring	Qal
PC-90 PC-91	Kerr-McGee	831729.99000	26733110.85000	1552.33	1552.42	-0.09	1512.4	40.0	65.0	37.0	26.5	36.5	10.0	Active	Monitoring	Qal
PC-92	Kerr-McGee	831749.30000	26733109.85000	1552.05	1552.12	-0.07	1512.1	40.0	30.0	22.0	11.5	21.5	10.0	Active	Monitoring	Qal
PC-93	Kerr-McGee	832179.60000	26733117.81000	1548.76	1548.86	-0.10	1508.9	40.0	57.0	38.0	27.5	37.5	10.0	Active	Monitoring	Qal
PC-94	Kerr-McGee	832189.05000	26733122.48000	1548.95	1548.84	0.11	1508.8	40.0	25.0	20.0	9.5	19.5	10.0	Active	Monitoring	Qal
PC-95	Kerr-McGee	831227.21000	26733449.91000	1550.62	1550.61	0.01	1507.6	43.0	50.0	35.0	24.5	35.0	10.5	Active	Monitoring	Qal
PC-96	Kerr-McGee	830896.56000	26733450.83000	1552.57	1552.69	-0.12	1505.7	47.0	50.0	39.5	29.0	39.0	10.0	Active	Monitoring	Qal
PC-97	Kerr-McGee	831565.69000	26733441.54000	1548.53	1548.78	-0.25	1505.8	43.0	45.0	33.5	23.0	33.0	10.0	Active	Monitoring	Qal
PC-98	Kerr-McGee	829519.86000	26730256.09000	1593.41	1593.35	0.06	1552.4	41.0	45.0	33.5	13.0	33.0	20.0	P&A	Monitoring	Qal
PC-98R	Kerr-McGee	829522.57900	26730260.53250	1593.35	1593.46	-0.11	1553.0	40.5	41.5	40.5	20.0	35.0	15.0	Active	Monitoring	Qal
PC-99 PC-99R	Kerr-McGee Kerr-McGee	831242.35000 831244.93200	26733140.18000 26733143.32000	1551.97 1552.11	1551.99 1552.17	-0.02 -0.06	1501.0 1500.2	<1500.99 52.0	>51 54.0	47.5 54.0	1.0 8.5	47.0 48.5	46.0 40.0	P&A P&A	Monitoring Monitoring	Qal Qal
PC-99R PC-99R2	Kerr-McGee	831244.93200 831258.72600	26733143.32000	1552.55	1552.17	-0.06	1500.2	52.0 52.0	54.0 55.3	54.0 55.3	8.5 10.0	48.5 50.0	40.0 40.0	Active	Recovery	Qal
PC-99R3	Kerr-McGee	831255.54600	26733160.44000	1552.48	1551.90	0.58	1499.9	52.0	58.0	55.5	10.0	50.0	40.0	Active	Recovery	Qal
PC-100	Kerr-McGee	829544.65000	26730298.84000	1592.83	1592.93	-0.10	1547.9	0.0	45.0	39.0	8.5	38.5	30.0	P&A	Monitoring	Qal
PC-100R	Kerr-McGee	829542.47550	26730295.30700	1592.94	1593.01	-0.07	1552.5	40.5	41.5	40.5	15.0	40.0	25.0	P&A	Monitoring	Qal
PC-101	Kerr-McGee	828714.91200	26728110.93700	1617.95	1618.17	-0.22	1567.9	50.0	52.0	50.0	14.5	49.5	35.0	P&A	Monitoring	Qal
PC-101R	Kerr-McGee	828711.71800	26728107.74100	1618.12	1618.12	0.00	1567.3	51.0	51.5	50.5	20.0	50.0	30.0	Active	Monitoring	Qal
PC-102	Kerr-McGee	831259.53900	26733174.52800	1550.92	1551.13	-0.21	<1501.13	>50	50.0	48.5	8.0	48.0	40.0	P&A	Monitoring	Qal
PC-103	Kerr-McGee	829110.86900	26730205.73450	1599.49	1597.02	2.47	1568.0	29.0	30.0	29.5	9.0	29.0	20.0	Active	Monitoring	Qal
PC-104	Kerr-McGee	829277.08350	26731049.70450	1596.68	1596.68	0.00	1561.7	35.0	36.0	35.3	10.0	35.0	25.0	Active	Monitoring	Qal
PC-105	Kerr-McGee	828827.49100	26731425.85150	1593.68	1591.27	2.41	1541.3	50.0	64.0	50.3	10.0	50.0	40.0	P&A	Monitoring	Qal
PC-106	Kerr-McGee	827110.05600	26730247.50550	1601.85	1602.10	-0.25	1569.1	33.0	40.0	35.3	5.0	35.0	30.0	Active	Monitoring	Qal/MCfg1
PC-107 PC-108	Kerr-McGee Kerr-McGee	827136.49950 828526.95850	26729287.57900 26731913.04700	1616.94 1584.81	1617.19 1584.96	-0.25 -0.15	1601.2 1540.0	16.0 45.0	20.0 55.0	18.0 45.0	7.7 9.7	17.7 44.7	10.0 35.0	Active Active	Monitoring Monitoring	Qal Qal
PC-108 PC-109	Kerr-McGee	828117.18100	26732063.87350	1587.08	1587.21	-0.13	1552.2	35.0	50.0	40.0	9.7 9.7	39.7	30.0	P&A	Monitoring	Qal
PC-110	Kerr-McGee	826778.30600	26731928.10950	1594.47	1591.80	2.67	<1554.80	>37	37.0	37.0	6.7	36.7	30.0	Active	Monitoring	Qal
PC-111	Kerr-McGee	826540.14700	26732782.12500	1585.36	1585.79	-0.43	1550.8	35.0	60.0	35.3	9.6	34.6	25.0	Active	Monitoring	Qal
PC-112	Kerr-McGee	828898.30950	26732800.68850	1575.15	1575.24	-0.09	1525.2	50.0	54.0	47.3	7.0	47.0	40.0	Active	Monitoring	Qal
PC-113	Kerr-McGee	829176.91500	26732302.71600	1573.59	1573.71	-0.12	1543.7	30.0	54.0	30.3	5.0	30.0	25.0	P&A	Monitoring	Qal
PC-114	Kerr-McGee	829700.64800	26732303.15600	1573.62	1573.83	-0.21	1544.8	29.0	35.0	30.3	5.0	30.0	25.0	P&A	Monitoring	Qal
PC-115	Kerr-McGee	831044.51600	26733155.23700		1553.62		1505.0	49.0	55.3	55.3	10.0	50.0	40.0	P&A	Recovery	Qal
PC-115R	Kerr-McGee	831148.63500	26733131.32500	1554.71	1554.79	-0.08	1504.8	50.0	58.0	55.5	10.0	50.0	40.0	Active	Recovery	Qal
PC-116	Kerr-McGee	831364.80700	26733213.14200		1551.64		1505.5	47.0	55.0	52.3	12.0	47.0	35.0	P&A	Recovery	Qal
PC-116R	Kerr-McGee	831348.42600	26733203.15300	1552.10	1552.04	0.06	1503.0	49.0	58.0	55.5	10.0	50.0	40.0	Active	Recovery	Qal
PC-117 PC-118	Kerr-McGee Kerr-McGee	831422.37090 831051.98530	26733275.94470 26733167.39220	1552.26 1554.53	1551.23 1553.65	1.03 0.88	1500.2 1504.2	51.0 49.5	57.5 52.0	53.0 51.0	11.0 9.0	51.0 49.0	40.0 40.0	Active Active	Recovery	Qal Qal
PC-118 PC-119	Kerr-McGee	831051.98530	26733167.39220	1554.66	1553.65	0.88	1504.2	49.5 47.0	52.0 49.0	51.0 47.0	9.0 15.0	49.0 45.0	40.0 30.0	Active	Recovery Recovery	Qal
PC-119 PC-120	Kerr-McGee	830851.47270	26733185.76610	1554.66	1554.34	0.32	1509.4	47.0	49.0	47.0	15.0	45.0 45.0	30.0	Active	Recovery	Qal
PC-121	Kerr-McGee	830751.31470	26733180.39010	1554.10	1554.70	-0.60	<1514.20	>40.5	40.5	38.5	6.5	36.5	30.0	Active	Recovery	Qal
PC-122	Kerr-McGee	829675.17300	26728145.17100	1617.39	1617.55	-0.16	1580.4	37.0	40.0	38.0	22.5	37.5	15.0	Active	Monitoring	Qal
PC-123	Kerr-McGee	829485.04100	26727358.44000	1626.44	1626.70	-0.26	1593.4	33.0	35.5	35.2	20.0	35.0	15.0	Active	Monitoring	Qal/MCfg1
PC-124	Kerr-McGee	830132.95300	26726741.58300	1635.73	1636.30	-0.57	1603.7	32.0	36.0	35.5	20.3	35.3	15.0	Active	Monitoring	Qal/MCfg1
PC-125	Kerr-McGee	829925.94500	26726739.81700	1635.06	1632.41	2.65	1603.1	32.0	34.3	33.9	18.7	33.7	15.0	Active	Monitoring	Qal/MCfg1
PC-126	Kerr-McGee	829724.72200	26726737.83700	1634.33	1634.66	-0.33	<1599.66	>35	35.0	34.7	19.5	34.5	15.0	Active	Monitoring	Qal
PC-127	Kerr-McGee	829316.64700	26726735.62100	1632.42	1632.92	-0.50	1599.4	33.0	35.0	35.5	15.0	35.0	20.0	Active	Monitoring	Qal/MCfg1
PC-128	Kerr-McGee	828953.97400	26726732.39100	1633.36	1633.62	-0.26	1601.4	32.0	35.0	35.0	14.8	34.8	20.0	Active	Monitoring	Qal/MCfg1
PC-129	Kerr-McGee	828747.28400	26726730.81200	1633.99	1634.36	-0.37	<1595.36	>39	39.0	39.0	38.0	12.8	37.8	Active	Monitoring	Qal
PC-130	Kerr-McGee	828538.18900	26726729.30900	1633.21	1633.50	-0.29	1585.2	48.0	50.0	50.0	14.8	49.8	35.0	Active	Monitoring	Qal/MCfg1

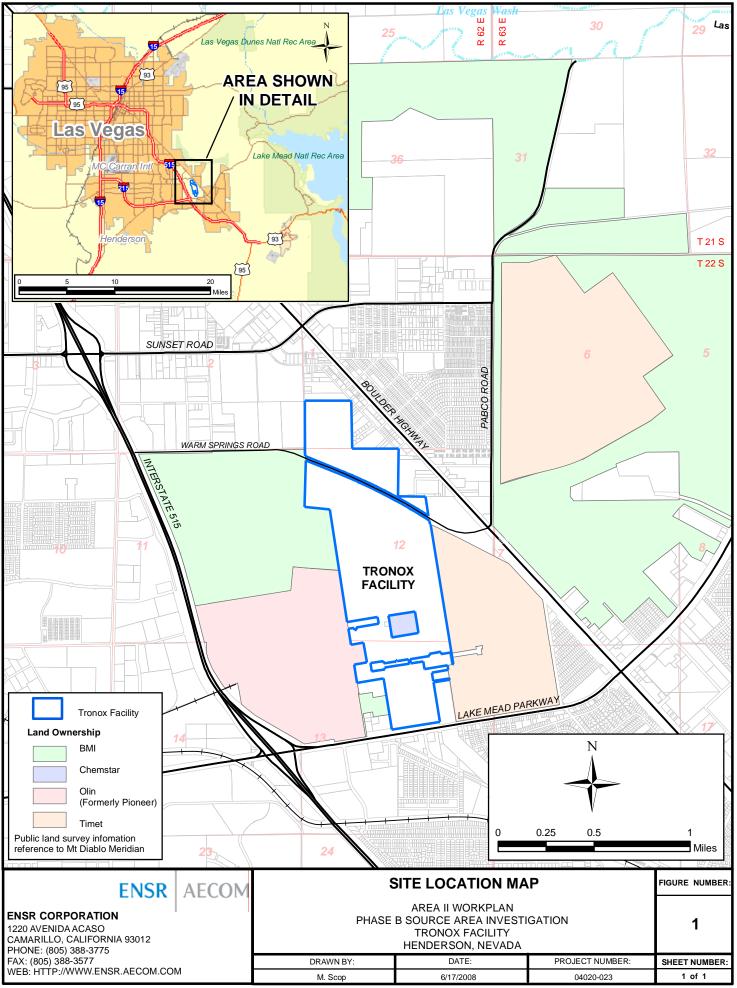
Phase B Source Area Investigation Work Plan Area III

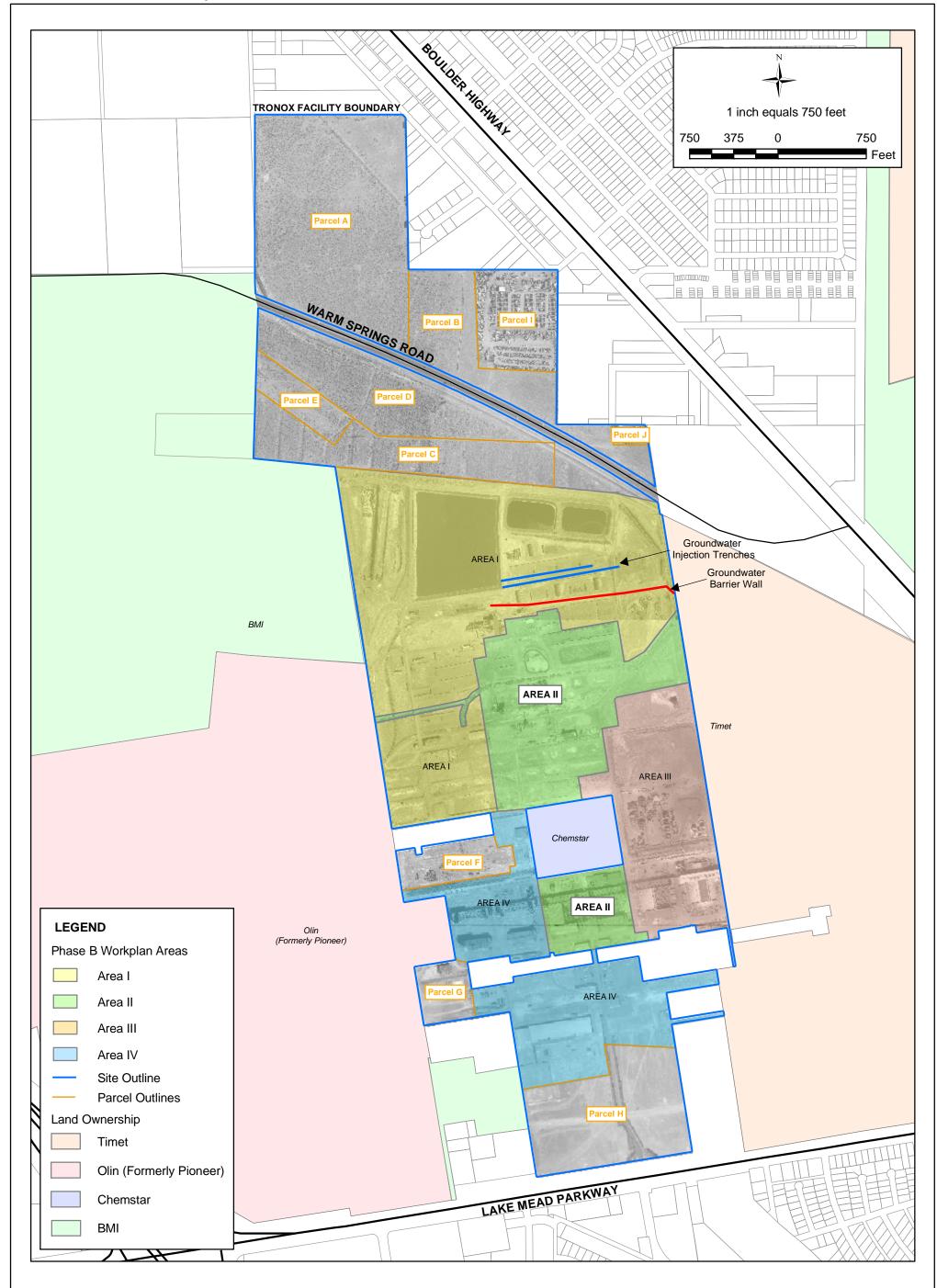
Tronox Facility - Henderson, Nevada Page 7 of 7

Well ⁽¹⁾	Owner	x	Y	TOC Elevation	Ground Elevation	Casing Stickup ²	Muddy Creek Elevation ³	QAL Thickness ⁴	Hole Total Depth	Well Total Depth	Depth to Screen Top	Depth to Screen	Screen Interval	Status	Туре	Aquifer
						ononap		Interaction				Bottom				
Note: Proposed P	Phase B wells for	Area II are listed o	n Table 3 and are hig	hlighted in BOLE) below.											
PC-131	Kerr-McGee	828123.27800	26726725.41400	1633.58	1634.28	-0.70	1593.6	40.0	40.0	40.0	9.8	39.8	30.0	Active	Monitoring	Qal/MCfg1
PC-132	Kerr-McGee	827913.94400	26726723.10200	1634.84	1635.21	-0.37	1602.8	32.0	40.0	40.0	9.8	39.8	30.0	Active	Monitoring	Qal/MCfg1
PC-133	Tronox	831758.00000	26733209.00000	1553.00	1551.84	1.16	1513.8	38.0	40.2	40.2	5.0	40.0	35.0	Active	Recovery	Qal/MCfg1
PC-134	Tronox	828776.17100	26728126.41500	1617.01	1617.43	-0.43	1568.4	49.0	70.0	70.0	59.7	69.7	10.0	Active	Monitoring	MCfg1
PC-135	Tronox	828765.25000	26728123.17700	1617.25	1617.52	-0.27	1568.0	49.5	50.0	50.0	19.7	49.7	30.0	Active	Monitoring	Qal
PC-136	Tronox	829517.88800	26728191.37400	1615.08	1615.46	-0.38	1578.0	37.5	38.0	38.0	17.7	37.7	20.0	Active	Monitoring	Qal
PC-137	Tronox															
TR-1	Kerr-McGee															
TR-10	Kerr-McGee															
TR-11	Kerr-McGee	825422.57000	26721918.29000	1717.12	1714.80	2.32	1664.8	50.0	255.0	230.5	210.0	230.0	20.0	Active	Monitoring	MCcg2
TR-12	Kerr-McGee	825286.37000	26723271.82000	1695.84	1693.44	2.40	1650.4	43.0	293.0	292.5	272.0	292.0	20.0	Active	Monitoring	MCcg2
TR-2	Kerr-McGee	826156.85000	26719954.57000	1751.79	1749.45	2.34	1712.5	37.0	180.0	175.0	144.5	174.5	30.0	Active	Monitoring	MCfg1
TR-3	Kerr-McGee	826342.89000	26718941.61000	1772.84	1770.08	2.76	1743.1	27.0	251.5	250.0	219.5	249.5	30.0	Active	Monitoring	MCcg2
TR-4	Kerr-McGee	826342.53000	26718951.58000	1772.55	1770.04	2.51	1743.0	27.0	147.0	145.0	124.5	144.5	20.0	Active	Monitoring	MCfg1
TR-5	Kerr-McGee	826595.86000	26717592.13000	1800.27	1797.45	2.82	1760.5	37.0	251.5	251.5	221.0	251.0	30.0	Active	Monitoring	MCcg2
TR-6	Kerr-McGee	826594.34000	26717608.38000	1800.36	1797.53	2.83	1760.5	37.0	80.5	80.0	60.0	80.0	20.0	Active	Monitoring	MCfg2
TR-7	Kerr-McGee	826724.99000	26716525.47000	1829.03	1826.56	2.47	1783.6	43.0	292.0	290.5	260.0	290.0	30.0	Active	Monitoring	MCcg2
TR-8	Kerr-McGee	826722.81000	26716512.15000	1829.08	1826.54	2.54	1783.5	43.0	98.0	93.5	63.0	93.0	30.0	Active	Monitoring	MCcg1/fg2
TR-9	Kerr-McGee	827560.22000	26715752.71000	1854.29	1851.75	2.54	1806.8	45.0	250.5	250.5	230.0	250.0	20.0	Active	Monitoring	MCcg2
TR-10	Kerr-McGee	827562.53000	26715739.77000	1854.06	1851.72	2.34	1806.7	45.0	102.0	100.5	80.0	100.0	20.0	Active	Monitoring	MCfg1
TR-11	Kerr-McGee	825422.57000	26721918.29000	1717.12	1714.80	2.32	1664.8	50.0	255.0	230.5	210.0	230.0	20.0	Active	Monitoring	MCcg2
TR-12	Kerr-McGee	825286.37000	26723271.82000	1695.84	1693.44	2.40	1650.4	43.0	293.0	292.5	272.0	292.0	20.0	Active	Monitoring	MCcg2
CLD2-R	TIMET	828919.17500	26719962.60500	1753.790	1750.000	3.79	1717.000	33.000	42.000	0.000	0.000	0.000	0.000	Active	Monitoring	Alluvial
DEFINITIONS																
OWNER		the company who ir														
X and Y		nd "Y" (Easting) - No	orth American Datum.													
тос	Top of Casing.															
QAL	Quaternary Alluv															
STATUS			as been sampled. "P&													
TYPE			ely to collect groundwa	ater samples to as	sess water quality	r. "Recovery" wel	Is are part of the grou	undwater containmer	nt systems and	d are used to	o pump ground	water.				
AQUIFER	Aquifer units des	signated by Tronox														
			ludes saturated upperr													
			eek Formation - "first"													
			reek Formation - "first"													
			eek Formation - "seco													
		MCfg2 - Muddy Cr	eek Formation - "seco	nd" coarse-graine	d facies											
			dicates that the well is	screened across l	ooth units											
		Alluvial - (Timet) de	esignation for Qal.													
			screen interval of the v			raddle two aquife	er units as noted abov	ve.								
	Information not a	available or provide	d in the BMI "ALL WEL	LS" database - Ju	ine 2008.											
NOTES																
1	Well and the ass	ociated information	as listed in the BMI "A	II Wells" database	e - June 2008.											
2			sitive being "up" and n			nce below the arr	ound surface									
3			dy Creek was not enco				sana bunuoo.									
4		•	measured from the gr													I
	, und					,										

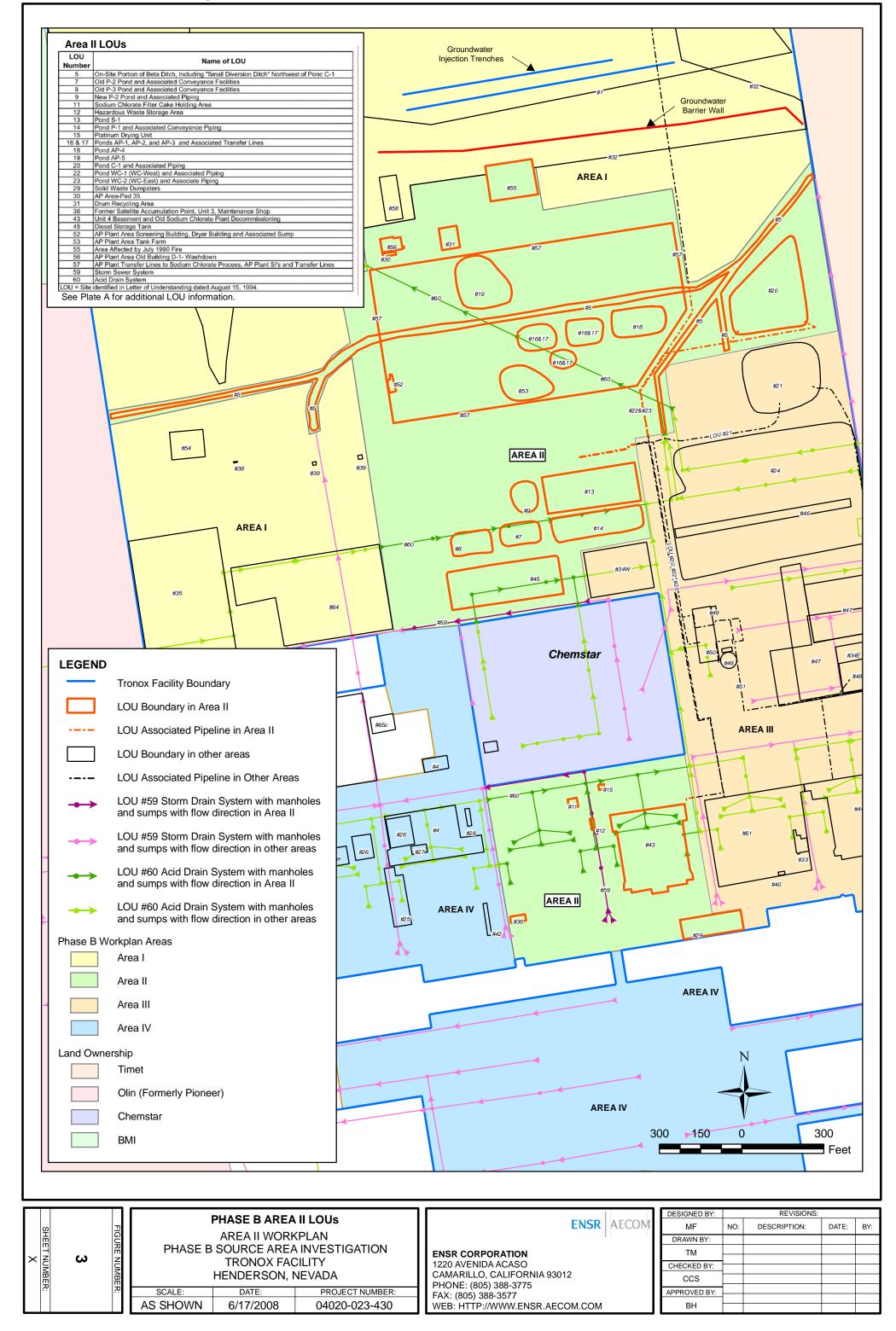
FIGURES

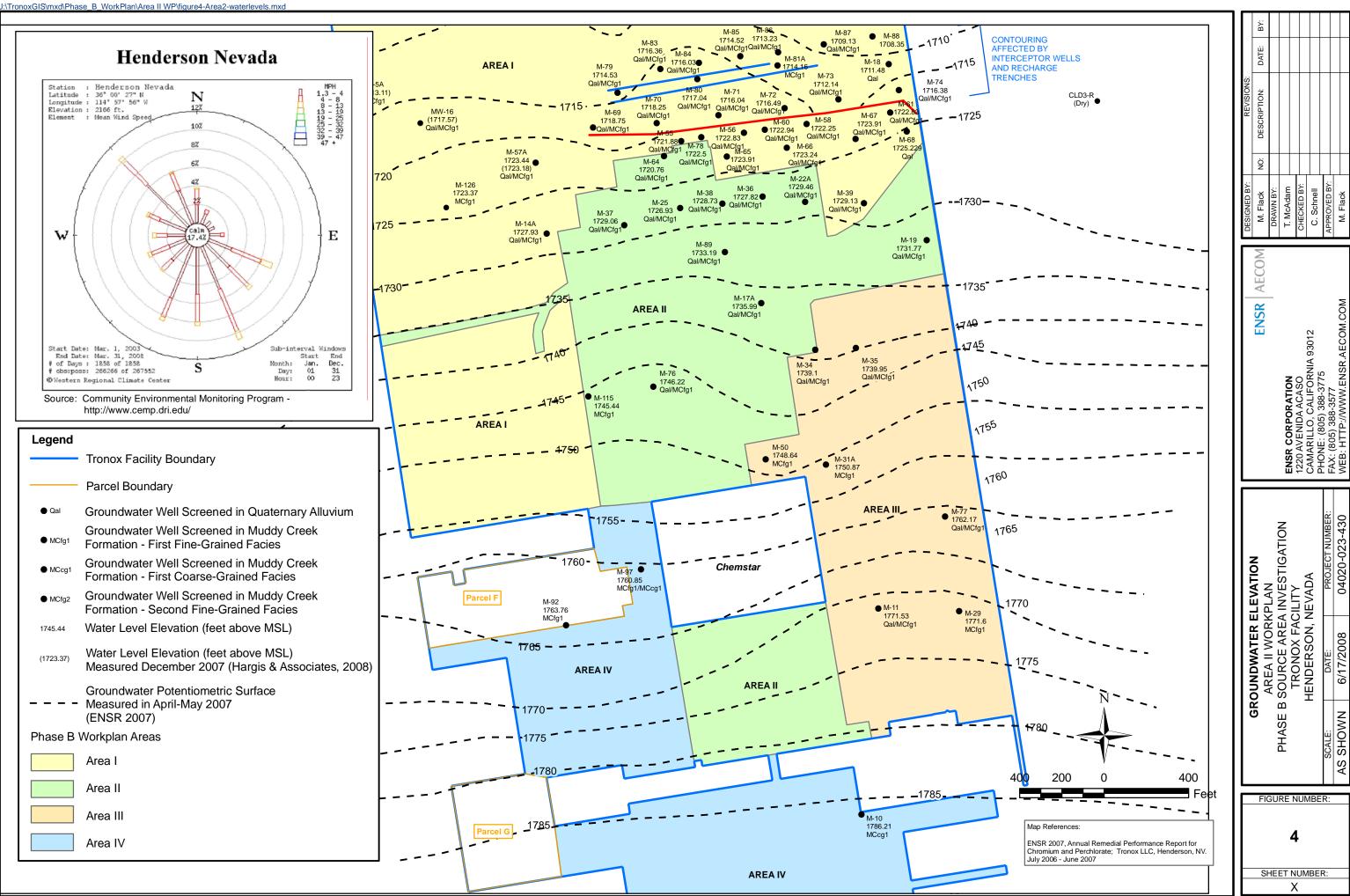
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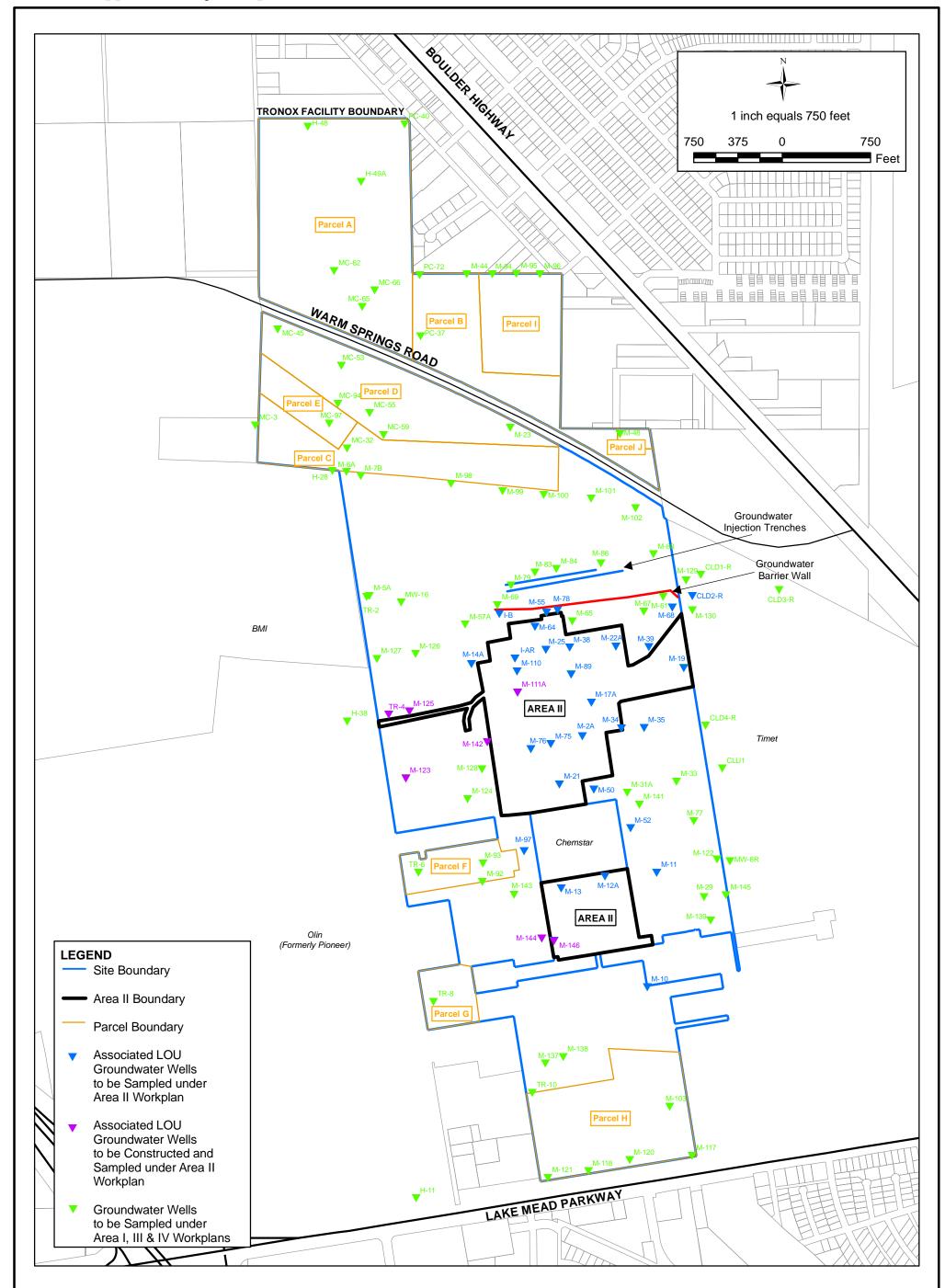




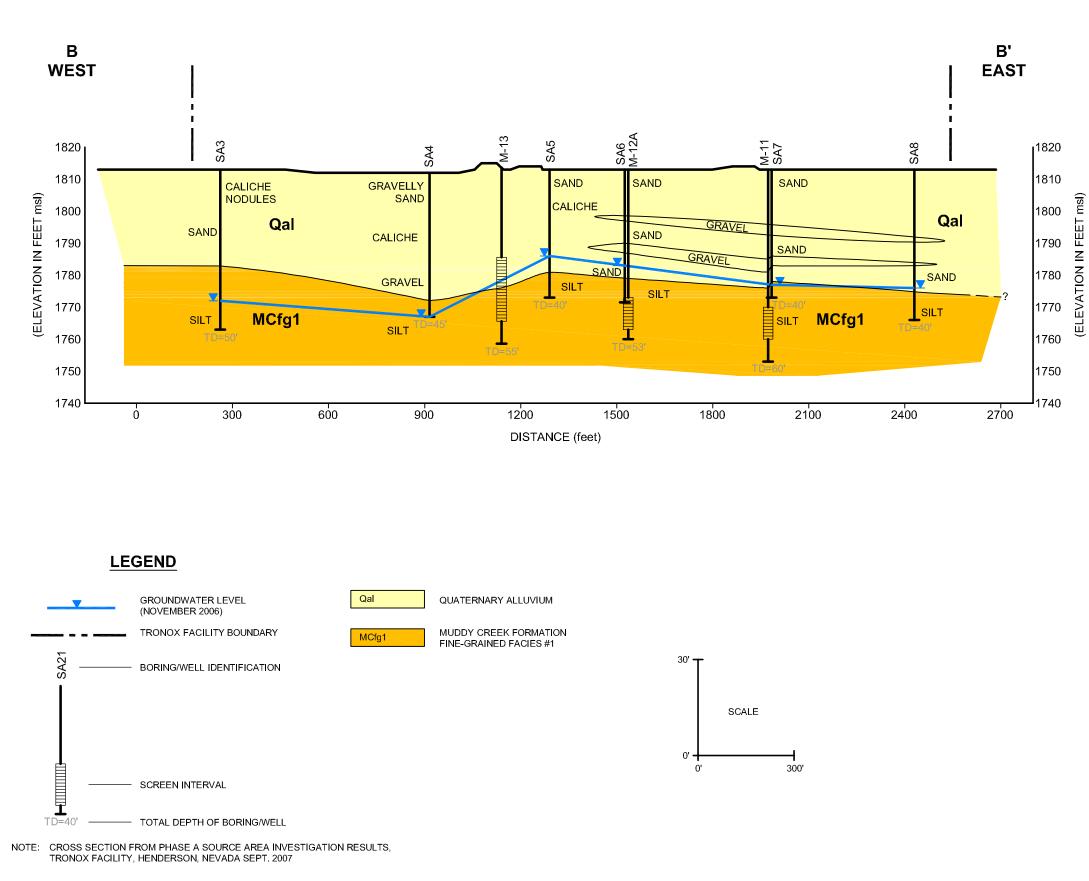
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	N		PHASE B			ENSR CORPORATION	M.S.				
XUN		NUN				1220 AVENIDA ACASO	CHECKED BY:				
BEF		JMBE		HENDERSON, N	NEVADA	CAMARILLO, CALIFORNIA 93012 PHONE: (805) 388-3775	B.H.				
بب			SCALE:	DATE:	PROJECT NUMBER:	FILONE: (805) 388-3577	APPROVED BY:	1			
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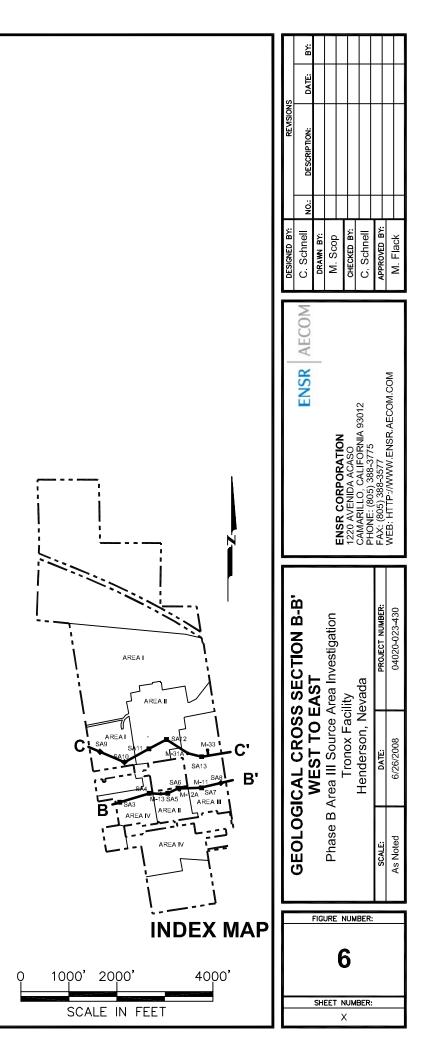
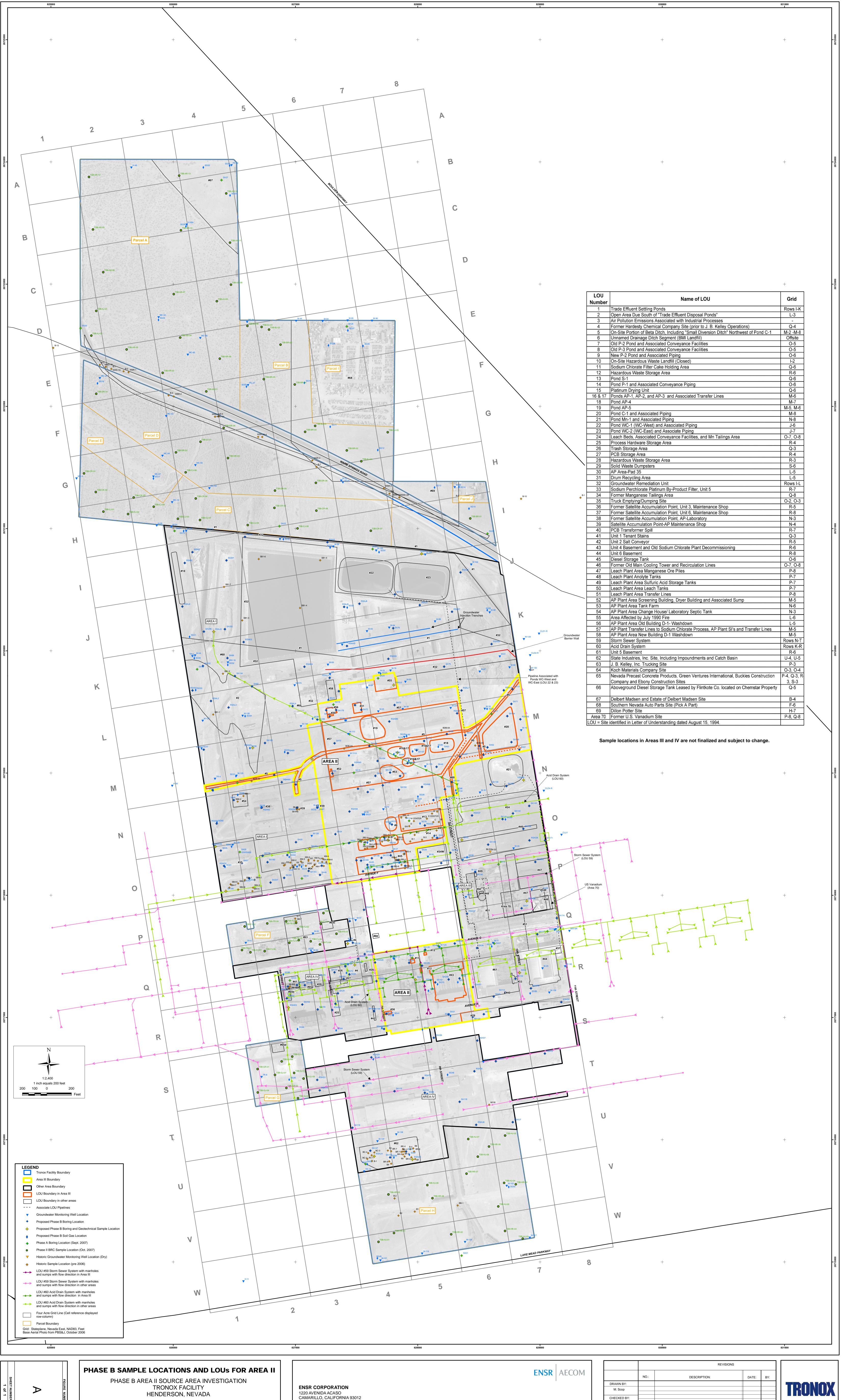


Plate A – Phase B Sample Locations and LOUs for Area II

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	1220 AVENIDA ACASO CAMARILLO, CALIFORNIA 93012 PHONE: (805) 388-3775 FAX: (805) 388-3577
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DATE:

6/20/2008

	REVISIONS				
	NO.:	DESCRIPTION:	DATE:	BY:	
DRAWN BY:					TRALIAV
M. Scop					TRINEX
CHECKED BY:					
C. Schnell					
APPROVED BY:					
B. Ho					