From: Kyle Summers
To: cory.smith@state.nm.us
Cc: Miller, Greg; Long, Thomas; Cooksey, Nick; Drewry, Scott; Marc Gentry
Subject: Revised Stage 1 Abatement Plans for AP-131
Date: Thursday, May 23, 2019 12:01:54 PM
Attachments: Trunk 6C Abatement Plan_Final_Full_Revised_v2.pdf

Cory,
The revised Stage 1 Abatement Plan for the above-referenced site is attached for your review.

Respectfully,
Kyle Summers

REVIEWED
By Mike Buchanan at 11:36 am, Jan 25, 2024

Kyle Summers
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www.ensolum.com

Stage 1 Abatement Plan reviewed and conditionally approved. Letter of determination sent electronically on 01/25/2024.

ENSOLUM

REVISED TRUNK 6C KUTZ WASH PIPELINE RELEASE
STAGE 1 ABATEMENT PLAN

Property:
Trunk 6C Kutz Wash Pipeline Release
SW ¼, S26 T28N R11W
San Juan County, New Mexico

New Mexico EMNRD OCD RP No. 3R-438
Abatement Plan No. 131

March 21, 2019
Revised May 22, 2019
Ensolum Job No: 05A1226011

Prepared for:
Enterprise Field Services, LLC
P.O. Box 4324
Houston, Texas 77210-4324
Attn: Mr. Gregory E. Miller, P.G.

Ranee Deechilly
Staff Scientist

Kyle Summers, CPG
Senior Project Manager

ENSOLUM

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LIST OF APPENDICES

Appendix D: Public Notice and Landowner Table

1 INTRODUCTION

Ensolum, LLC (Ensolum) has prepared a Stage 1 Abatement Plan for the Enterprise Field Services, LLC (Enterprise) Trunk 6C Kutz Wash pipeline release site located within the southwest (SW) 1/4 of Section 26, Township 28 North, Range 11 West, in San Juan County, New Mexico (36.63202°N, 107.97400°W), hereinafter referred to as the "Site".

Based on correspondence from the New Mexico Energy Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD), dated January 22, 2019, Enterprise is required to submit a Stage 1 Abatement Plan no later than March 22, 2019. The Stage 1 Abatement Plan is intended to define site conditions such that an effective abatement option can be selected. Stage 2 is implementation of the remedial option. This Stage 1 Abatement Plan details the site description and background, historic site investigation and remediation activities and the geologic and hydrogeologic characteristics. Additionally, the Stage 1 Abatement Plan may propose additional delineation, monitoring activities, and remediation activities and provides a proposed schedule to complete delineation activities in accordance with New Mexico Administrative Code (NMAC) 19.15.30. Subsequent to the successful completion and the agency approval of the proposed monitoring activities, a Stage 2 Abatement Plan will be developed to address the remediation of constituents of concern (COCs) remaining at the Site in excess of the applicable New Mexico EMNRD closure criteria.

1.1 Standard of Care and Limitations

Ensolum's services will be performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services to be performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information to be used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services will be performed in accordance with the scope of work agreed with the client and regulatory agency, as detailed in our discussions.

Findings, conclusions, and recommendations resulting from these services will be based upon information derived from public information resources and it should be noted that this information is subject to change over time. Ensolum's findings are based solely upon data available to Ensolum at the time of these services.

This report will be prepared for the exclusive use of Enterprise Products Operating LLC (Enterprise), and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Enterprise and Ensolum. Any unauthorized distribution or reuse is at the Client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Stage 1 Abatement Plan and Ensolum's Agreement with the client. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

2 SITE DESCRIPTION AND BACKGROUND

The Trunk 6C Kutz Wash pipeline release Site is located on land managed by the United States Bureau of Land Management (BLM). The Site is surrounded by rangeland that is periodically interrupted by oil and gas production and gathering facilities, including the natural gas gathering pipeline that traverses the area from approximately northwest to southeast.

On September 22, 2011, a pipeline release of natural gas and associated pipeline liquids was discovered at the Site and the pipeline was subsequently repaired. A Site assessment conducted by Animas Environmental Services, LLC (AES) during October 2011 identified COC concentrations in "test hole" excavation soil and groundwater that exceeded the New Mexico EMNRD OCD *Remediation Action Levels* (*RALs*) (which were applicable at that time) for soils and the New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards* (*GQSs*) for groundwater.

Excavation, delineation, and remediation activities were performed between November 2011 and September 2016. Results from the excavation, delineation, and remediation activities indicated COC concentrations in soil and groundwater above the applicable New Mexico EMNRD OCD and WQCC standards. Semi-annual groundwater monitoring events are ongoing at the Site.

A **Topographic Map** is provided as **Figure 1** of **Appendix A**, which was reproduced from a portion of a United States Geological Survey (USGS) 7.5-minute series topographic map. A **Site Vicinity Map**, created from an aerial photograph, is provided as **Figure 2**, and a **Site Map**, which indicates the locations of the monitoring wells and recent soil borings in relation to pertinent structures and general Site boundaries, is provided as **Figure 3** of **Appendix A**.

3 SITE CHARACTERIZATION

3.1 Regional Geology and Hydrogeology

The Site is located within the San Juan Basin which is the major structural feature in the northwest corner of New Mexico. The San Juan Basin is classified as an arid region, as most of the area receives less than 10 inches of precipitation per year. Mean annual precipitation in the mountainous regions along the basin margin may be as much as 30 inches a year. Surface water is relatively scarce, with the exception of the San Juan River and its tributaries.

Based upon reference information from the New Mexico Bureau of Geology and Mineral Resources publication on the background geology of the San Juan Basin (Decision-Makers Field Conference 2002) "most of the aquifers in the San Juan Basin exist under confined or semi-confined hydrologic conditions. In Mesozoic rocks of the region, the confined sandstone aquifers are interbedded with shales that behave as aquitards. The Triassic mudrock sequence is the aquitard for the Permian Limestone. Groundwater in the alluvium along streams and in the shallow Tertiary sandstone aquifers is generally unconfined and is open to the atmosphere through pores in the overlying permeable rocks."

The major aquifer underlying the Site vicinity is listed as the Colorado Plateaus Aquifer, which is made up of four aquifers – Uinta-Anima, Mesa Verde, Dakota-Glen, and Coconino-De Chelly. The Uinta-Animas is the shallowest of these aquifers and is present in the San Juan Basin. The general composition of the aquifers is moderately to well-consolidated sedimentary rocks of an

age ranging from Permian to Tertiary. Each aquifer is separated from the others by an impermeable confining unit. Two of the confining units are completely impermeable and cover the entire area of the aquifers. The other two confining units are less extensive and are thinner. These units allow water to flow between the principal aquifers.

According to the New Mexico Bureau of Geology and Mineral Resource (Geologic Map of New Mexico 2003), the Site is located within the upper Nacimiento Formation. The Nacimiento Formation is a heterogeneous non-marine formation composed of sandstone, siltstone, and shale, comprised of sediment eroded from the San Juan and Brazos-Sangre de Cristo uplifts.

3.2 Local Geology and Hydrogeology

Boring logs were prepared during historic site investigation activities. The boring logs recorded sample identification, depth collected, and method of collection, as well as observations of soil moisture, color, grain size, contaminant presence, and overall stratigraphy. The lithology encountered at the Site during boring activities were composed of Quaternary alluvial and fluvial deposits. Based on the data collected during the completion of the soil borings, the lithology generally consists of brown to tan silty sands, sands, and clayey sand, with some gravel at depths greater than 20 feet below grade surface (bgs). Sandstone bedrock was identified at approximately 25 feet bgs.

The lithology observed during the advancement of soil boring MW-7 at the Site included a brown silty sand from the surface to approximately five (5) feet bgs. The silty sand stratum was underlain by a brown clayey sand from five (5) feet bgs to 10 feet bgs. A brown sand was encountered from 10 feet bgs to 25 feet bgs. Gray bedrock was encountered from 25 feet bgs to the terminus depth of 26 feet bgs. The lithologies observed in the remaining soil borings at the Site were generally similar to that of soil boring MW-7. Detailed lithologic descriptions are presented on the monitoring well soil boring logs included in **Appendix C**.

The initial groundwater-bearing unit at the Site was encountered at depths ranging from 13 to 16 feet bgs during supplemental investigation activities. The groundwater flow direction (gradient) at the Site is generally toward the northwest and averages approximately 0.008 feet per foot (ft/ft) across the Site.

Based on site investigation activities, impact to surface water has not been identified.

Based on Domenico and Schwartz (1990) a default hydraulic conductivity value for the impacted sand unit at the Site would be, on average, $2x10^{-6}$ m/sec which is equivalent to 0.57 feet per day (ft/day). Additional site-specific aquifer characterization is proposed in this Stage 1 Abatement Plan Proposal.

3.3 Proposed Cleanup Goals

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. Initial Site activities were performed in accordance with the New Mexico ENMRD OCD *Guidelines for Remediation of Leaks, Spills and Releases*, in addition to the New Mexico EMNRD OCD rules, specifically NMAC 19.15.29 *Release Notification.* This guidance established investigation and abatement action requirements for sites subject to reporting and/or corrective action prior to the update of the rule during August 2018. Groundwater remediation activities at the Site will be performed in accordance with NMAC 19.15.30 *Remediation*.

Ensolum utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging Database to determine the appropriate closure criteria for the Site.

- No water wells were identified within a one (1) mile search radius of the Site on the OSE Water Rights Reporting System (WRRS) database. Based on water levels measured in groundwater monitoring wells located at the Site, the depth to groundwater is less than 50 feet bgs.
- The Site is located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or significant watercourse. The Site is located approximately 127 feet southwest of Kutz Canyon Wash.
- The Site is not located within 200 feet of a lakebed, sinkhole or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution or church.
- No springs, or private domestic fresh water wells used by less than five (5) households for domestic or stock watering purposes were identified within 500 feet of the Site.
- No fresh water wells or springs were identified within 1,000 feet of the Site.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- Based on available Federal Emergency Management Agency data, the Site is located adjacent to, but not within, a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include: 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total benzene, toluene, ethylbenzene, and total xylenes (BTEX), 100 mg/kg for combined total petroleum hydrocarbon (TPH) gasoline range organics (GRO) diesel range organics (DRO) and motor oil/lube oil range organics (MRO) and 600 mg/kg for chlorides.

In addition, cleanup/delineation goals for groundwater located at the Site include: 10 micrograms per liter (µg/L) for benzene, 750 µg/L for toluene, 750 µg/L for ethylbenzene, and 620 µg/L for total xylenes.

4 SUMMARY OF SITE ASSESSMENT ACTIVITIES

On September 22, 2011, a pipeline release of an unknown volume of natural gas and associated liquids was discovered at the Site and the pipeline was subsequently repaired. AES collected one (1) soil sample from the floor of the repair excavation. Based on field screening results, the soil sample exhibited elevated levels of volatile organic compounds (VOCs). A site assessment was conducted by AES on October 11, 2011, which included the collection of soil samples from four (4) test holes (TP-1 through TP-4) which were advanced near the release area, as well as groundwater samples from two (2) of the four (4) test holes. Based on laboratory analytical results, BTEX and TPH were identified in soils from two (2) of the test holes (TP-1 and TP-2) at concentrations above the New Mexico EMNRD OCD *RALs*. The test hole water samples collected from TP-2 and TP-4 exhibited concentrations of benzene, toluene, and total xylenes above WQCC *GQSs*. Additional detail regarding the initial site assessment activities are provided in the *Release Assessment Report, dated October 28, 2011- AES.*

During November 2011, AES advanced eight (8) soil borings (SB-1 through SB-8) at the Site to further delineate the extent of hydrocarbon affected soil and potentially impacted groundwater. Laboratory analytical results for the soil and groundwater samples collected from the soil borings identified COC concentrations in soil above the New Mexico EMNRD OCD *RALs* (SB-2, SB-7, and SB-8) and in groundwater above the WQCC *GQSs* (SB-2W, SB-3W, and SB-7W) *(Site Investigation Report, dated February 20, 2012 – AES)*.

During September 2012, nine (9) additional soil borings were advanced at the Site by AES to further evaluate the extent of dissolved phase COCs in groundwater. Subsequent to advancement, the soil borings were completed as groundwater monitoring wells (MW-1 through MW-9). Laboratory analytical results did not indicate COCs in soil above the New Mexico EMNRD OCD *RALs* at these soil boring/monitoring well locations. However, COCs were confirmed in groundwater above the WQCC *GQSs (Groundwater Investigation Report, dated October 31, 2012 – AES)*.

On October 16, 2013, AES advanced four (4) additional soil borings/monitoring wells (MW-10 through MW-13) in and around the release area to further evaluate the extent of COCs in groundwater. Laboratory analytical results indicated COC concentrations in soil and groundwater from soil boring/monitoring well MW-10 were present at levels above the New Mexico EMNRD OCD *RALs* and the WQCC *GQSs* (*3rd Quarter 2013 Groundwater Monitoring and Well Installation Report, dated December 10, 2013 – AES*).

On October 28, 2013, an additional leak was discovered in the immediate vicinity of the original release and the pipeline was subsequently repaired and placed back in service. AES collected 20 discrete soils samples from the final pipeline repair excavation and the resulting analytical data identified COC concentrations above the New Mexico EMNRD OCD *RALs*. In addition, aquifer pumping tests were conducted in four (4) wells by AES to estimate hydraulic conductivity (*4th Quarter 2013 Groundwater Monitoring and Continued Investigation Report, dated July 23, 2014 – AES*).

During September 2016, Apex TITAN, Inc (Apex) performed site investigation activities to further evaluate and delineate the concentrations of COCs in soil and groundwater at the Site. Five (5) soil borings were advanced and three (3) of the soil borings were completed as groundwater monitoring wells MW-14, MW-15, and MW-17. Laboratory analytical results indicated COC concentrations in soil (MW-15 and MW-17) and groundwater (MW-17) were above the New

Mexico EMNRD OCD *RALs* and the WQCC *GQSs* (*Supplemental Environmental Site Investigation (September 2016) and Annual Groundwater Monitoring Report (June and December 2016), dated February 13, 2017 – Apex*).

Soil laboratory results, including data from previous site investigations, are provided in **Table 1** (**Appendix B**). Groundwater analytical results are summarized in **Table 2** (**Appendix B**). Groundwater measurements (including historical data) are presented with top of casing (TOC) elevations in **Table 3** (**Appendix B**). Benzene, BTEX, and TPH RAL Exceedance Zone soil maps for vadose and capillary fringe zones are provided as **Figure 4A** through **Figure 4F** (**Appendix A**) and included the estimated area of soil impact based on available and current historical data. Groundwater gradient maps and groundwater quality standards exceedance zone maps that include the June and December 2018 exceedances are provided as **Figure 4A**, **Figure 4B**, **Figure 5A** and **Figure 5B** (**Appendix A)**. Available soil boring logs are provided in **Appendix C**. Please note that the historic soil analytical data tables reference the Remediation Action Levels provided in the now obsolete New Mexico ENMRD OCD *Guidelines for Remediation of Leaks, Spills and Releases*.

5 PROPOSED MONITORING ACTIVITIES

5.1 Health and Safety Plan

Ensolum will develop a site-specific Health and Safety Plan (HSP) for the performance of the proposed scope of services described in this work plan. For the purposes of this HSP, it is assumed that the COCs include petroleum hydrocarbons constituents. For the purposes of this proposed plan, it is assumed that the scope of services can be conducted under modified Level D personal protective equipment (PPE), which will include a hard hat, steel-toed boots, protective eyewear, and gloves. Should the need arise to upgrade PPE (e.g. respiratory protection), the client will be notified, and the HSP will be modified accordingly. Although it is not anticipated at this time, it should be noted that a PPE upgrade will constitute a change in scope of work, requiring a change order.

5.2 Groundwater Sampling Program

Ensolum will collect one (1) groundwater sample from each of the 15 monitor wells on a semi-annual schedule through 2019. The purpose of the groundwater monitoring program is to evaluate and document dissolved-phase COC concentrations at the Site.

Prior to sampling, fluid levels in each of the monitoring wells will be gauged utilizing an interface probe capable of detecting non-aqueous phase liquid (NAPL).

Groundwater samples will be collected utilizing low-flow sampling or bailer-purge sampling methods.

Low-flow refers to the velocity with which groundwater enters the pump intake and that is imparted to the formation pore water in the immediate vicinity of the well screen. Water level drawdown provides the best indication of the stress imparted by a given flow-rate for a given hydrological situation. The objective is to pump in a manner that minimizes stress (drawdown) to the system, to the extent practical, taking into account established Site sampling objectives. Flow rates on the order of 0.1 to 0.5 liters per minute (L/min) are maintained during sampling activities, using

dedicated or decontaminated sampling equipment. The pump intake is placed within the screened interval such that the groundwater recovered is drawn in directly from the formation with little mixing of casing water or disturbance to the sampling zone.

The groundwater samples will be collected from each monitoring well once produced groundwater is consistent in color, clarity, pH, temperature, and conductivity. Measurements are taken every three to five minutes while purging. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for three successive readings.

If a disposable bailer is utilized to sample the monitoring well, the monitoring well will be purged until effectively dry and once groundwater recovers to static or near static levels, a groundwater sample will be collected.

Samples will be collected in laboratory supplied containers, labels/sealed using the laboratory supplied custody seals, and placed on ice in a cooler. The samples will be relinquished to the courier for Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico under proper chain-of-custody procedures.

5.3 Groundwater Laboratory Analytical Program

The groundwater samples collected from the monitoring wells will be analyzed for BTEX utilizing EPA Method SW-846 8021/8260.

A summary of the analytes, sample type, estimated number of samples per event, and EPA-approved methods are presented below:

Analytes	Sample Type	No. of Samples	Method
BTEX	Water	15	SW-846 8021/8260

5.4 Aquifer Characterization

Ensolum will evaluate site specific groundwater characteristics in the initial groundwater bearing unit. Ensolum's groundwater characterization program will be developed based on Ensolum's understanding of the geologic and hydrogeologic conditions present at the Site and will be conducted utilizing a bail-down method with recharge observations. In this method, the well is pumped/bailed as near as practicable to the base of the well screen and recovery is measured utilizing a pressure transducer capable of recording measurements for use by modeling software. The test is deemed complete when groundwater is fully recharged or when the test duration reaches 4 hours, whichever occurs first.

5.5 Stage 2 Abatement Plan Proposal

Based on the data generated from the groundwater sampling and aquifer testing, Ensolum will prepare a Stage 2 Abatement Plan Proposal. The plan will include an evaluation of the cumulative laboratory analytical data develop and justify a preferred abatement option for the Site. In addition, the Stage 2 Abatement Plan Proposal will include a modification to the groundwater monitoring program, Site maintenance activities, a proposed schedule for duration of abatement activities

and public notification proposal designed to satisfy the requirement of Subsections A through C of 19.15.30.15 NMAC.

5.6 Quality Assurance

Sampling and analytical techniques have been identified in the text above and conforms with the references identified in Subsection B of 20.6.2.3107 NMAC and with 20.6.4.14 NMAC of the water quality standards for interstate and intrastate surface waters in New Mexico.

6 PROPOSED SCHEDULE

Based on the available data, soil and groundwater impact at the Site appears to be delineated.

Public Notice

Enterprise will provide Public Notice within 15 days of notice from NMOCD that this Abatement Plan is administratively complete as required per NMAC 19.15.30.15. Enterprise will provide written notice of the Stage 1 Abatement Plan to the following parties:

- Surface owners of record within one (1) mile of the perimeter of the identified impacted area as currently delineated in the Stage 1 Abatement Plan. The list of Landowners is provided in **Table A** (**Appendix D**).
- The County Commission of San Juan County, New Mexico.
- The Office of Natural Resources Trustee for the State of New Mexico.

Please note the release was not identified to be within one (1) mile of any city limits or tribal boundaries.

Enterprise understands that the NM EMNRD OCD may request additional notification to persons or entities that have requested such, as well as other local, state, or federal governmental agencies upon approval of the Stage 1 Abatement Plan.

Once approval is received, Enterprise will publish the NM EMNRD OCD approved notice in the Farmington Daily Times, a newspaper circulated in San Juan County, New Mexico, and in the Albuquerque Journal, a newspaper of general circulation across the state of New Mexico. The newspaper publications will run for a cycle of one (1) business day.

Enterprise will issue the public notice via the newspapers and certified mailings within 15 days after the NM EMNRD OCD has provided determination that the Stage 1 Abatement Plan is administratively complete. Proposed verbiage for the public notice and a list of landowners within a one-mile radius are provided in **Appendix D**.

If no public comments are received within 30 days of posting public notice, Ensolum will proceed with permitting and scheduling supplemental site investigation activities.

Field Activities

Enterprise proposes to continue semi-annual groundwater monitoring activities at the Site until the additional aquifer testing activities are evaluated and the Stage 2 Abatement Plan Proposal

has been approved and implemented. The additional aquifer testing activities are proposed to be completed before the end of June 2019. Prior to any field work, Ensolum and/or Enterprise will provide the NM EMNRD OCD with 48-hour notification.

Quarterly Progress Reports

In accordance with NMAC 19.15.30.13 C. (5), Enterprise will provide the New Mexico ENMRD OCD with summary quarterly progress reports of the Stage 1 Abatement Plan implementation beginning 30 days after the approval and initiation of the Stage 1 activities. At this time the summary quarterly progress reports are anticipated to begin in July 2019.

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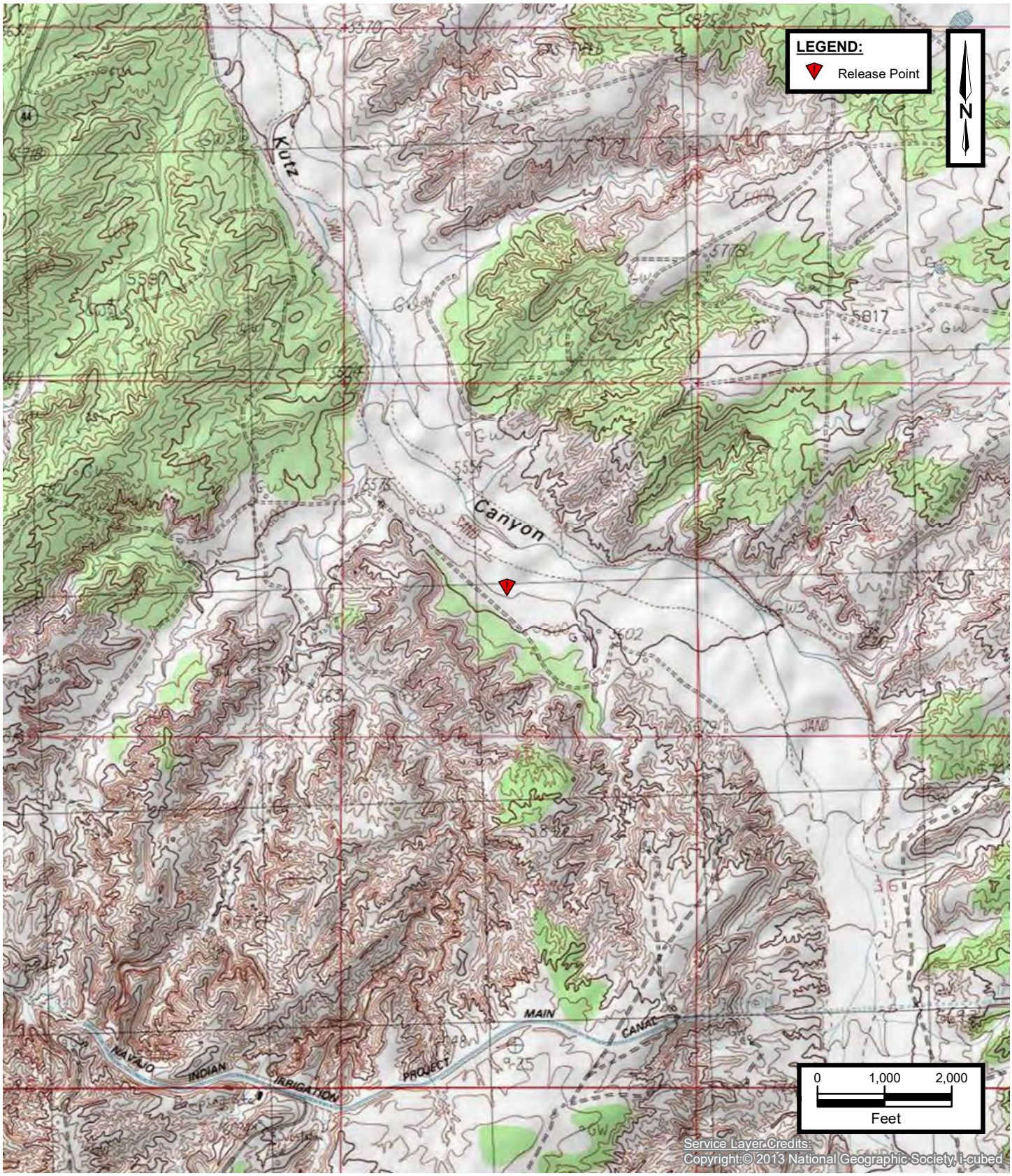
APPENDIX A

Figures



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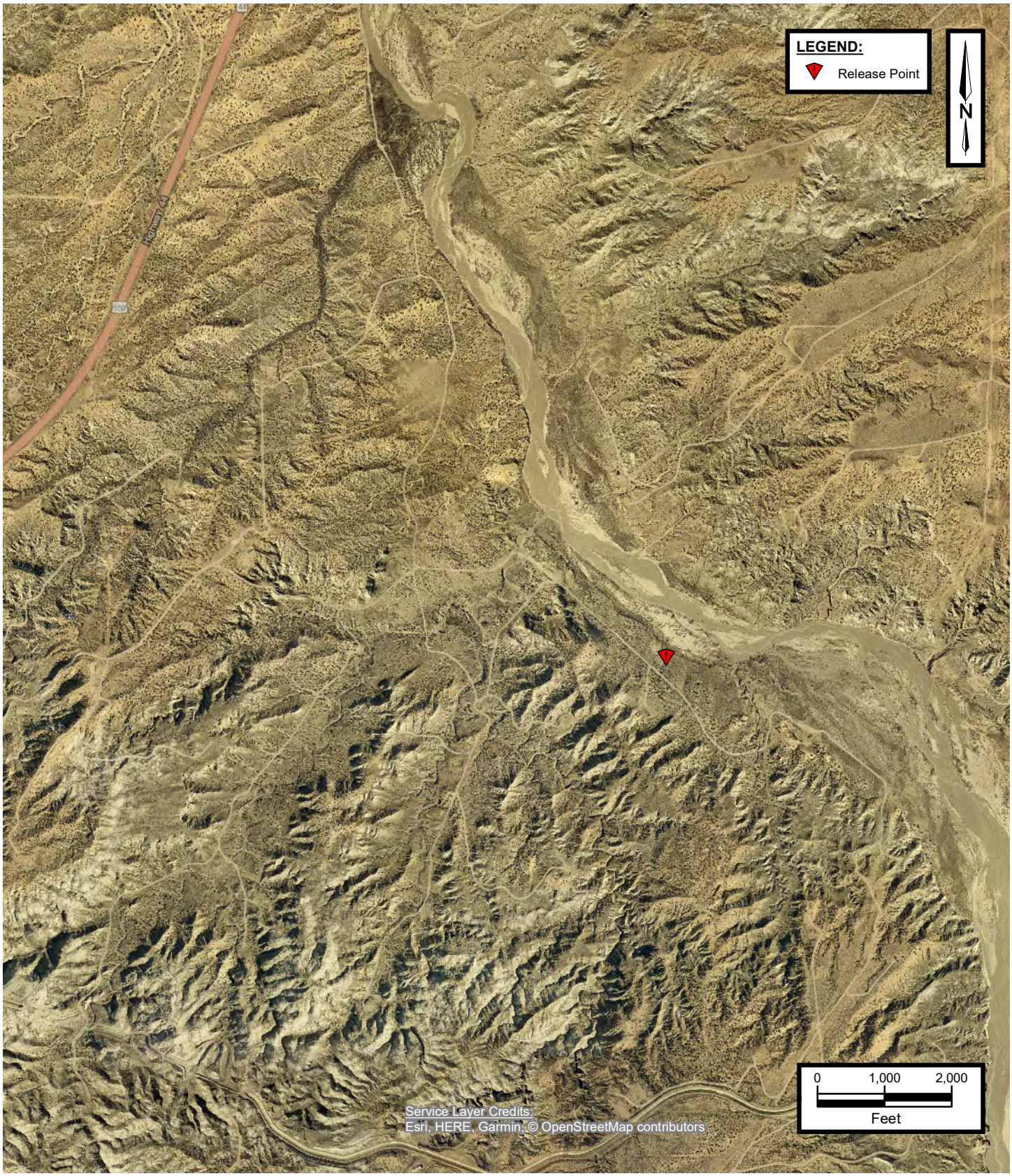
TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE

1



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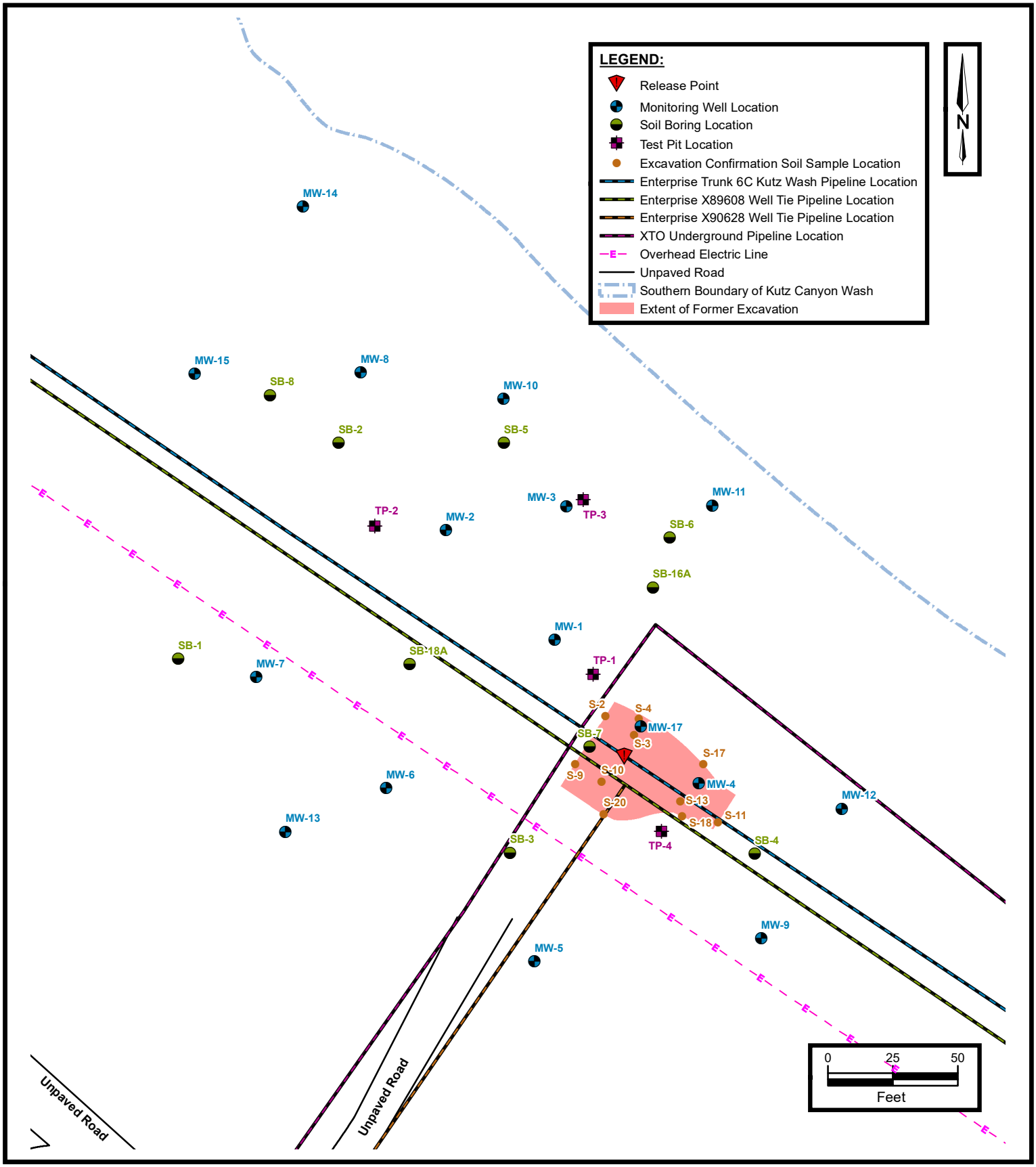
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
2



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SITE MAP

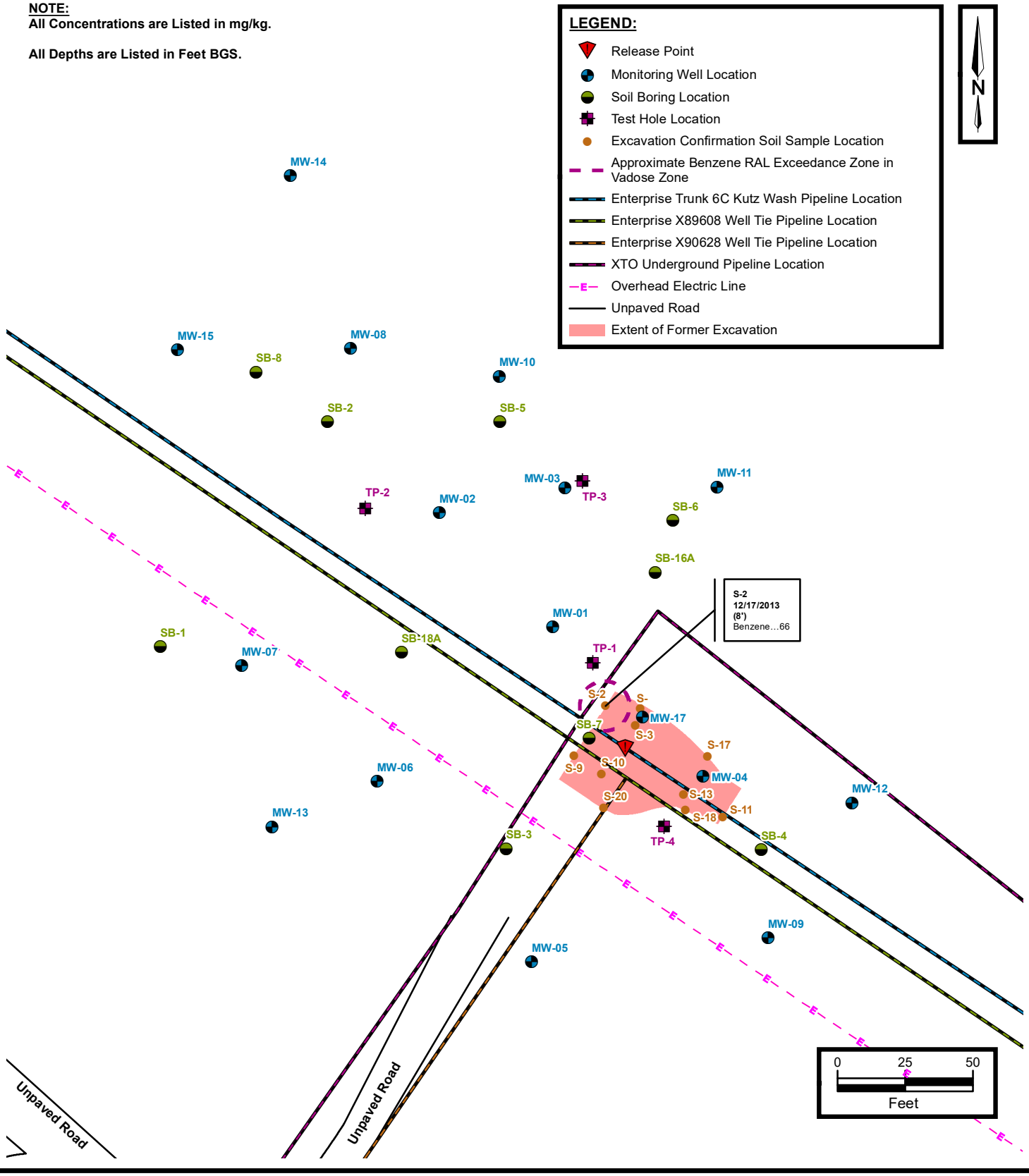
ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
3

NOTE:
All Concentrations are Listed in mg/kg.

All Depths are Listed in Feet BGS.



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BENZENE RAL EXCEEDANCE ZONE MAP
VADOSE ZONE 0 TO 10 FEET BGS

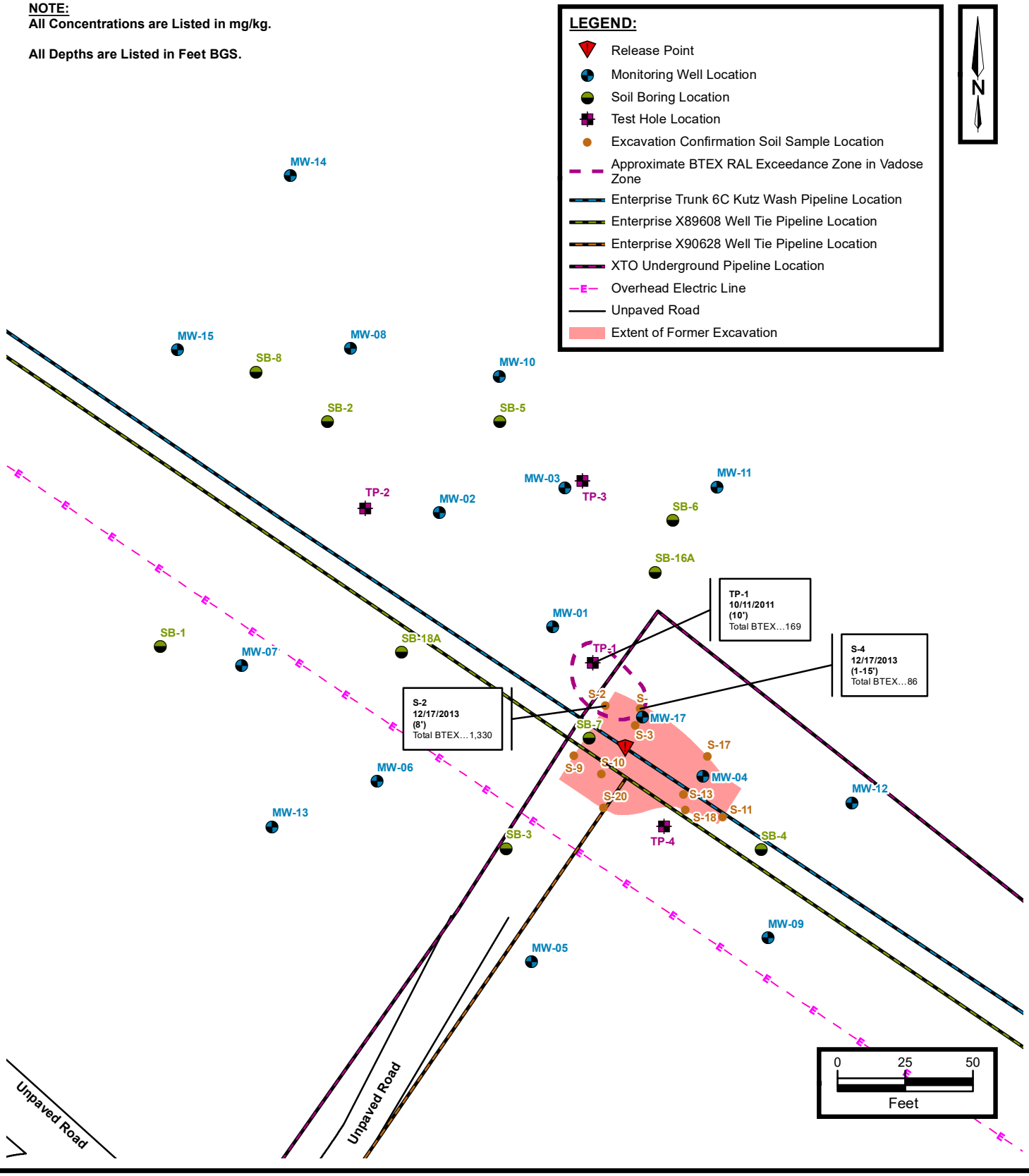
ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
4A

NOTE:
All Concentrations are Listed in mg/kg.

All Depths are Listed in Feet BGS.



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BTEX RAL EXCEEDANCE ZONE MAP
VADOSE ZONE 0 TO 10 FEET BGS

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

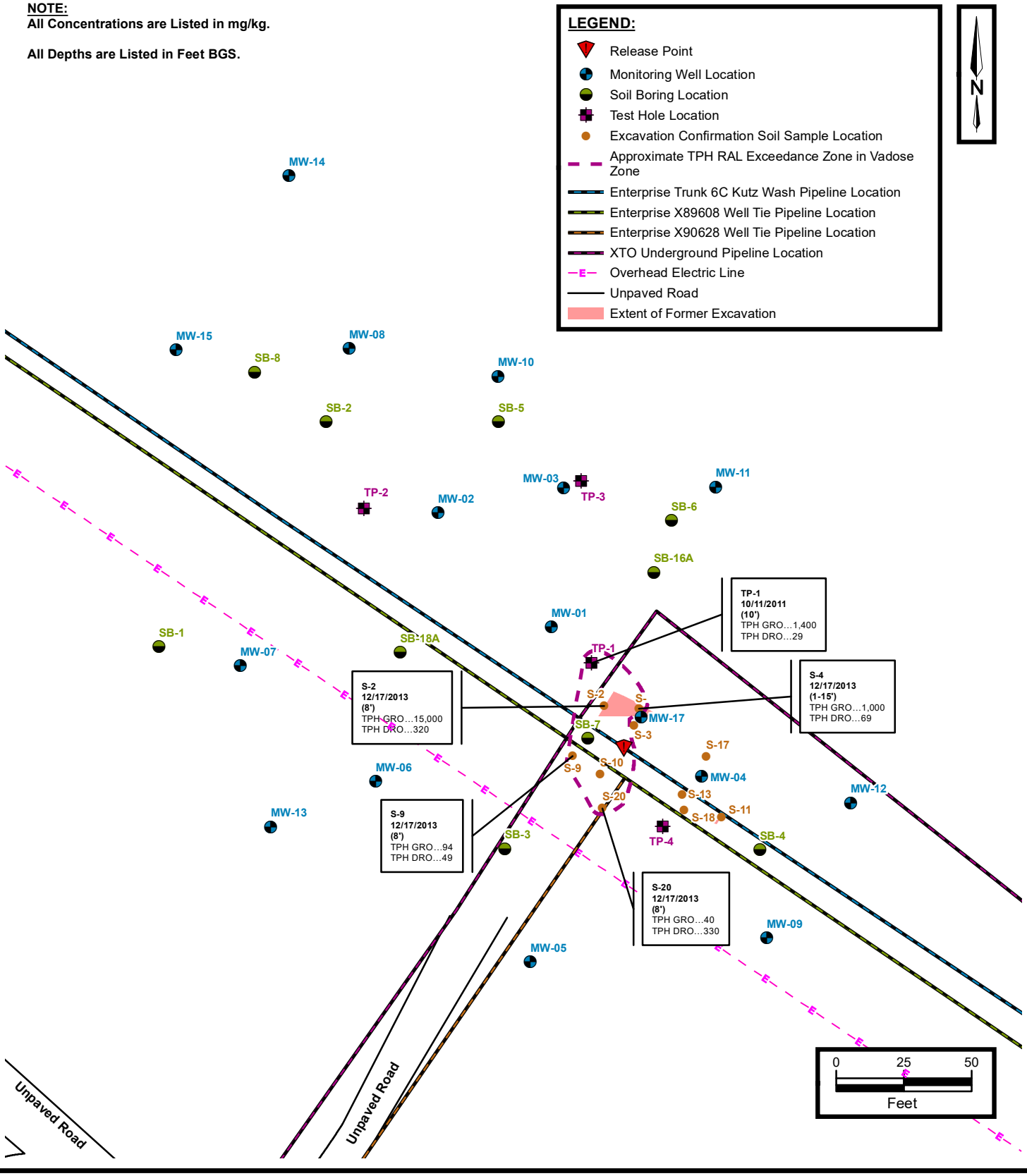
PROJECT NUMBER: 05A1226011

FIGURE

4B

NOTE:
All Concentrations are Listed in mg/kg.

All Depths are Listed in Feet BGS.



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TPH RAL EXCEEDANCE ZONE MAP
VADOSE ZONE 0 TO 10 FEET BGS

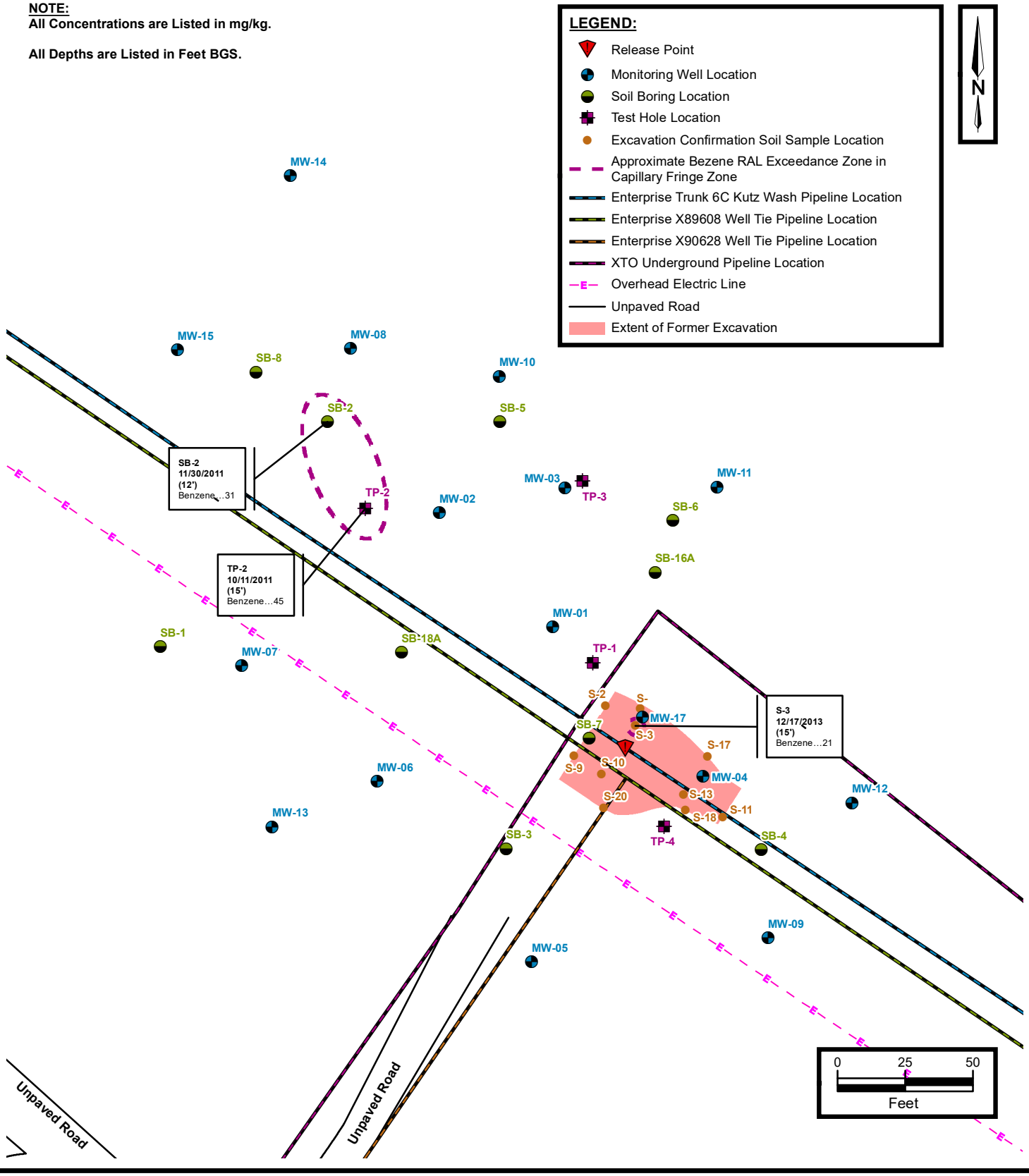
ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
4C

NOTE:
All Concentrations are Listed in mg/kg.

All Depths are Listed in Feet BGS.



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BENZENE RAL EXCEEDANCE ZONE MAP
CAPILLARY FRINGE ZONE

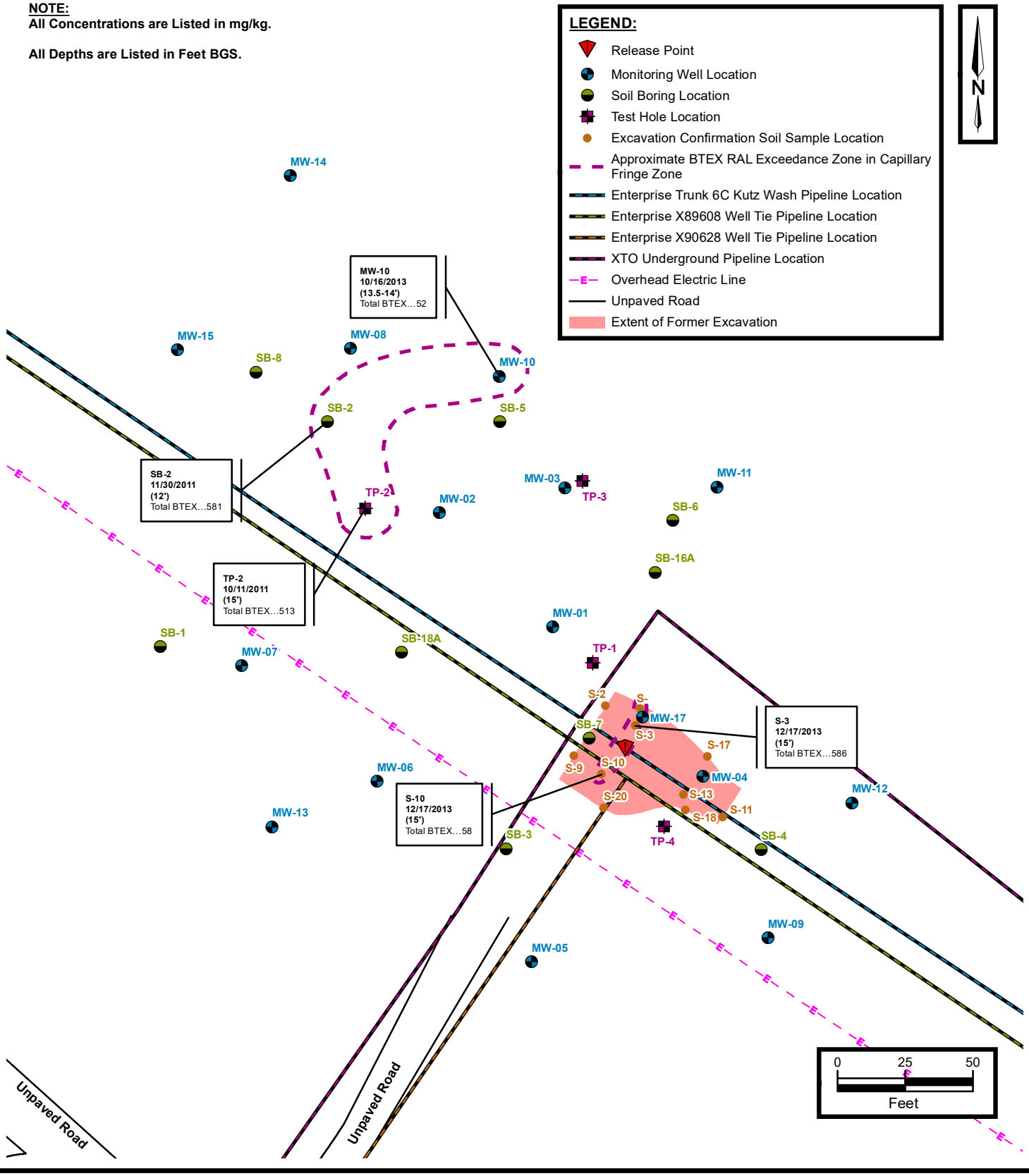
ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
4D

NOTE:
All Concentrations are Listed in mg/kg.

All Depths are Listed in Feet BGS.



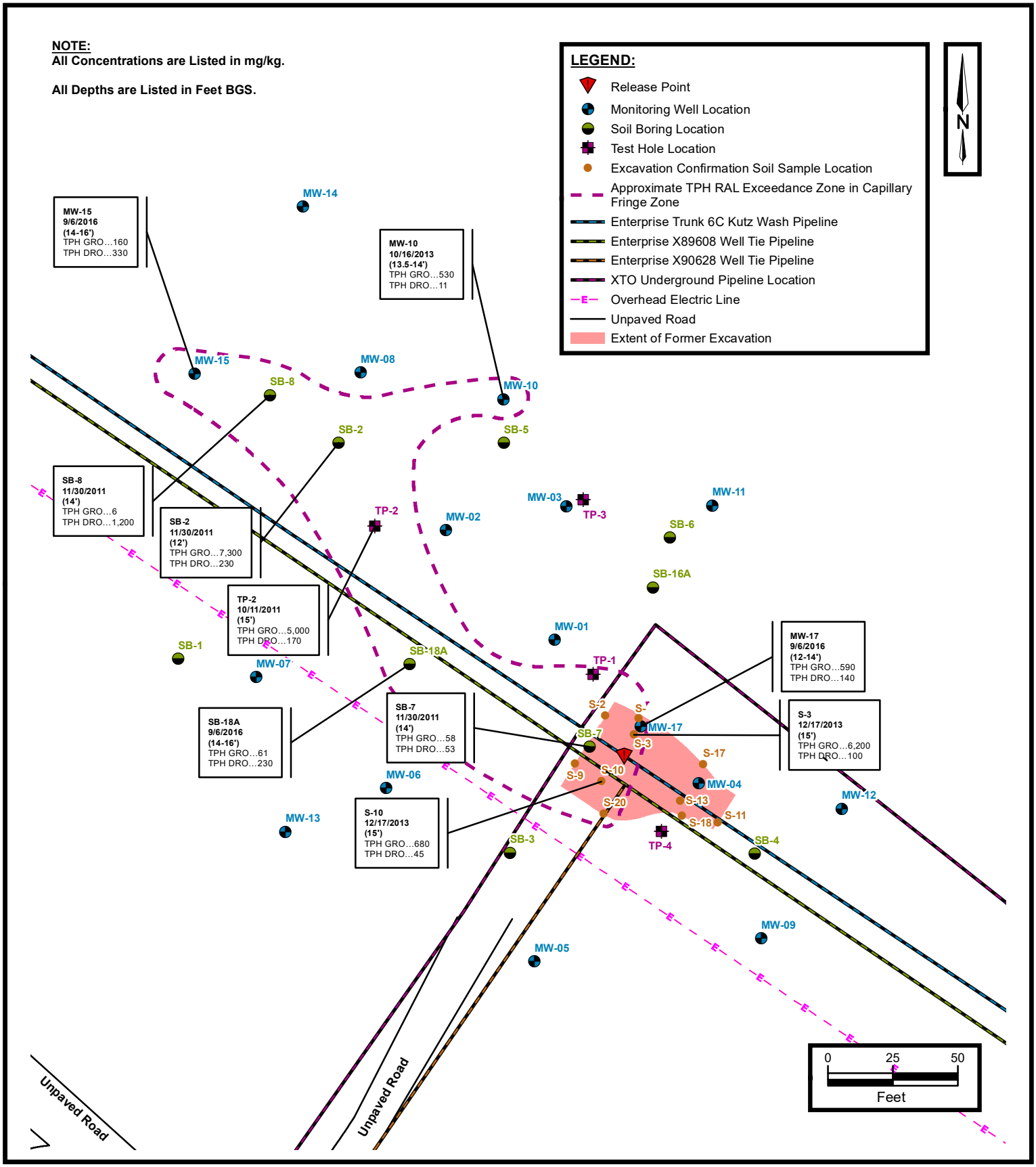
ENSOLUM
Environmental & Hydrogeologic Consultants

BTEX RAL EXCEEDANCE ZONE MAP
CAPILLARY FRINGE ZONE

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
4E



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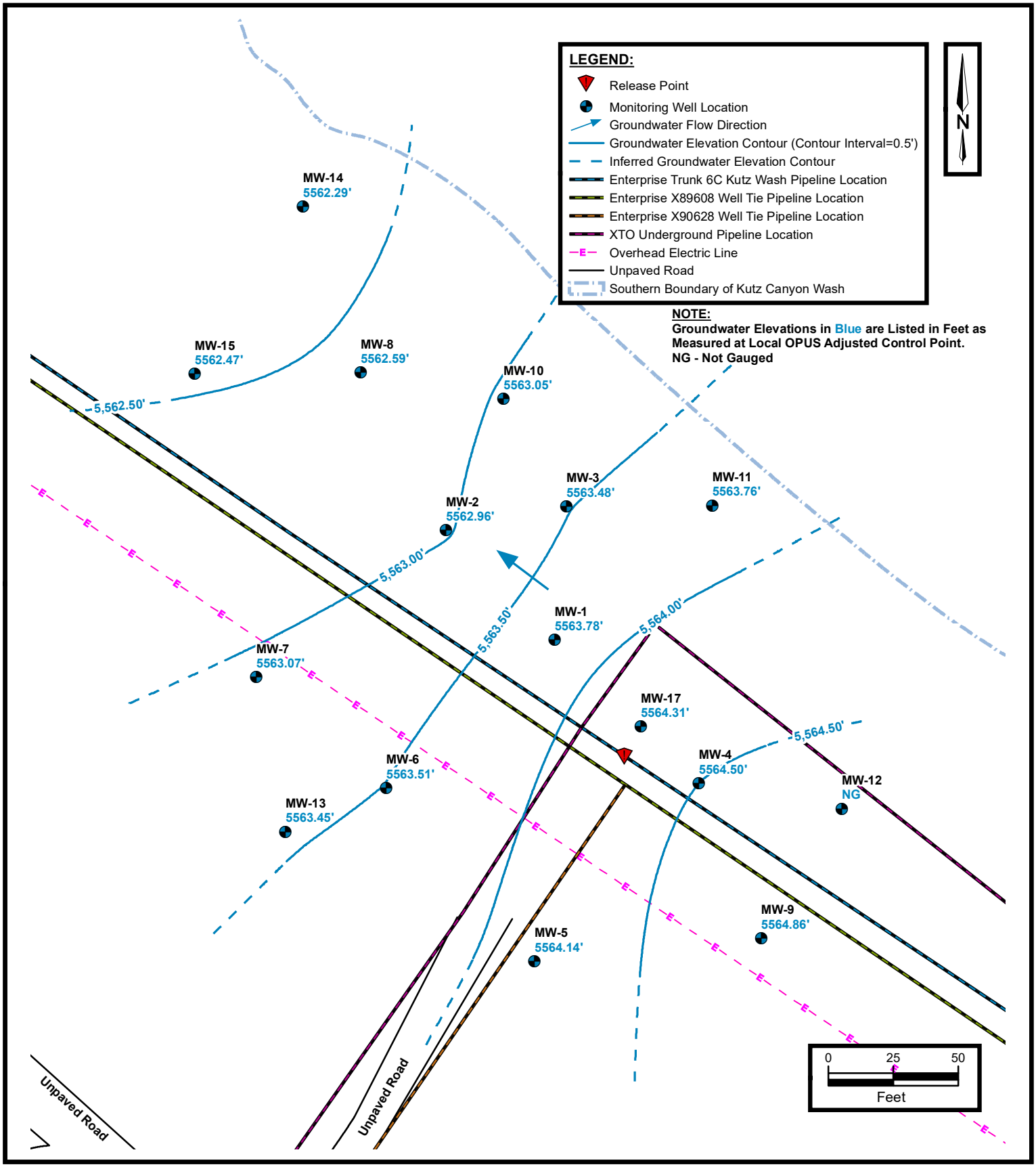
TPH RAL EXCEEDANCE ZONE MAP
CAPILLARY FRINGE ZONE

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
4F



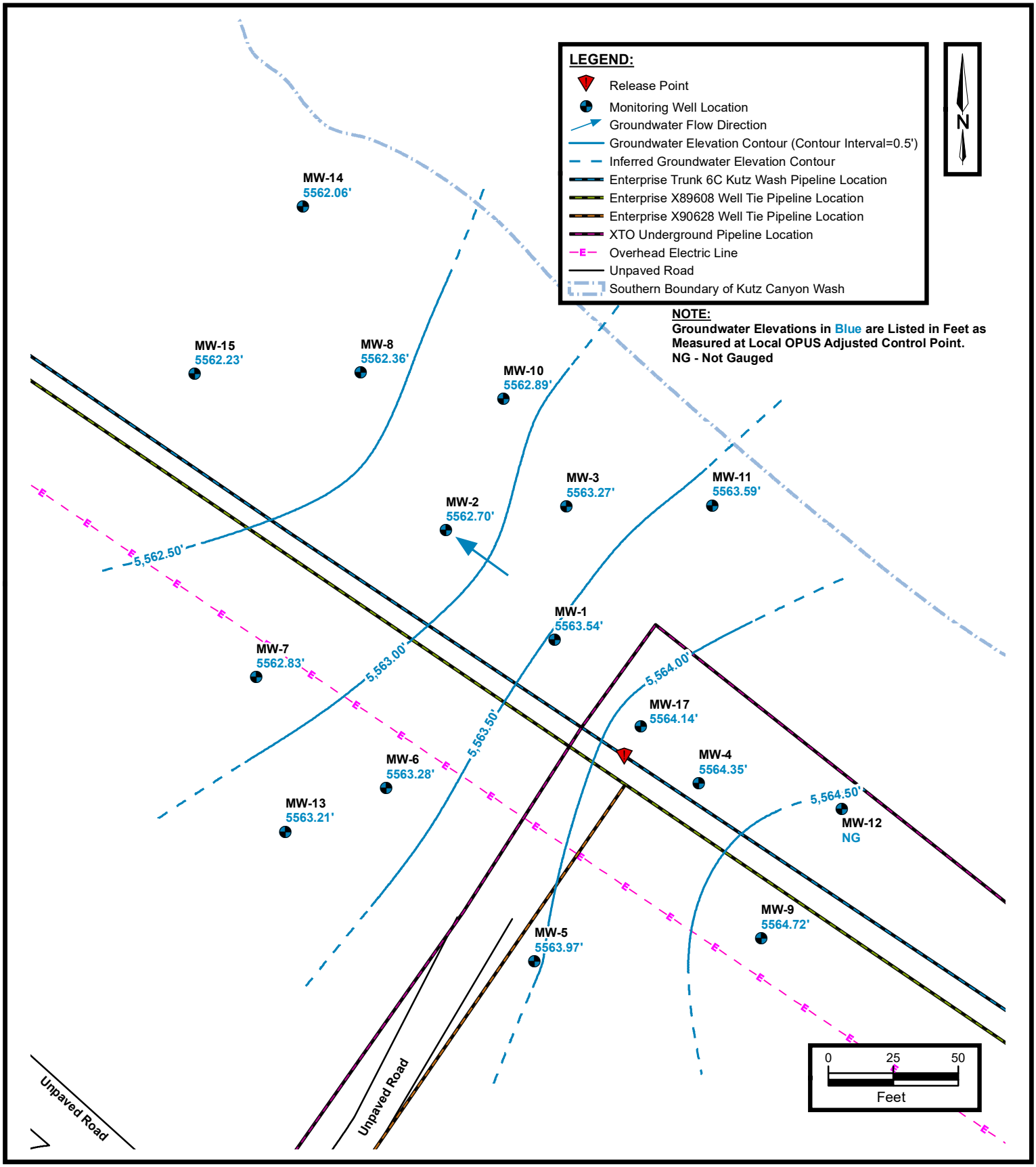
ENSOLUM
Environmental & Hydrogeologic Consultants

GROUNDWATER GRADIENT MAP
(JUNE 2018)

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
5A



ENSOLUM
Environmental & Hydrogeologic Consultants

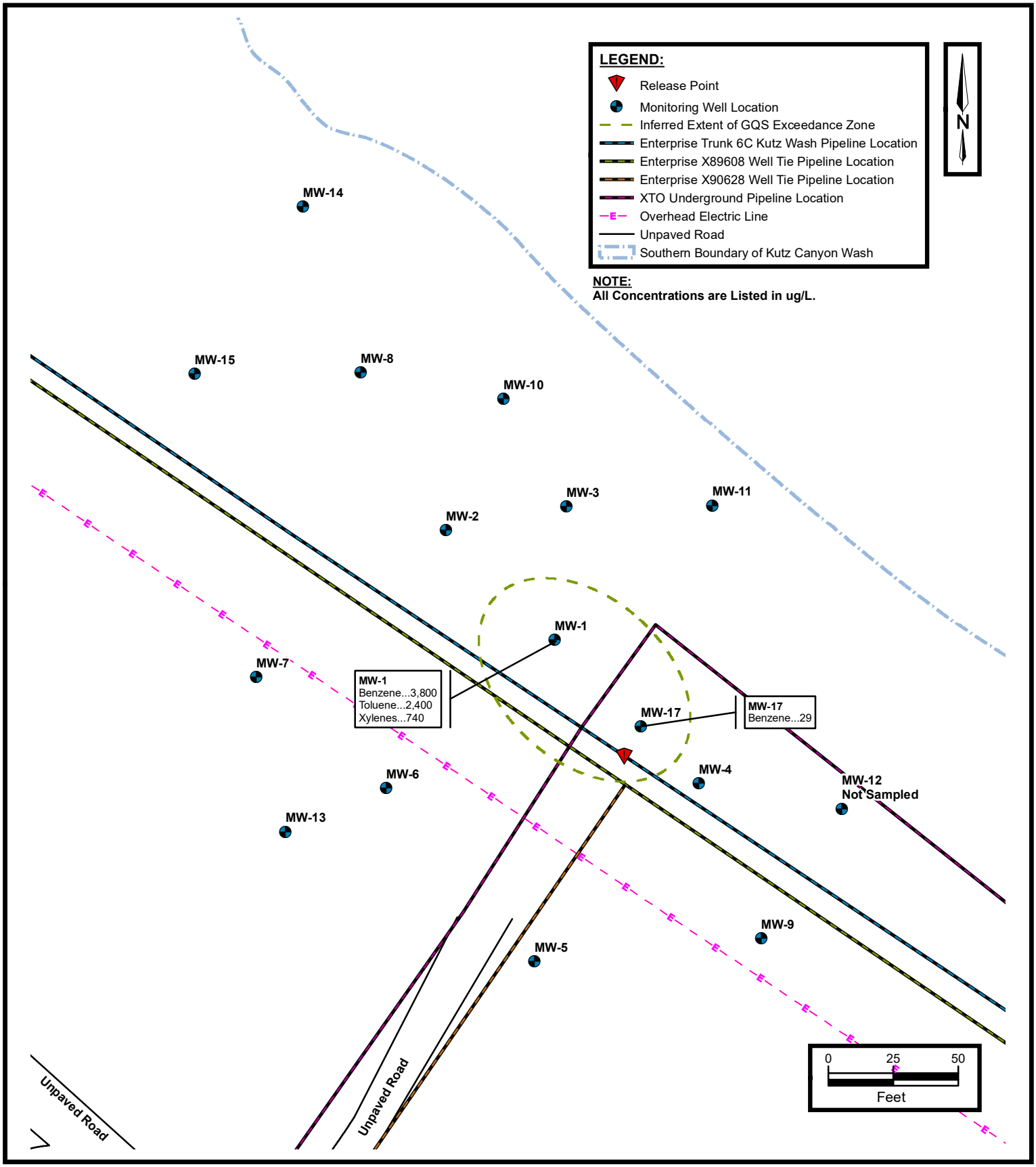
GROUNDWATER GRADIENT MAP (DECEMBER 2018)

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE

5B



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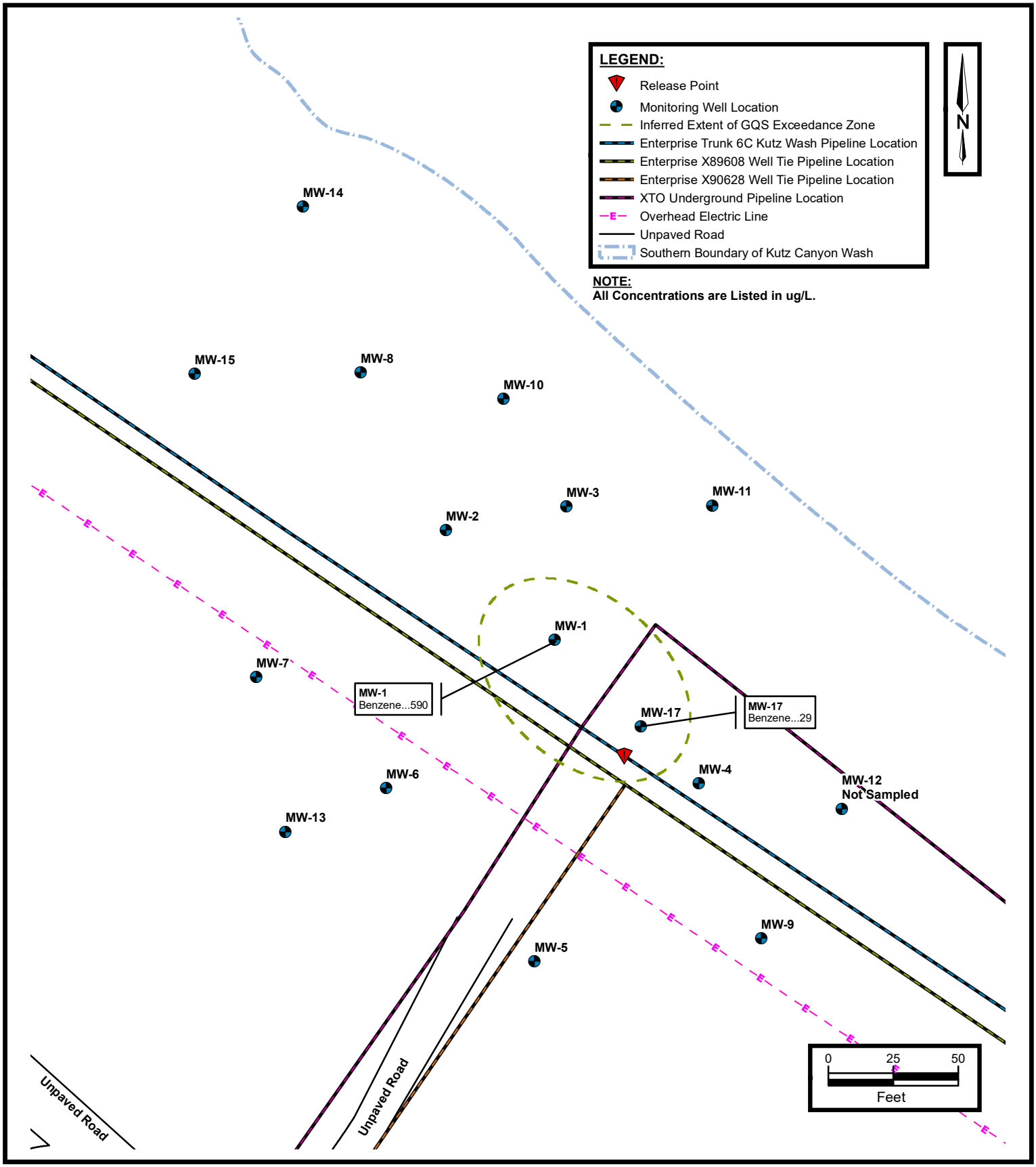
GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (JUNE 2018)

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE

5C



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GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (DECEMBER 2018)

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH PIPELINE RELEASE
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE

5D

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APPENDIX B

Tables

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TABLE 1
Trunk 6C Kutz Wash Pipeline Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Test Hole Excavation and Soil Boring Soil Samples Collected by AES									
TP-1	10.11.11	10	6.2	84	7.8	71	**169**	**1,400**	**29**
TP-2	10.11.11	12	<0.047	<0.047	<0.047	<0.094	ND	<4.7	<9.8
TP-2	10.11.11	15	**45**	200	8.3	260	**513**	**5,000**	**170**
TP-3	10.11.11	10	<0.048	<0.048	<0.048	<0.095	ND	<4.8	<10
TP-4	10.11.11	12	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
TP-4	10.11.11	15	<0.048	<0.048	0.12	0.50	0.62	20	39
SB-1	11.30.11	14	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10
SB-2	11.30.11	12	**31**	240	20	290	**581**	**7,300**	**230**
SB-3	11.30.11	14	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<10
SB-4	11.30.11	14	<0.049	<0.049	<0.049	<0.097	ND	<4.9	<10
SB-5	11.30.11	14	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<9.6
SB-6	11.30.11	13	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<9.9
SB-7	11.30.11	14	<0.24	0.61	<0.24	2.0	2.6	**58**	**53**
SB-8	11.30.11	14	<0.050	<0.050	<0.050	<0.099	ND	**6**	**1,200**
Excavation Soil Samples Collected by AES									
S-2	12.17.13	8	**66**	710	54	500	**1,330**	**15,000**	**320**
S-3	12.17.13	15	**21**	270	25	270	**586**	**6,200**	**100**
S-4	12.17.13	1 to 15	<0.49	21	6.0	59	**86**	**1,000**	**69**
S-9	12.17.13	8	<0.12	1.4	0.45	4.8	6.7	**94**	**49**
S-10	12.17.13	15	0.63	19	3.5	35	**58**	**680**	**45**
S-11	12.17.13	4	<0.049	<0.049	<0.049	<0.097	ND	<4.9	<10
S-13	12.17.13	15	<0.048	<0.048	<0.048	0.11	0.11	5.6	<10
S-17	12.17.13	1 to 15	<0.048	<0.048	<0.048	<0.095	ND	<4.8	<10
S-18	12.17.13	1 to 15	<0.048	<0.048	<0.048	0.16	0.16	<4.8	<10
S-20	12.17.13	8	<0.12	0.31	0.28	3.2	3.8	**40**	**330**
Soil Borings Advanced by AES									
MW-1	8.20.12	5 to 7	<0.049	<0.049	<0.049	<0.097	ND	<4.9	<9.9
	8.20.12	10 to 12	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<9.9
MW-2	8.20.12	5 to 7	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<9.8
	8.20.12	10 to 12	<0.049	<0.049	<0.049	<0.097	ND	<4.9	<10
MW-3	8.21.12	0 to 2	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
	8.21.12	10 to 12	<0.050	<0.050	<0.050	<0.099	ND	<5.0	<9.8
MW-4	8.21.12	5 to 7	<0.050	<0.050	<0.050	<0.099	ND	<5.0	<9.9
	8.21.12	10 to 12	<0.047	<0.047	<0.047	<0.094	ND	<4.7	<9.8
MW-5	8.23.12	5 to 7	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<10
	8.23.12	10 to 12	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<9.9
MW-6	8.23.12	5 to 7	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
	8.23.12	10 to 12	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<9.9
MW-7	8.23.12	5 to 7	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<9.7
	8.23.12	10 to 12	<0.047	<0.047	<0.047	<0.094	ND	<4.7	<9.8
MW-8	8.21.12	5 to 7	<0.046	<0.046	<0.046	<0.093	ND	<4.6	<9.6
	8.21.12	10 to 12	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<10
MW-9	8.23.12	5 to 7	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<9.6
	8.23.12	10 to 12	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<10
MW-10	10.16.13	13.5 to 14	1.7	20	2.5	28	**52**	**530**	**11**
MW-11	10.16.13	13.5 to 14	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<10
MW-12	10.16.13	13.5 to 14	<0.046	<0.046	<0.046	<0.093	ND	<4.6	<10
MW-13	10.16.13	13.5 to 14	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<10

ENSOLUM

TABLE 1
Trunk 6C Kutz Wash Pipeline Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Soil Borings Advanced by Apex									
MW-14	9.6.16	12 to 16	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.8
MW-15	9.6.16	14 to 16	0.070	<0.046	<0.046	0.78	0.85	**160**	**330**
SB-16A	9.6.16	12 to 14	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.5
MW-17	9.6.16	7 to 12	<0.024	<0.047	<0.047	0.16	0.16	17	15
MW-17	9.6.16	12 to 14	3.8	12	2.1	17	35	**590**	**140**
SB-18A	9.6.16	14 to 16	<0.12	<0.24	<0.24	0.80	0.80	**61**	**230**

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

mg/kg = milligrams per kilograms

ND = Not Detected above the Laboratory Reporting Limits

NE = Not established

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

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TABLE 2
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10	750	750	620
Monitoring Wells Installed by AES					
MW-1	9.7.12	**2,200**	350	68	**650**
	12.20.12	**1,100**	250	37	180
	3.20.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	6.19.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	9.17.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	12.16.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	3.14.15	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	9.9.15	**1,900**	440	54	400
	6.15.15	**6,900**	**2,700**	170	**1,400**
	12.7.15	**3,900**	**1,400**	120	**870**
	6.02.16	**1,400**	**850**	41	330
	12.20.16	**76**	59	2.5	23
	6.28.17	**3,500**	**4,200**	180	**1,800**
	1.10.18	**1,300**	710	59	350
	6.22.18	**3,800**	**2,400**	140	**740**
	12.14.18	**590**	400	33	99
MW-2	9.7.12	**270**	**1,100**	66	**1,800**
	12.20.12	**26**	49	5.1	250
	3.20.13	<5.0	<5.0	<5.0	67
	6.19.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	9.17.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	12.16.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	3.14.14	**1,200**	**1,600**	74	**660**
	9.9.14	**78**	76	2.9	110
	6.15.15	<1.0	1.1	<1.0	44
	12.7.15	<1.0	<1.0	<1.0	13
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
MW-3	9.7.12	<2.0	<2.0	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	**780**	130	2.5	15
	9.18.13	**150**	28	<5.0	15
	12.16.13	**660**	340	16	130
	3.14.14	**200**	86	4.0	49
	9.9.14	2.5	1.7	<1.0	3.3
	6.12.15	1.3	<1.0	<1.0	2.2
	12.7.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.28.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0

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TABLE 2
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10	750	750	620
MW-4	9.7.12	**18**	5.1	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	**290**	110	<2.0	15
	6.19.13	**600**	45	<10	<20
	9.18.13	**830**	39	<20	<30
	12.16.13	**300**	110	10	63
	3.14.14	4.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.11.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.28.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0
MW-5	9.7.12	<2.0	<2.0	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	<1.0	<1.0	<1.0	<2.0
	9.17.13	<1.0	<1.0	<1.0	<1.5
	12.16.13	2.1	4.7	4.0	17
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<1.0	<1.0	<1.0	<2.0
	6.12.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0
MW-6	9.7.12	<5.0	<5.0	260	**2,200**
	12.20.12	<5.0	<5.0	180	**1,200**
	3.20.13	<5.0	<5.0	120	**800**
	6.19.13	9.6	6.2	150	**1,100**
	9.18.13	<5.0	<5.0	180	**1,200**
	12.16.13	<5.0	<5.0	140	**990**
	3.14.14	<1.0	<1.0	150	**990**
	9.9.14	<5.0	<5.0	49	400
	6.12.15	<5.0	<5.0	89	590
	12.4.15	<2.5	<5.0	41	210
	6.02.16	<1.0	<1.0	16	70
	12.19.16	<1.0	<1.0	26	80
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	3.6	12
	6.21.18	<1.0	<1.0	2.1	5.9
	12.13.18	<1.0	<1.0	2.7	9.8

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TABLE 2
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10	750	750	620
MW-7	9.7.12	<2.0	<2.0	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	2.4
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	<1.0	<1.0	<1.0	<2.0
	9.17.13	<1.0	<1.0	<1.0	<1.5
	12.16.13	1.6	3.9	3.6	16
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<1.0	<1.0	<1.0	<2.0
	6.12.15	<1.0	<1.0	<1.0	<2.0
	12.7.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0
MW-8	9.7.12	**41**	40	3.8	320
	12.20.12	<2.0	<2.0	<2.0	20
	3.20.13	**41**	36	<2.0	89
	6.19.13	**21**	12	<1.0	6.8
	9.18.13	<1.0	<1.0	3.4	27
	12.16.13	**18**	21	5.1	74
	3.14.14	**66**	190	10	210
	9.9.14	**NAPL****	**NAPL****	**NAPL****	**NAPL****
	6.15.15	<1.0	<1.0	<1.0	10
	12.7.15	1.3	<1.0	<1.0	53
	6.02.16	4.0	1.6	<1.0	5.1
	12.19.16	<1.0	<1.0	<1.0	2.1
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
MW-9	9.7.12	<2.0	2.4	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	<1.0	<1.0	<1.0	<2.0
	9.17.13	<1.0	<1.0	<1.0	<1.5
	12.16.13	1.5	3.5	2.9	12
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.11.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0

ENSOLUM

TABLE 2
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10	750	750	620
MW-10	12.16.13	**950**	34	12	39
	3.14.14	**560**	4.0	16	27
	9.9.14	**580**	<10	34	<20
	6.15.15	**75**	<1.0	12	2.9
	12.7.15	**17**	<1.0	2.0	<2.0
	6.03.16	**16**	<1.0	<1.0	<2.0
	12.20.16	4.8	<1.0	<1.0	<1.5
	6.27.17	3.4	<1.0	<1.0	<2.0
	1.10.18	<1.0	<1.0	<1.0	<2.0
	6.22.18	5.0	<1.0	<1.0	2.7
	12.14.18	<1.0	<1.0	<1.0	<2.0
MW-11	12.16.13	2.6	3.5	<1.0	6
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.12.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.03.16	<1.0	<1.0	<1.0	<2.0
	12.20.16	<1.0	<1.0	<1.0	<1.5
	6.28.17	Insufficient volume of water to sample.			
	1.10.18	<1.0	<1.0	<1.0	<1.5
	6.22.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
MW-12	12.16.13	3.3	3.8	<1.0	6
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.12.15	Casing Obstruction			
	12.4.15	Casing Obstruction			
	6.02.16	Casing Obstruction			
	12.20.16	Casing Obstruction			
	6.27.17	Casing Obstruction			
	1.10.18	Casing Obstruction			
	6.21.18	Casing Obstruction			
	12.13.18	Casing Obstruction			
MW-13	12.16.13	4.4	5.1	1.2	8
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.15.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.03.16	<1.0	<1.0	<1.0	<2.0
	12.20.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.10.18	<1.0	<1.0	<1.0	<2.0
	6.22.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0

ENSOLUM

TABLE 2
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10	750	750	620
Monitoring Wells Installed by APEX					
MW-14	9.16.16	<1.0	<1.0	<1.0	<2.0
	12.20.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.10.18	<1.0	<1.0	<1.0	<2.0
	6.22.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	2.7	<1.0	<1.0	6.1
MW-15	9.16.16	3.6	<1.0	4.1	43
	12.20.16	<1.0	<1.0	6.2	87
	6.27.17	4.1	<1.0	4.6	89
	1.10.18	4.7	<1.0	2.8	33
	6.21.18	6.5	<1.0	2.6	13
	12.13.18	1.2	<1.0	<1.0	<2.0
MW-17	9.16.16	**380**	**790**	33	**1,200**
	12.20.16	**200**	100	11	310
	6.28.17	**130**	<5.0	<5.0	**950**
	1.10.18	5.2	2.2	1.2	13
	6.22.18	**29**	<1.0	2.4	<1.5
	12.14.18	**29**	<1.0	1.8	<2.0

Note: Concentrations in **bold** and yellow exceed the applicable WQCC GQS

µg/L = micrograms per liter

NAPL = Non-aqueous phase liquid

** - Field personnel recorded the presence of NAPL utilizing an interface probe, but the product was not documented as visually verified.

<1.0 = the numeral (in this case "1.0") identifies the laboratory RL or PQL

ENSOLUM

TABLE 3
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-1*	9.7.12	ND	15.78	ND	5579.73	5563.95
	12.20.12	ND	15.69	ND		5564.04
	3.20.13	15.31	15.73	0.42		5564.31
	6.19.13	15.49	15.75	0.26		5564.17
	9.17.13	15.79	16.27	0.48		5563.81
	12.16.13	15.59	15.75	0.16		5564.10
	3.14.14	15.35	15.36	0.01		5564.38
	9.9.14	15.98	15.99	0.01		5563.75
	6.10.15	15.29	15.30	0.01		5564.44
	12.04.15	ND	15.81	ND		5563.92
	6.02.16	ND	15.41	ND		5564.32
	9.16.16	16.12	16.13	0.01	5579.43	5563.31
	12.19.16	ND	15.83	ND		5563.60
	6.27.17	ND	15.39	ND		5564.04
	1.09.18	ND	15.61	ND		5563.82
	6.21.18	ND	15.65	ND		5563.78
	12.13.18	ND	15.89	ND		5563.54
MW-2*	9.7.12	ND	16.29	ND	5579.39	5563.10
	12.20.12	ND	16.22	ND		5563.17
	3.20.13	ND	15.97	ND		5563.42
	6.19.13	15.96	16.40	0.44		5563.31
	9.17.13	16.40	16.54	0.14		5562.95
	12.16.13	16.14	16.22	0.08		5563.23
	3.14.14	ND	15.89	ND		5563.50
	9.9.14	ND	16.50	ND		5562.89
	6.10.15	ND	15.81	ND		5563.58
	12.04.15	ND	16.32	ND		5563.07
	6.02.16	ND	15.93	ND		5563.46
	9.16.16	ND	16.61	ND	5579.15	5562.54
	12.19.16	ND	16.35	ND		5562.80
	6.27.17	ND	15.95	ND		5563.20
	1.09.18	ND	16.13	ND		5563.02
	6.21.18	ND	16.19	ND		5562.96
	12.13.18	ND	16.45	ND		5562.70
MW-3*	9.7.12	ND	15.98	ND	5579.52	5563.54
	12.20.12	ND	15.79	ND		5563.73
	3.20.13	ND	15.50	ND		5564.02
	6.19.13	ND	15.66	ND		5563.86
	9.18.13	ND	15.96	ND		5563.56
	12.16.13	ND	15.70	ND		5563.82
	3.14.14	ND	15.39	ND		5564.13
	9.9.14	ND	16.10	ND		5563.42
	6.10.15	ND	15.28	ND		5564.24
	12.04.15	ND	15.87	ND		5563.65
	6.02.16	ND	15.47	ND		5564.05
	9.16.16	ND	16.24	ND	5579.24	5563.00
	12.19.16	ND	15.87	ND		5563.37
	6.27.17	ND	15.45	ND		5563.79
	1.09.18	ND	15.65	ND		5563.59
	6.21.18	ND	15.76	ND		5563.48
	12.13.18	ND	15.97	ND		5563.27

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TABLE 3
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-4*	9.7.12	ND	15.59	ND	5580.36	5564.77
	12.20.12	ND	15.51	ND		5564.85
	3.20.13	ND	15.25	ND		5565.11
	6.19.13	ND	15.41	ND		5564.95
	9.18.13	ND	15.74	ND		5564.62
	12.16.13	ND	15.45	ND		5564.91
	3.14.14	ND	15.14	ND		5565.22
	9.9.14	ND	15.80	ND		5564.56
	6.10.15	ND	15.06	ND		5565.30
	12.04.15	ND	15.56	ND		5564.80
	6.02.16	ND	15.22	ND		5565.14
	9.16.16	ND	15.92	ND	5579.95	5564.03
	12.19.16	ND	15.55	ND		5564.40
	6.27.17	ND	15.22	ND		5564.73
	1.09.18	ND	15.34	ND		5564.61
	6.21.18	ND	15.45	ND		5564.50
	12.13.18	ND	15.60	ND		5564.35
MW-5*	9.7.12	ND	19.35	ND	5583.53	5564.18
	12.20.12	ND	19.28	ND		5564.25
	3.20.13	ND	19.10	ND		5564.43
	6.19.13	ND	19.21	ND		5564.32
	9.17.13	ND	19.55	ND		5563.98
	12.16.13	ND	19.28	ND		5564.25
	3.14.14	ND	19.03	ND		5564.50
	9.9.14	ND	19.58	ND		5563.95
	6.10.15	ND	18.98	ND		5564.55
	12.04.15	ND	19.41	ND		5564.12
	6.02.16	ND	19.08	ND		5564.45
	9.16.16	ND	19.69	ND	5583.41	5563.72
	12.19.16	ND	19.42	ND		5563.99
	6.27.17	ND	19.12	ND		5564.29
	1.09.18	ND	19.22	ND		5564.19
	6.21.18	ND	19.27	ND		5564.14
	12.13.18	ND	19.44	ND		5563.97
MW-6*	9.7.12	ND	18.55	ND	5582.22	5563.67
	12.20.12	ND	18.49	ND		5563.73
	3.20.13	ND	18.27	ND		5563.95
	6.19.13	ND	18.38	ND		5563.84
	9.18.13	ND	18.74	ND		5563.48
	12.16.13	ND	18.46	ND		5563.76
	3.14.14	ND	18.21	ND		5564.01
	9.9.14	ND	18.75	ND		5563.47
	6.10.15	ND	18.16	ND		5564.06
	12.04.15	ND	18.60	ND		5563.62
	6.02.16	ND	18.25	ND		5563.97
	9.16.16	ND	18.86	ND	5581.98	5563.12
	12.19.16	ND	18.61	ND		5563.37
	6.27.17	ND	18.29	ND		5563.69
	1.09.18	ND	18.43	ND		5563.55
	6.21.18	ND	18.47	ND		5563.51
	12.13.18	ND	18.70	ND		5563.28

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TABLE 3
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-7*	9.7.12	ND	19.03	ND	5582.24	5563.21
	12.20.12	ND	18.97	ND		5563.27
	3.20.13	ND	18.79	ND		5563.45
	6.19.13	ND	18.87	ND		5563.37
	9.17.13	ND	19.22	ND		5563.02
	12.16.13	ND	18.46	ND		5563.78
	3.14.14	ND	18.73	ND		5563.51
	9.9.14	ND	19.24	ND		5563.00
	6.10.15	ND	18.65	ND		5563.59
	12.04.15	ND	19.10	ND		5563.14
	6.02.16	ND	18.76	ND		5563.48
	9.16.16	ND	19.37	ND	5582.05	5562.68
	12.19.16	ND	19.13	ND		5562.92
	6.27.17	ND	18.80	ND		5563.25
	1.09.18	ND	18.95	ND		5563.10
	6.21.18	ND	18.98	ND		5563.07
	12.13.18	ND	19.22	ND		5562.83
MW-8*	9.7.12	ND	14.96	ND	5577.81	5562.85
	12.20.12	ND	14.87	ND		5562.94
	3.20.13	ND	14.63	ND		5563.18
	6.19.13	ND	14.74	ND		5563.07
	9.18.13	ND	15.08	ND		5562.73
	12.16.13	ND	14.81	ND		5563.00
	3.14.14	ND	14.53	ND		5563.28
	9.9.14**	15.12**	15.25	0.13**		5562.65
	6.10.15	ND	14.44	ND		5563.37
	12.04.15	ND	14.97	ND		5562.84
	6.02.16	ND	14.61	ND		5563.20
	9.16.16	ND	15.29	ND	5577.47	5562.18
	12.19.16	ND	15.00	ND		5562.47
	6.27.17	ND	14.62	ND		5562.85
	1.09.18	ND	14.80	ND		5562.67
	6.21.18	ND	14.88	ND		5562.59
	12.13.18	ND	15.11	ND		5562.36
MW-9*	9.7.12	ND	17.55	ND	5582.48	5564.93
	12.20.12	ND	17.47	ND		5565.01
	3.20.13	ND	17.28	ND		5565.20
	6.19.13	ND	17.42	ND		5565.06
	9.17.13	ND	17.74	ND		5564.74
	12.16.13	ND	17.48	ND		5565.00
	3.14.14	ND	17.21	ND		5565.27
	9.9.14	ND	17.83	ND		5564.65
	6.10.15	ND	17.18	ND		5565.30
	12.04.15	ND	17.61	ND		5564.87
	6.02.16	ND	17.30	ND		5565.18
	9.16.16	ND	17.94	ND	5582.35	5564.41
	12.19.16	ND	17.60	ND		5564.75
	6.27.17	ND	17.34	ND		5565.01
	1.09.18	ND	17.40	ND		5564.95
	6.21.18	ND	17.49	ND		5564.86
	12.13.18	ND	17.63	ND		5564.72

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TABLE 3
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-10*	12.16.13	ND	16.93	ND	5577.80	5560.87
	3.14.14	ND	14.63	ND		5563.17
	9.9.14	ND	15.34	ND		5562.46
	6.10.15	ND	14.58	ND		5563.22
	12.04.15	ND	15.10	ND		5562.70
	6.02.16	ND	14.74	ND		5563.06
	9.16.16	ND	15.49	ND	5578.10	5562.61
	12.19.16	ND	15.12	ND		5562.98
	6.27.17	ND	14.73	ND		5563.37
	1.09.18	ND	14.90	ND		5563.20
	6.21.18	ND	15.05	ND		5563.05
	12.13.18	ND	15.21	ND		5562.89
MW-11*	12.16.13	ND	15.15	ND	5578.65	5563.50
	3.14.14	ND	14.82	ND		5563.83
	9.9.14	ND	15.63	ND		5563.02
	6.10.15	ND	14.76	ND		5563.89
	12.04.15	ND	15.35	ND		5563.30
	6.02.16	ND	14.98	ND		5563.67
	9.16.16	ND	15.74	ND	5579.04	5563.30
	12.19.16	ND	15.35	ND		5563.69
	6.27.17	ND	15.00	ND		5564.04
	1.09.18	ND	15.11	ND		5563.93
	6.21.18	ND	15.28	ND		5563.76
	12.13.18	ND	15.45	ND		5563.59
MW-12*	12.16.13	ND	15.54	ND	5579.99	5564.45
	3.14.14	ND	15.27	ND		5564.72
	9.9.14	ND	15.96	ND		5564.03
	6.10.15	ND	15.22	ND		5564.77
	12.04.15	NG	NG	NG		NG
	6.02.16	NG	NG	NG		NG
	9.16.16	NG	NG	NG	5580.28	NG
	12.19.16	NG	NG	NG		NG
	6.27.17	NG	NG	NG		NG
	1.09.18	NG	NG	NG		NG
	6.21.18	NG	NG	NG		NG
	12.13.18	Plugged				NG
MW-13*	12.16.13	ND	19.88	ND	5583.03	5563.15
	3.14.14	ND	19.63	ND		5563.40
	9.9.14	ND	20.18	ND		5562.85
	6.10.15	ND	19.57	ND		5563.46
	12.04.15	ND	20.01	ND		5563.02
	6.02.16	ND	19.67	ND		5563.36
	9.16.16	ND	20.27	ND	5583.34	5563.07
	12.19.16	ND	20.03	ND		5563.31
	6.27.17	ND	19.74	ND		5563.60
	1.09.18	ND	19.85	ND		5563.49
	6.21.18	ND	19.89	ND		5563.45
	12.13.18	ND	20.13	ND		5563.21

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TABLE 3
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-14	9.16.16	ND	14.48	ND	5576.39	5561.91
	12.19.16	ND	14.18	ND		5562.21
	6.27.17	ND	13.83	ND		5562.56
	1.09.18	ND	13.99	ND		5562.40
	6.21.18	ND	14.10	ND		5562.29
	12.13.18	ND	14.33	ND		5562.06
MW-15	9.16.16	ND	16.75	ND	5578.83	5562.08
	12.19.16	ND	16.48	ND		5562.35
	6.27.17	ND	16.12	ND		5562.71
	1.09.18	ND	16.30	ND		5562.53
	6.21.18	ND	16.36	ND		5562.47
	12.13.18	ND	16.60	ND		5562.23
MW-17	9.16.16	ND	16.02	ND	5579.86	5563.84
	12.19.16	ND	15.68	ND		5564.18
	6.27.17	ND	15.30	ND		5564.56
	1.09.18	ND	15.45	ND		5564.41
	6.21.18	ND	15.55	ND		5564.31
	12.13.18	ND	15.72	ND		5564.14

BTOC - below top of casing
AMSL - above mean sea level
TOC - top of casing
NG - Well not gauged, or Errant Gauge.
* - Monitoring wells resurveyed during September 2016
** - Field personnel recorded the presence of NAPL utilizing an interface probe, but the product was not visually verified.
NA - not applicable

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APPENDIX C

Soil Boring/Monitoring Well Logs

Animas Environmental Services, LLC.
624 East Comanche St.
Farmington, NM 87401

SB-1

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.632133°
Date Completed	: 11/30/11	Longitude	: -107.974467°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5588	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5588	SP		SILTY SAND, brown, fine to medium grained, dry		0.0
2	5586					
4	5584					
6	5582					
8	5580	SP		SAND, brown, coarse, moist (groundwater encountered at 15 feet)		0.0
10	5578					
12	5576					0.0
14	5574					
16	5572	SP		SAND, brown, coarse, wet		
18	5570					
20						

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Animas Environmental Services, LLC.
624 East Comanche St.
Farmington, NM 87401

SB-2

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.632267°
Date Completed	: 11/30/11	Longitude	: -107.974333°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5586	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5586	SP		SAND, brown, dry		
2	5584					812
4	5582	SP		SAND, brown, dry		
6	5580					3,009
8	5578	SP		SAND, brown, coarse, dry		
10	5576					442
12	5574	SP		SAND, gray, coarse, wet (groundwater encountered at 15 feet)		
14	5572					
16						

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Animas Environmental Services, LLC.
624 East Comanche St.
Farmington, NM 87401

SB-3

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.631867°
Date Completed	: 11/30/11	Longitude	: -107.974133°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5589	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5589	SP		SAND, brown, coarse, dry		
2	5587					
4	5585					1.5
6	5583					
8	5581					1.1
10	5579					
12	5577					0.4
14	5575	SP		SAND, brown, coarse, slightly moist		
16	5573					0.4
18	5571	SP		SAND, gray, coarse, wet (groundwater encountered at 15 feet)		
20						

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Animas Environmental Services, LLC.
624 East Comanche St.
Farmington, NM 87401

SB-4

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.63185°
Date Completed	: 11/30/11	Longitude	: -107.973783°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5588	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5588	SP		SAND, brown, dry		30.2
2	5586					
4	5584					
6	5582					
8	5580	SP		SAND, brown, coarse, moist		2.5
10	5578					
12	5576					0.0
14	5574					
16	5572	SP		SAND, gray, coarse, wet (groundwater encountered at 18 feet)		0.5
18	5570					
20						

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Farmington, NM 87401

SB-5

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.632317°
Date Completed	: 11/30/11	Longitude	: -107.974117°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5585	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5585	SP		SAND, brown, loose, dry		0.0
2	5583					
4	5581					
6	5579					
8	5577	SP		SAND, brown, loose, moist		14.6
10	5575					
12	5573	SP		SAND, grey, coarse, wet (groundwater encountered at 13 feet)		26.2
14	5571					
16						

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SB-6

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.632183°
Date Completed	: 11/30/11	Longitude	: -107.973883°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5585	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5585	SP		SAND, brown, loose, dry		0.0
2	5583					
4	5581					
6	5579					
8	5577	SP		SAND, brown, coarse, moist		0.0
10	5575					
12	5573	SP		SAND, gray, coarse, wet (groundwater encountered at 15 feet)		
14	5571					
16						

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SB-7

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.63205°
Date Completed	: 11/30/11	Longitude	: -107.973983°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5588	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5588	SW		Backfill		
2	5586					
4	5584					
6	5582					
8	5580	SP		SAND, brown, coarse, moist		
10	5578					1,982
12	5576	SP		SAND, gray, black silt, coarse, moist		
14	5574					
16	5572	SP		SAND, gray, coarse/small rocks, wet (groundwater encountered at 17 feet)		
18	5570					
20						

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Farmington, NM 87401

SB-8

LATERAL 6C PIPELINE RELEASE
ENTERPRISE PRODUCTS COMPANY
SAN JUAN COUNTY, NEW MEXICO

Date Started	: 11/30/11	Latitude	: 36.6323°
Date Completed	: 11/30/11	Longitude	: -107.97422°
Hole Diameter	: 2.25 in.	Survey By	: GPS
Drilling Method	: Geoprobe	Logged By	: Tami Ross
Sampling Method	: Continuous		

Depth in Feet	Surf. Elev. 5586	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm) 0,20,5
0	5586	SP		SAND, brown, loose, dry		364
2	5584					
4	5582					
6	5580					
8	5578	SP		SAND, brown, loose, moist		134
10	5576					
12	5574	SP		SAND, dark gray, coarse, wet (groundwater encountered at 13 feet)		36
14	5572					
16	5570	SP		SAND, gray, coarse/small rocks, wet		
18	5568					
20						

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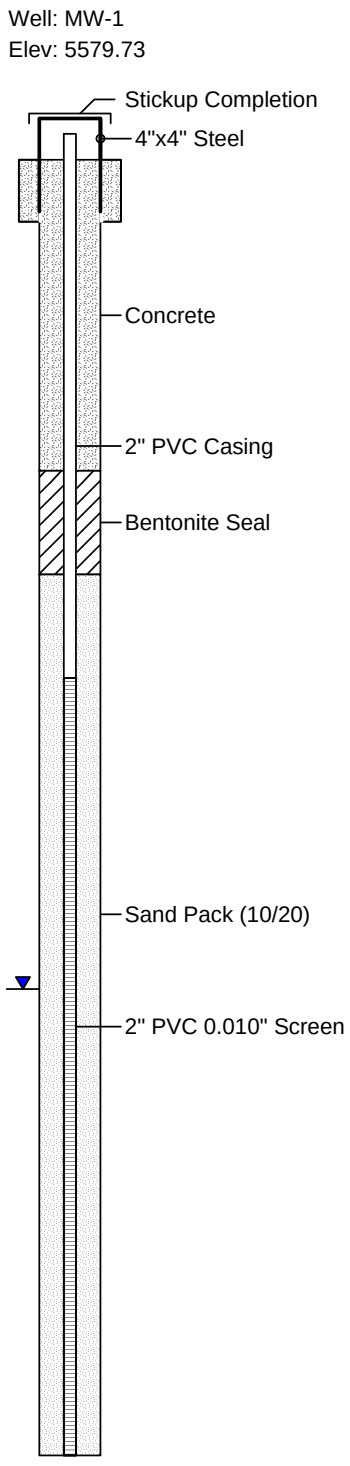
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-1

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/20/12	Lat.	: N36.63216
Date Completed	: 8/20/12	Long.	: W107.97405
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5577	USCS	DESCRIPTION	Blow Count	PID (ppm)
0	5577	SC	Clayey Sand, Brown, Dry, No Odor, No Staining		85.8
6	5571	SM	Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		87.4
10	5567	SP	Sand, Brown/Tan, Moist, No Odor, No Staining		190
16	5561	SP	Sand, Brown, Fine Grained, Wet, Very Little Recovery, Slight Odor		NA
20	5557	CG	Cobble/Gravel, Brown, Wet, No Odor, No Staining		2.4
24	5553	SP	Sand, Gray, Fine Grained, Wet, Slight Odor, Slight Staining		15.3
26					



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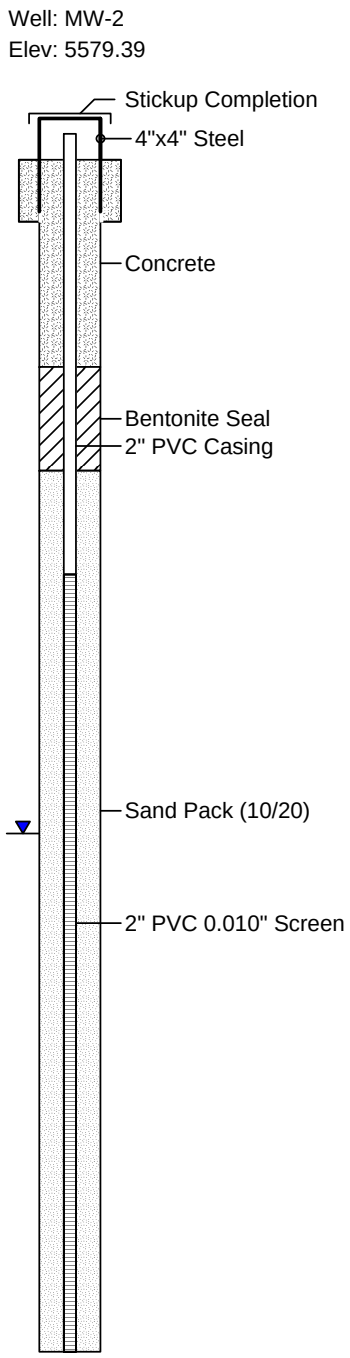
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-2

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/20/12	Lat.	: N36.63228
Date Completed	: 8/20/12	Long.	: W107.97419
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5577	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5577	SP		Sand, Brown, Fine Grained, Moist, No Odor, No Staining		93.1
2	5575					
4	5573					
6	5571					108
8	5569					
10	5567	SP		Sand, Brown, Moist/Wet, No Odor, No Staining		87.0
12	5565					
14	5563					
16	5561	SP		Sand, Brown, Medium Grained, Wet, Very Little Recovery, No Odor, No Staining		NA
18	5559					
20	5557	CG		Cobble/Gravel, Brown, Wet, Slight Odor, No Staining		38.7
22	5555					
24	5553					
26		SS		Sandstone, Gray, Fine Grained, Wet, Slight Odor, No Staining		16.1



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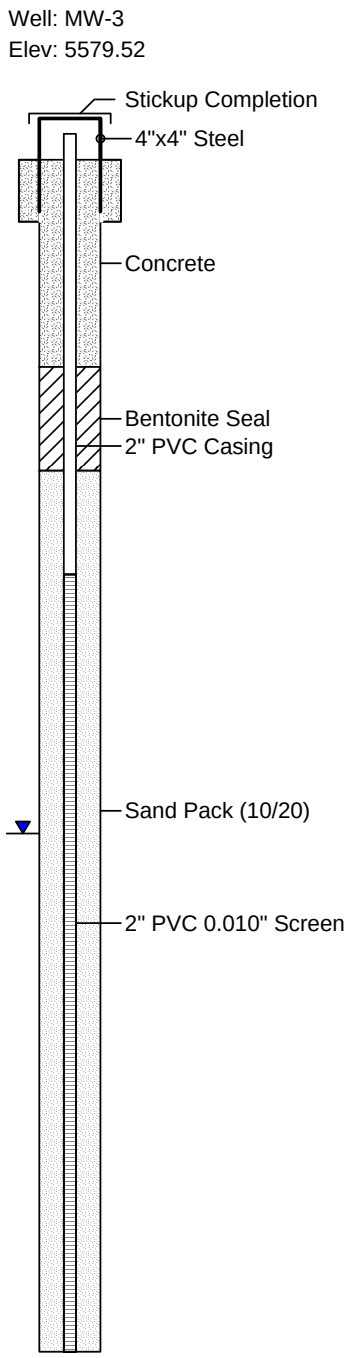
MW-3

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/21/12	Lat.	: N36.63230
Date Completed	: 8/21/12	Long.	: W107.97403
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5577	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5577	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		5.6
2	5575					
4	5573					
6	5571					
8	5569					2.8
10	5567	SP		Sand, Brown, Fine Grained, Wet, No Odor, No Staining		
12	5565					2.9
14	5563					
16	5561	SP		Sand, Gray, Fine to Medium Grained, Wet, No Odor, No Staining		0.8
18	5559					
20	5557	SP		Sand, Gray, Fine to Coarse Grained, Some Gravel, Wet, No Odor, No Staining		2.1
22	5555					
24	5553	SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		2.3
26						



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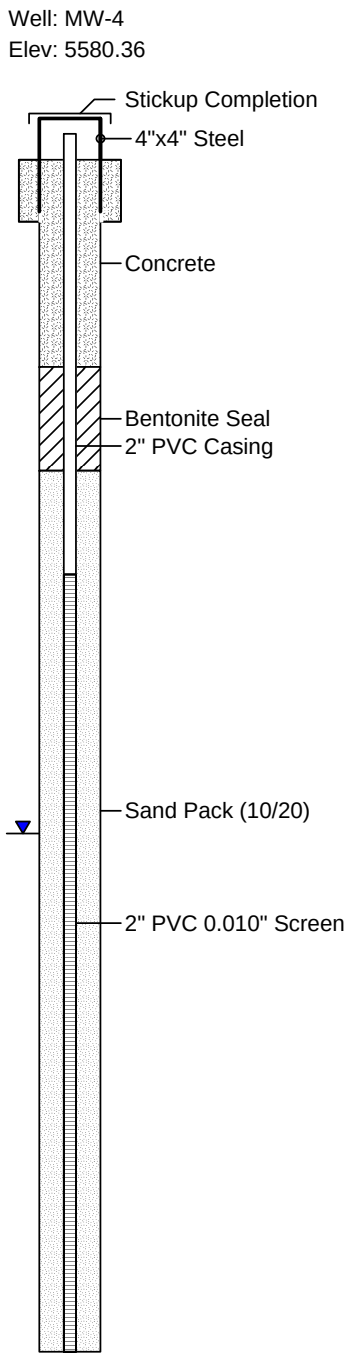
MW-4

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/21/12	Lat.	: N36.63230
Date Completed	: 8/21/12	Long.	: W107.97403
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5578	USCS	DESCRIPTION	Blow Count	PID (ppm)
0	5578	SC	Interbedded Sand and Clay, Brown, Fine Grained, Dry, No Odor, No Staining		22.1
6	5572	SP	Sand, Brown, Fine Grained, Dry, No Odor, No Staining		54.8
10	5568	SP	Sand, Brown, Fine Grained, Wet, No Odor, No Staining		58.2
16	5562	SP	Sand, Brown, Fine Grained, Wet, No Odor, No Staining, Very Little Recovery		NA
20	5558	SP	No Recovery		NA
24	5554	SS	Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		3.6
26					



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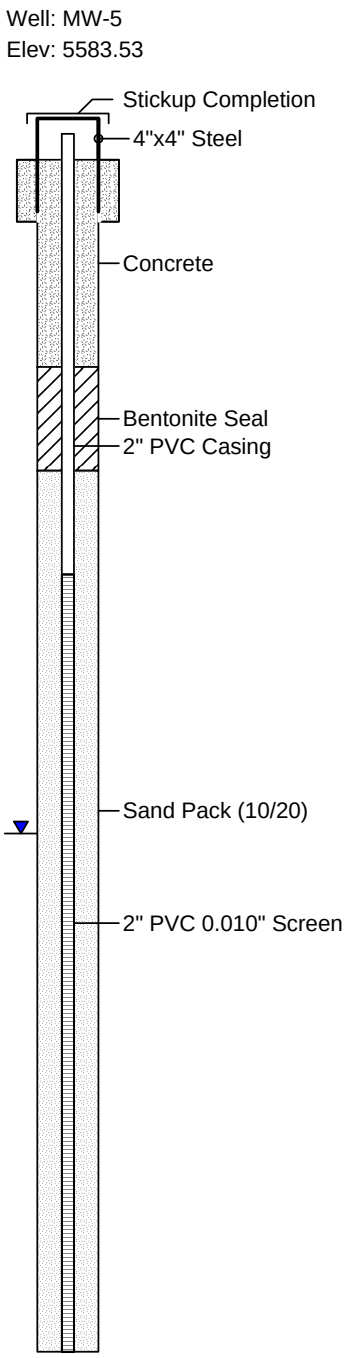
624 East Comanche
Farmington, NM 87401

MW-5

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.63182
Date Completed	: 8/23/12	Long.	: W107.97417
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5581	USCS	DESCRIPTION	Blow Count	PID (ppm)
0	5581	SC	Interbedded Sand and Clay, Brown, Fine Grained, Dry, No Odor, No Staining		0.4
2	5579				
4	5577	SC	Clayey Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.5
6	5575				
8	5573	SP	Sand, Brown, Fine Grained, Wet, No Odor, No Staining		0.9
10	5571				
12	5569	SC	Clayey Sand, Brown, Fine Grained, Wet, No Odor, No Staining		0.7
14	5567				
16	5565	SP	Sand, Brown, Fine to Coarse Grained, Wet, Some Gravel, No Odor, No Staining		0.6
18	5563				
20	5561	SS	Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		0.8
22	5559				
24	5557				
26					



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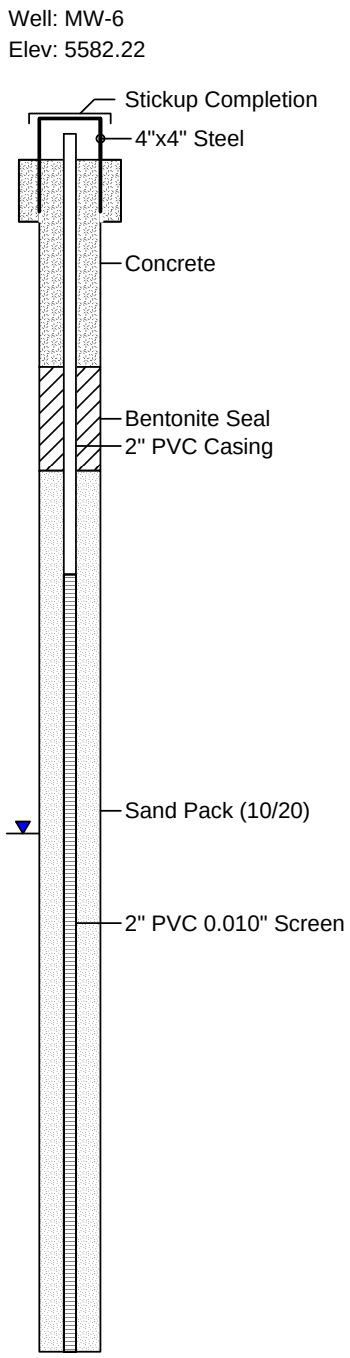
MW-6

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.63201
Date Completed	: 8/23/12	Long.	: W107.97427
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5580	USCS	DESCRIPTION	Blow Count	PID (ppm)
0	5580	SM	Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.3
4	5576	SP	Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.5
10	5570	SP	Sand, Brown, Fine Grained, Wet, No Odor, No Staining		0.6
16	5564	SP	Sand, Brown, Fine Grained, Some Clay, Wet, Slight Odor, Slight Staining		3.0
20	5560	SP	Sand, Brown, Fine to Coarse Grained, Some Gravel, Very Little Recovery, No Staining		NA
26		SS	Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		1.9



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624 East Comanche
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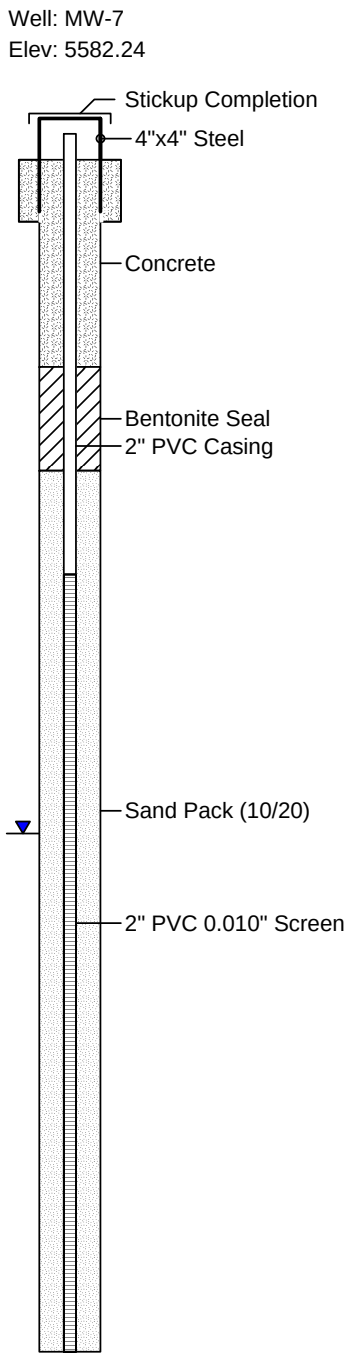
MW-7

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.632122
Date Completed	: 8/23/12	Long.	: W107.97444
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5579	USCS	DESCRIPTION	Blow Count	PID (ppm)
0	5579	SM	Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.5
2	5577				
4	5575	SC	Clayey Sand, Brown, Moist, No Odor, No Staining		0.6
6	5573				
8	5571				
10	5569	SP	Sand, Brown, Fine Grained, Moist, No Odor, No Staining		0.5
12	5567				
14	5565				
16	5563	SP	Sand, Brown, Fine Grained, Some Clay, Wet, Slight Odor, Slight Staining		0.7
18	5561				
20	5559	SP	Sand, Brown, Fine to Coarse Grained, Some Gravel, Wet, No Odor, No Staining		0.5
22	5557				
24	5555	SS	Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		0.8
26					



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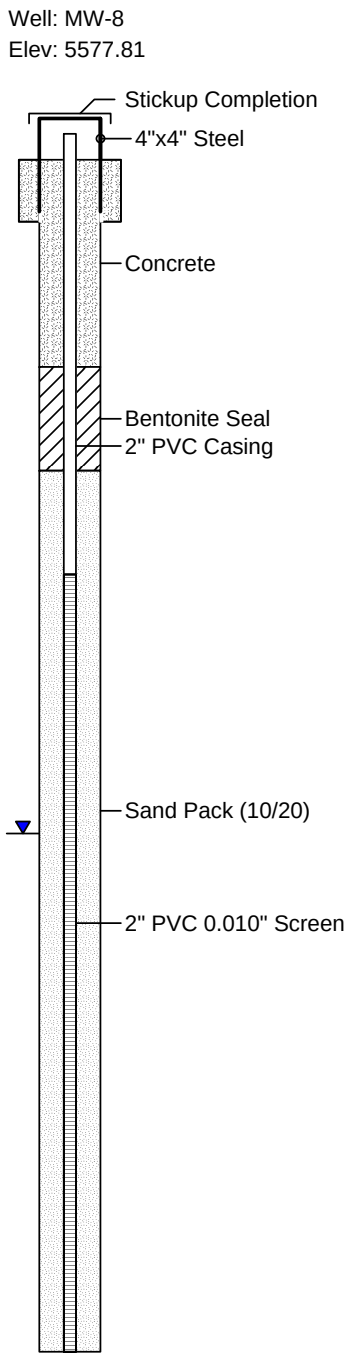
MW-8

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/21/12	Lat.	: N36.63245
Date Completed	: 8/21/12	Long.	: W107.97430
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5576	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5576	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		82.8
2	5574					
4	5572	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		219
6	5570					
8	5568	SP		Sand, Brown, Fine Grained, Wet, Slight Odor, No Staining		144
10	5566					
12	5564	SP		Sand, Gray, Fine to Medium Grained, Wet, Slight Odor, No Staining		147
14	5562					
16	5560	SP		Sand, Gray, Fine to Medium Grained, Some Gravel, Wet, Slight Odor, No Staining		87.3
18	5558					
20	5556	SP				
22	5554					
24	5552	SS		Sandstone, Gray, Fine Grained, Wet, Slight Odor, No Staining		16.9
26						



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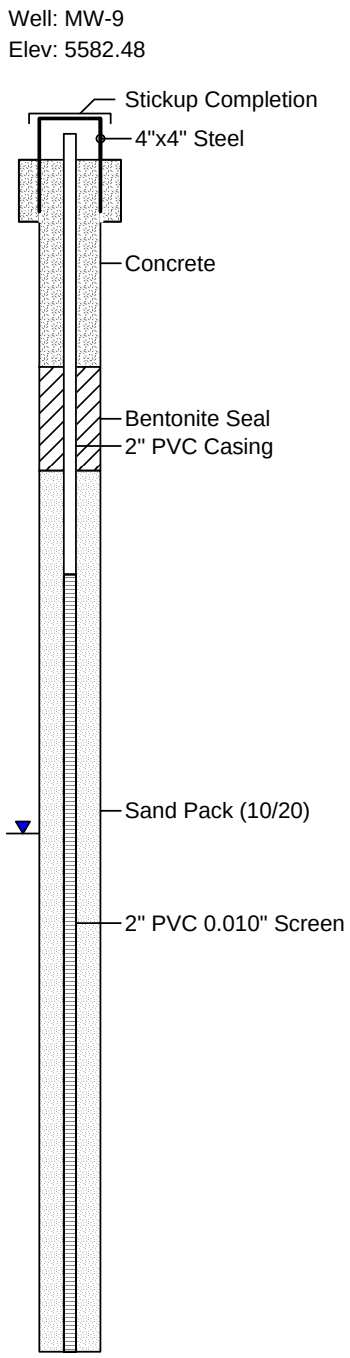
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-9

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.63185
Date Completed	: 8/23/12	Long.	: W107.97378
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5580	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5580	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.3
2	5578					
4	5576	SM		Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.3
6	5574					
8	5572	SP		Sand, Brown, Fine Grained, Moist, No Odor, No Staining		0.4
10	5570					
12	5568					
14	5566	SP		Sand, Gray, Fine to Medium Grained, Wet, No Odor, No Staining		0.2
16	5564					
18	5562	SP		Sand, Gray, Some Gravel, Wet, No Odor, No Staining		0.1
20	5560					
22	5558	SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		
24	5556					
26						



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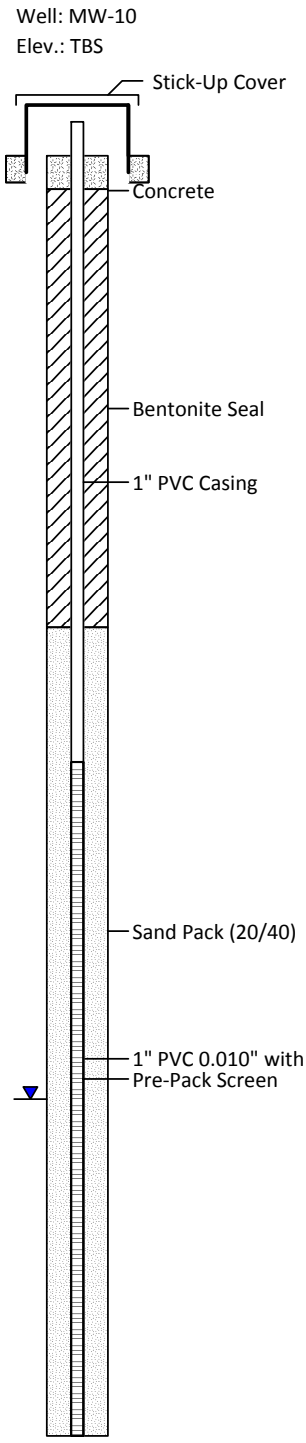
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

LOG OF : MW-10

ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPT. 2011 PIPELINE RELEASE
NE1/4 SW1/4 SEC. 26, T28N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.63202, W107.97400

Date Started	: 10/16/13	Latitude	: To Be Surveyed
Date Completed	: 10/16/13	Longitude	: To Be Surveyed
Hole Diameter	: 2.35 in.	Survey By	:
Drilling Method	: GeoProbe	Logged By	: H. Woods
Sampling Method	: Continous		

Depth in Feet	USCS	DESCRIPTION	PID (ppm)
0	SM	Silty Sand, Brown, Moist, Very Fine to Fine Grained, No Staining, No Odor	0.2
4	SP	Poorly Graded Sand with Silt, Brown, Dry to Moist, Fine to Medium Grained, No Staining, No Odor	1.7
10	SP	Poorly Graded Sand, Brown, Moist, Fine to Medium Grained, No Staining, Moderate to Heavy Odor	23.8
12	SC	Clayey Sand, Brown to Black, Moist to Wet at 14 feet, Moderate to Heavy Staining, Heavy Odor to 14.5 feet	786
14	SC	Clayey Sand, Brown to Gray, Wet, Slight to No Staining, Slight to No Odor	
20			



11-20-2013 R:\Animas 2000\Dropbox\2013 Projects\Enterprise\Lateral 6C\Soil Boring Logs\MW-10.bor

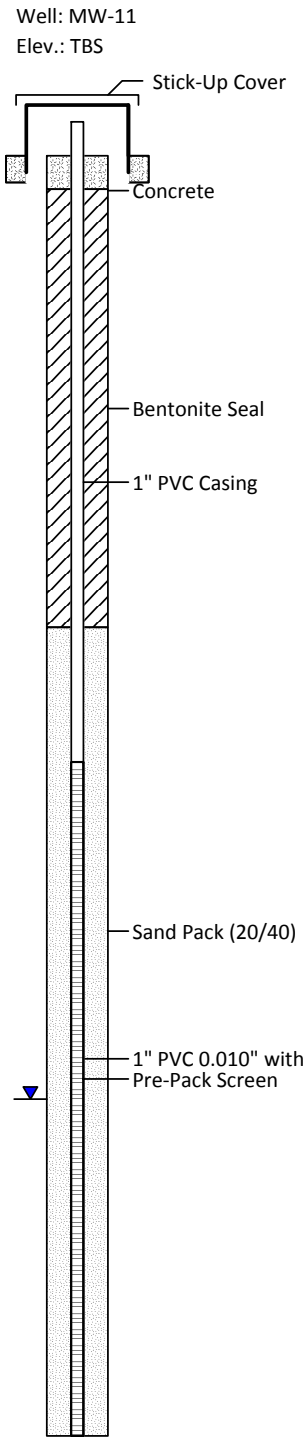
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

LOG OF : MW-11

ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPT. 2011 PIPELINE RELEASE
NE1/4 SW1/4 SEC. 26, T28N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.63202, W107.97400

Date Started	: 10/16/13	Latitude	: To Be Surveyed
Date Completed	: 10/16/13	Longitude	: To Be Surveyed
Hole Diameter	: 2.35 in.	Survey By	:
Drilling Method	: GeoProbe	Logged By	: H. Woods
Sampling Method	: Continous		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)
0–2		SM		Silty Sand, Brown, Moist to Dry, Very Fine Grained, No Staining, No Odor	0.0
4–8		SP		Poorly Graded Sand, Brown, Moist, Fine to Medium Grained, No Staining, No Odor, Silty Sand Lense at 7.5 feet, Trace Gravel from 8 to 12 feet	0.0
10–12		SP			0.0
14		SC		Clayey Sand, Brown, Moist to Wet at 14 feet, Fine to Medium Grained	0.0
16–20		SP		Poorly Graded Sand, Brown to Gray, Wet, Fine to Large Grained, Traces of Gravel, No Staining, No Odor, Trace Silt	



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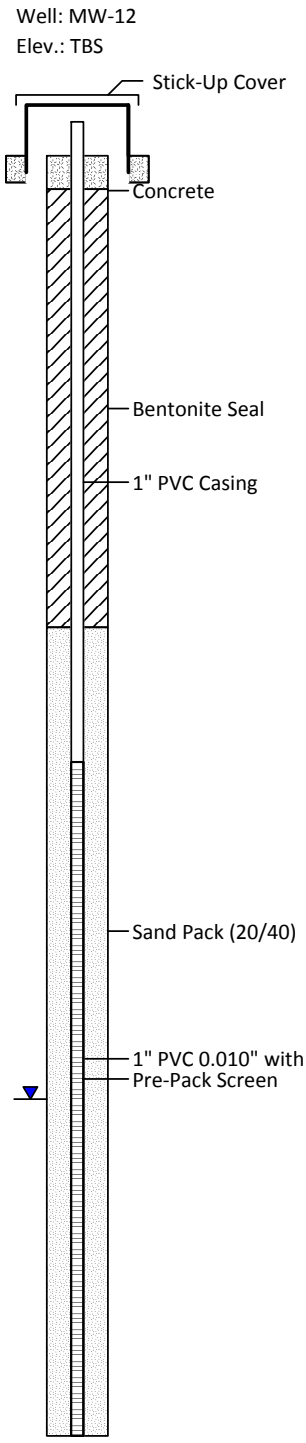
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

LOG OF : MW-12

ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPT. 2011 PIPELINE RELEASE
NE1/4 SW1/4 SEC. 26, T28N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.63202, W107.97400

Date Started	: 10/16/13	Latitude	: To Be Surveyed
Date Completed	: 10/16/13	Longitude	: To Be Surveyed
Hole Diameter	: 2.35 in.	Survey By	:
Drilling Method	: GeoProbe	Logged By	: H. Woods
Sampling Method	: Continous		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)
0–2		SC		Clayey Sand, Brown, Moist, Fine to Medium Grained, No Staining, No Odor	0.0
2–8		SP		Interbedded Poorly Graded Sand with Silt, Clayey Sand and S ilty Sand Lenses 0.5 to 1 foot, Brown, Moist to Dry, No Staining, No Odor	0.0
8–20		SP		Sand, Brown to Gray, Moist to Wet at 14 feet, Fine to Medium Grained, Traces of Large Grains Increasing with Depth, No Staining, No Odor	0.0 0.0



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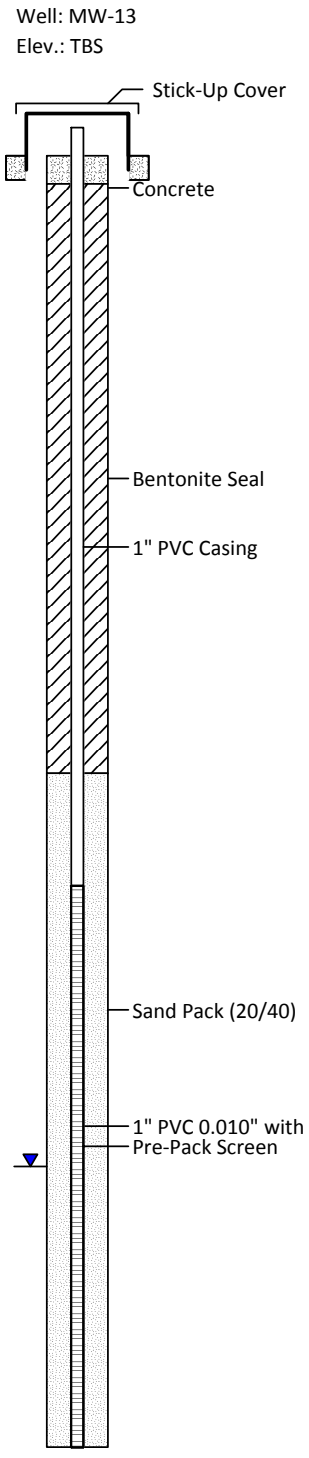
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

LOG OF : MW-13

ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPT. 2011 PIPELINE RELEASE
NE1/4 SW1/4 SEC. 26, T28N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.63202, W107.97400

Date Started	: 10/16/13	Latitude	: To Be Surveyed
Date Completed	: 10/16/13	Longitude	: To Be Surveyed
Hole Diameter	: 2.35 in.	Survey By	:
Drilling Method	: GeoProbe	Logged By	: H. Woods
Sampling Method	: Continous		

Depth in Feet	USCS	DESCRIPTION	PID (ppm)
0	SC	Clayey Sand, Brown, Fine to Medium Grained, No Staining, No Odor	0.0
6	SP	Poorly Graded Sand with Silt, Brown, Fine to Medium Graine d, Moist to Dry,No Staining, No Odor	0.0
10	CL	Lean Clay Lense, Brown, Moist, No Staining, No Odor	0.0
12	SP	Sand with Silt, Brown, Fine to Medium Grained, Moist to Dry, No Staining, No Odor	
14	SC	Lean Clay Grading to Clayey Sand, Brown, Fine Grained, Moist, No Staining, No Odor	0.0
16	SP	Poorly Graded Sand, Brown, Moist, Fine to Medium Grained, No Staining, No Odor	
18	SC	Clayey Sand, Brown with Orange Lenses, Fine Grained, Moist to Wet at 18 feet, No Staining, No Odor	0.0
20	SP	Sand, Brown with 2 to 3 inch Orange and Gray Lenses, Wet, Medium Grained, Slight to No Staining, No Odor	
24			



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Apex TITAN, Inc.
606 South Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com
A Subsidiary of Apex Companies, LLC

Trunk 6C Kutz Wash Pipeline Release
SW 1/4 Sec 26, T28N, R11W
San Juan County, New Mexico
36.63202 N, 107.97400 W

Project No. 725040112183

Soil Boring/Monitoring Well

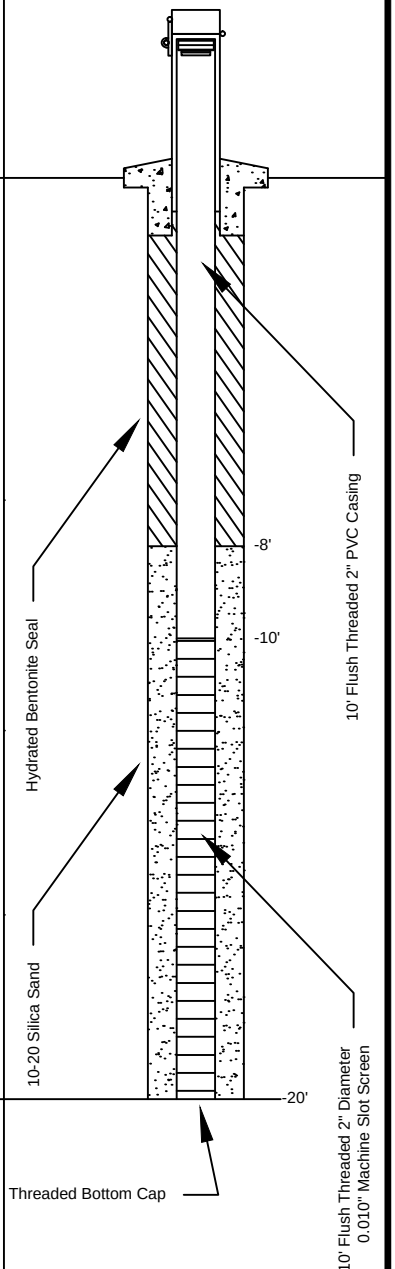
MW-14

Date Sampled:	9/6/2016	Ground Surface Elevation:	5573.63'	Borehole Diameter:	3.25"
Drilled by:	Earthworx	Top of Casing Elevation:	5579.39'	Casing Diameter:	2"
Driller:	L. Trujillo	North Coordinate:	2049613.84	Well Materials:	0.010" SCH40 PVC
Logged by:	R. Deechilly	West Coordinate:	2681706.40	Surface Completion:	Above Ground Vault
Sampler:	R. Deechilly	Bench Mark Elevation:	5575.44'	Boring Method:	Geoprobe
Project Manager:	K. Summers	GW Elev: ▽ At Completion ▼ At Well Stabilization			

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description
0							NO RECOVERY, Hydrovac
2.5			0	-			
5							
7.5							SAND, Light Olive Gray, Medium to Coarse Grained, No Staining, Moist, No Odor
10			60	0.0			
12.5				0.0			SAND, Light Olive Gray, Coarse Grained, No Staining, Wet, No Odor
15		12-16	35	0.0	9/6/2016 ▽		
17.5			85	0.0			SAND, Light Olive Gray, Coarse to Very Coarse Grained, with Trace Gravel, No Staining, Wet to Very Wet, No Odor
20				0.0			Bottom of Boring at 20 Feet BGS
22.5							
25							

NOTE:
Survey Elevations are Listed in Feet as Measured at Local OPUS Adjusted Control Point.
Coordinates are Listed in Feet, NAD 1983 2011 State Plane New Mexico West FIPS 3003

Boring/Well Completion (Graphic Depiction)



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Trunk 6C Kutz Wash Pipeline Release
SW 1/4 Sec 26, T28N, R11W
San Juan County, New Mexico
36.63202 N, 107.97400 W

Project No. 725040112183

Soil Boring/Monitoring Well

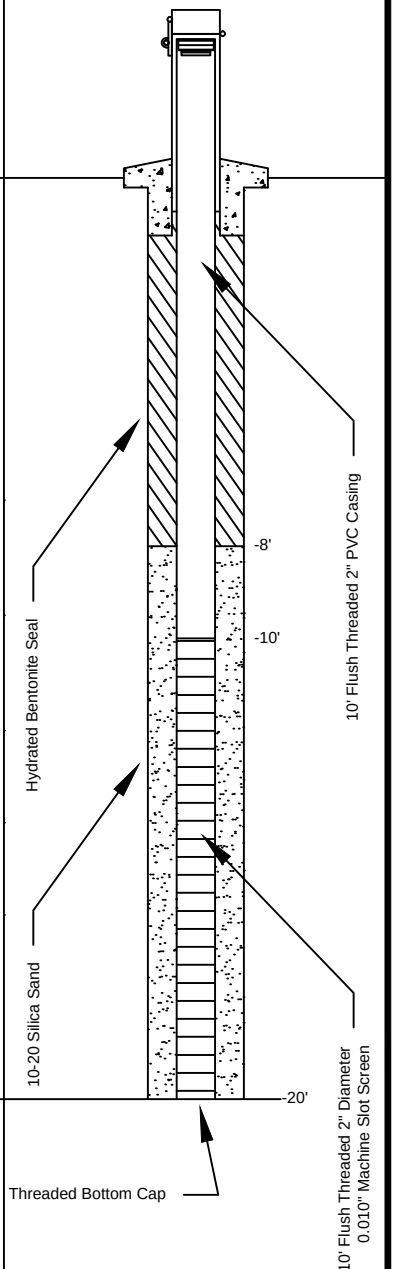
MW-15

Date Sampled:	9/6/2016	Ground Surface Elevation:	5575.93'	Borehole Diameter:	3.25"
Drilled by:	Earthworx	Top of Casing Elevation:	5578.83'	Casing Diameter:	2"
Driller:	L. Trujillo	North Coordinate:	2049549.05	Well Materials:	0.010" SCH40 PVC
Logged by:	R. Deechilly	West Coordinate:	2681664.07	Surface Completion:	Above Ground Vault
Sampler:	R. Deechilly	Bench Mark Elevation:	5575.44'	Boring Method:	Geoprobe
Project Manager:	K. Summers	GW Elev: ▽ At Completion ▼ At Well Stabilization			

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description
0							NO RECOVERY, Hydrovac
2.5			0	-			
5							
7.5							SILTY SAND, Light Olive Gray, Fine Grained, No Staining, Moist, No Odor
10			100	0.0			SAND, Light Olive Gray, Medium Grained, with Trace Silt, No Staining, Moist, No Odor
12.5				0.2			SAND, Light Olive Gray, Medium to Coarse Grained, with Trace Gravel, No Staining, Moist, No Odor
15	X	14-16	100	1,062	9/6/2016 ▽		SAND, Medium Dark Gray, Medium to Coarse Grained, Staining, Wet, Strong Hydrocarbon Odor
17.5				0.0			SAND, Light Olive Gray, Coarse Grained, No Staining, Wet, No Odor
20			100	0.0			-Becoming Saturated at 18 Feet BGS
22.5							Bottom of Boring at 20 Feet BGS
25							

NOTE:
Survey Elevations are Listed in Feet as Measured at Local OPUS Adjusted Control Point.
Coordinates are Listed in Feet, NAD 1983 2011 State Plane New Mexico West FIPS 3003

Boring/Well Completion (Graphic Depiction)



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Trunk 6C Kutz Wash Pipeline Release
SW 1/4 Sec 26, T28N, R11W
San Juan County, New Mexico
36.63202 N, 107.97400 W

Project No. 725040112183

Soil Boring/Monitoring Well

SB-16A

Date Sampled:	9/6/2016	Ground Surface Elevation:	N/A	Borehole Diameter:	3.25"
Drilled by:	Earthworx	Top of Casing Elevation:	N/A	Casing Diameter:	N/A
Driller:	L. Trujillo	North Coordinate:	N/A	Well Materials:	N/A
Logged by:	R. Deechilly	West Coordinate:	N/A	Surface Completion:	N/A
Sampler:	R. Deechilly	Bench Mark Elevation:	N/A	Boring Method:	Geoprobe
Project Manager:	K. Summers	GW Elev: ▽ At Completion ▼ At Well Stabilization			

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description	Boring/Well Completion (Graphic Depiction)
0			0	-			NO RECOVERY, Hydrovac	Hydrated Bentonite Backfill
7.5			70	1.0			SAND, Light Olive Gray, Medium Grained, No Staining, Moist, No Odor	
10				1.2				
12.5		12-14	70	0.3	9/6/2016 ▽		SAND, Light Olive Gray, Coarse to Very Coarse Grained, No Staining, Wet to Very Wet, No Odor	
15				0.0				
17.5			85	0.0			SAND, Light Olive Gray, with Trace Gravel, Coarse to Very Coarse Grained, No Staining, Saturated, No Odor	
20				0.0			Bottom of Boring at 20 Feet BGS	-20'

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Trunk 6C Kutz Wash Pipeline Release
SW 1/4 Sec 26, T28N, R11W
San Juan County, New Mexico
36.63202 N, 107.97400 W

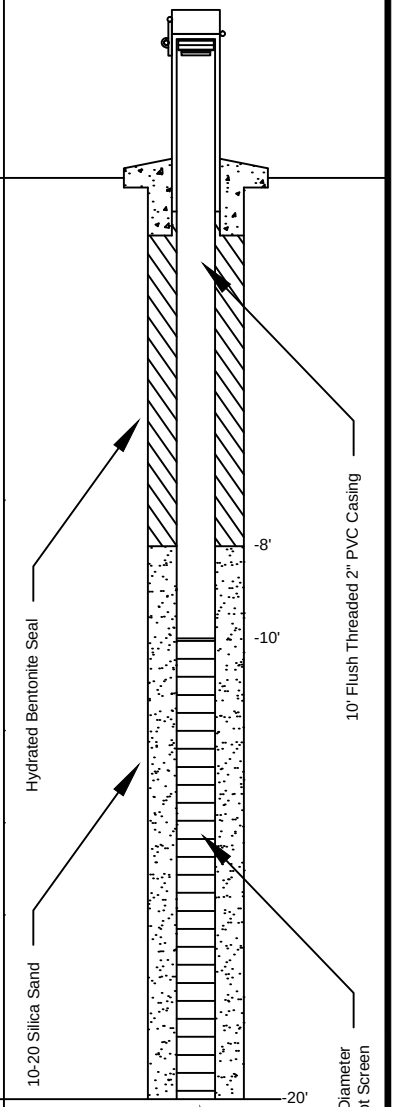
Project No. 725040112183

Soil Boring/Monitoring Well

MW-17

Date Sampled:	9/6/2016	Ground Surface Elevation:	5577.16'	Borehole Diameter:	3.25"
Drilled by:	Earthworx	Top of Casing Elevation:	5579.86'	Casing Diameter:	2"
Driller:	L. Trujillo	North Coordinate:	2049413.60	Well Materials:	0.010" SCH40 PVC
Logged by:	R. Deechilly	West Coordinate:	2681834.71	Surface Completion:	Above Ground Vault
Sampler:	R. Deechilly	Bench Mark Elevation:	5575.44'	Boring Method:	Geoprobe
Project Manager:	K. Summers	GW Elev: ▽ At Completion ▼ At Well Stabilization			

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description
0							NO RECOVERY, Hydrovac
2.5			0	-			
5							
7.5							SAND, Light Olive Gray, Medium Grained, No Staining, Moist, Moderate Hydrocarbon Odor
10		7-12	25	3,094			
12.5		12-14	40	2,198			SAND, Medium Gray, with Trace Clay, Medium to Coarse Grained, Staining, Wet, Strong Hydrocarbon Odor
15				52	9/6/2016 ▽		SAND, Light Olive Gray, Coarse Grained, No Staining, Wet, No Odor
17.5			70	9.3			SAND, Light Olive Gray, with Trace Gravel, Coarse Grained, No Staining, Very Wet to Saturated, No Odor
20				3.7			Bottom of Boring at 20 Feet BGS
22.5							
25							



NOTE:
Survey Elevations are Listed in Feet as Measured at Local OPUS Adjusted Control Point.
Coordinates are Listed in Feet, NAD 1983 2011 State Plane New Mexico West FIPS 3003

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Trunk 6C Kutz Wash Pipeline Release
SW 1/4 Sec 26, T28N, R11W
San Juan County, New Mexico
36.63202 N, 107.97400 W

Project No. 725040112183

Soil Boring/Monitoring Well

SB-18A

Date Sampled:	9/6/2016	Ground Surface Elevation:	N/A	Borehole Diameter:	3.25"
Drilled by:	Earthworx	Top of Casing Elevation:	N/A	Casing Diameter:	N/A
Driller:	L. Trujillo	North Coordinate:	N/A	Well Materials:	N/A
Logged by:	R. Deechilly	West Coordinate:	N/A	Surface Completion:	N/A
Sampler:	R. Deechilly	Bench Mark Elevation:	N/A	Boring Method:	Geoprobe
Project Manager:	K. Summers	GW Elev: ▽ At Completion ▼ At Well Stabilization			

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description	Boring/Well Completion (Graphic Depiction)
0							NO RECOVERY, Hydrovac	
2.5			0	-				
5								
7.5			35	0.7			SAND, Light Olive Gray, with Trace Silt, Fine to Medium Grained, No Staining, Moist, No Odor	
10								
12.5			50	27			SAND, Light Olive Gray, Medium to Coarse Grained, No Staining, Moist, No Odor	
15	X	14-16		315	9/6/2016 ▽		SAND, Medium Dark Gray, Medium to Coarse Grained, Apparent Staining, Wet, Moderate Hydrocarbon Odor	
17.5			70	104			SAND, Light Olive Gray, Coarse Grained, No Staining, Very Wet to Saturated, Hydrocarbon Odor	
20				0.3			Bottom of Boring at 20 Feet BGS	Hydrated Bentonite Backfill -20'
22.5								
25								

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ENSOLUM

APPENDIX D

Public Notice and Landowner Table

Enterprise proposes the following verbiage for public notice:

Enterprise Field Services, LLC (Enterprise) hereby announces the publication of a Stage 1 Abatement Plan for soil and groundwater impacts identified at the Trunk 6C Kutz Wash pipeline release site located at latitude 36.63202° and longitude -107.97400° within the southwest (SW) ¼, in Section 26 of Township 28 North, Range 11 West in rural San Juan County, approximately 7 miles southeast of Bloomfield.

On September 11, 2011, a release of natural gas condensate was identified due to a leak on the Trunk 6C pipeline. Initial site assessments and subsurface investigations performed at the Site between October 2011 and September 2016 concluded that soil and groundwater impacts were present above applicable New Mexico (NM) Energy, Minerals and Natural Resource Department (EMNRD) Oil Conservation Division (OCD) standards for soil and Water Quality Control Commission (WQCC) standards for groundwater. The current extent of groundwater impact is estimated to be less than 0.3 acres. No surface water was impacted.

The Director of the NM ENMRD OCD has approved a Stage 1 Abatement Plan in which Enterprise proposes implementation of groundwater monitoring at the site to evaluate the concentrations of constituents of concern (COC) and the implementation of additional site-specific aquifer characterization. The data obtained from the Stage 1 Abatement Plan activities will be evaluated to determine a preferred abatement plan remediation option at the site. In order to determine that the Stage 1 Abatement Plan is administratively complete, the NM EMNRD OCD Director has complied with Subsection B of 19.15.30.15 of the New Mexico Administrative Code (NMAC) by reviewing the document and concluding that it satisfies the requirements of Subsection C of 19.15.30.13 NMAC.

Members of the public may view a copy of the Stage 1 Abatement Plan at the NM EMNRD OCD's Santa Fe office located at 1220 South St Francis Drive, #3, Santa Fe, New Mexico or at the NM EMNRD OCD's district office at 1000 Rio Brazos Road, Aztec, New Mexico. Additionally, the Stage 1 Abatement Plan is available for viewing electronically on the NM EMNRD OCD public database at http://www.emnrd.state.nm.us/OCD/.

The NM EMNRD OCD is accepting written comments and requests for consideration if they are received within 30 days after the publication date of this public notice. Any person seeking to comment on a Stage 1 Abatement Plan should submit written comments to:

Mr. Corey Smith
Environmental Specialist
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

The NM ENMRD OCD shall distribute notice of the submittal of the Stage 1 Abatement Plan with the next division and commission hearing docket following receipt of the plan.

Additional information can be obtained from the Enterprise project contact:

Gregory E. Miller, P.G.
1100 Louisiana Street
Houston, Texas 77002-5227
(713) 381-8780

Table A
Property Owners Within One (1) Mile Radius

Trunk 6C Kutz Wash Pipeline Release
San Juan County, New Mexico
Enterprise Field Services, LLC

Parcel Number	Owner Name	Owner Address	Owner City, State, Zip Code
2099199900900	Federal	6251 College Blvd., Suite A	Farmington, NM 87402

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Dylan M. Fuge
Deputy Secretary

Dylan Fuge, Division Director (Acting)
Oil Conservation Division

Greg E Miller
Enterprise Field Services, LLC
PO Box 4324
Houston, TX 77210

RE: Determination of Administratively Complete Stage 1 Abatement Plan & Public Notice and Participation for the Trunk 6C Kutz Wash Pipeline Release (Incident #nJK1201237146) 3R-438 & AP-131

Mr. Miller,

The Oil Conservation Division (OCD) received a Stage 1 Abatement Plan as well as a Proposed Public Notice and Participation submittal prepared on Enterprise Field Services, LLC's behalf by Ensolum, LLC. OCD has reviewed the plan and determined it to be administratively complete. In addition, OCD also approves the proposed draft of the Public Notice and Participation Proposal. The required public notice and participation should now proceed under the provisions of Subsections A and B of 19.15.30.15 NMAC. Proof of Public Notice must be provided to the OCD.

According to Table 2 of the Stage 1 Abatement Plan, MW-12 has not been sampled since 6/12/2015. Either the well must be re-drilled or the casing obstruction that has prevented access down the well must be removed for continued sampling.

Additionally, please include sampling analysis for TPH (MRO, DRO, GRO) using EPA method 8015M/B for lab analysis, due to the past presence of NAPL in wells MW-1, MW-2, and MW-8. Include sampling analysis for Polycyclic aromatic hydrocarbons (PAH), EPA method 8100.

The division shall distribute notice of an abatement plan's filing with the next division and commission hearing docket following the plan's receipt.

OCD's approval of the Stage 1 Abatement Plan does not relieve Enterprise of any other requirements imposed by any other regulatory agencies.

If you have any questions, please contact Mike Buchanan of the Environmental Incident Group at (505) 490-0798 or by email at *michael.buchanan*@emnrd.nm.gov.

Respectfully,

RosaM Romero

Rosa Romero Environmental
Bureau Chief
RR/mb

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 265681

CONDITIONS

Operator:	OGRID:
Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	241602
	Action Number: 265681
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Stage 1 Abatement Plan reviewed and conditionally approved. Letter of determination sent electronically on 01/25/2024.	1/25/2024