AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pENV000GW00061

GW - 51

TEPPCO GP, INC

7/26/2016

GW - 51

Release Report/ C-141

Val Verde/ Blanco D Turbine

Date: 2016

OIL CONS. DIV DIST. 3

JUL 28 2016

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR ☐ Initial Report ☒ Final Report

Name of Company: Enterprise Field Services LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: **Blanco Plant D-Turbine**	Facility Type: **Natural Gas Processing Plant**

Surface Owner: **BLM**	Mineral Owner: **BLM**	Serial Number: **NM 0 014706**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N/O	**11**	**29N**	**11W**	**620**		**152**		**San Juan**

Latitude 36.734617 Longitude -107.960433

NATURE OF RELEASE

Type of Release: Lubrication Oil	Volume of Release **Approximately 42 barrels**	Volume Recovered: **None**
Source of Release: Facility Blowdown Vent Pipe	Date and Hour of Occurrence: **5/3/2016 @ 10:01 a.m.**	Date and Hour of Discovery: **5/3/2016 @ 10:02 a.m.**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Vanessa Fields – NMOCD and Katherina Diemer - BLM	
By Whom? Thomas Long	Date and Time May 4, 2016 @ 10:46 a.m. Follow up notification on May 5, 2016 @ 9:00 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: The initial release occurred on May 3, 2016. A subsequent release occurred on May 4, 2016. Both releases were a result of lubrication seal oil being ejected from the blowdown vent pipe during annual testing of the Emergency Shutdown System and from equipment maintenance activities being performed at the Blanco Plant facility. The blowdown vent pipe is used when the station is being depressurized due to either an emergency event or during maintenance activities. The lubrication oil releases were a result of a failed level control system on the compressor oil seal system. Lubricating seal oil accumulated in the gas compressor and associated piping and was emitted through the blowdown vent stack during the depressurization events.

Describe Area Affected and Cleanup Action: An area of approximately 450 feet long by 165 feet wide was saturated with lubrication oil. An overspray area of approximately 700 feet long and 150 feet wild was impacted. An area of approximately 0.5 miles long by 200 feet wide was misted with the lubrication oil. Residents located to west of the facility were impacted. Mobile homes and vehicles were impacted with a mist of lubrication oil. Enterprise provided cleaning services for impacted property owner's vehicles. The contaminant mass was removed by mechanical excavation. The final excavation measured approximately 450 feet long by 165 feet wide ranging from 0.5 to 3.0 feet deep. Approximately 634 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. A third party corrective action report is included with this "Final" C-141.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Jon E. Fields	OIL CONSERVATION DIVISION
Printed Name: Jon E. Fields	Approved by Environmental Specialist:
Title: Director, Environmental	Approval Date: 8/19/2016 Expiration Date:
E-mail Address:jefields@eprod.com	Conditions of Approval: NUF1618241350 Attached ☐
Date: 7/25/2016 Phone: (713)381-6684	

Schedule Site Inspection for inspection of plant growth by December 2016.

* Attach Additional Sheets If Necessary

Blanco Plant D-Turbine
Lubrication Oil Release Report

UL N & O, S11, Township 29N, Range 11W
San Juan County, New Mexico

July 11, 2016

Prepared for:
Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

Prepared by:
Rule Engineering, LLC
501 Airport Drive, Suite 205
Farmington, New Mexico 87401

Rule Engineering, LLC
Solutions to Regulations for Industry

Enterprise Field Services, LLC
Blanco Plant D-Turbine Lubrication Oil Release Report

Prepared for:

Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

Prepared by:

Rule Engineering, LLC
501 Airport Drive, Suite 205
Farmington, New Mexico 87401

Heather M. Woods

Heather M. Woods, P.G., Area Manager

Reviewed by:

Russell Knight, PG, Principal Hydrogeologist

July 11, 2016

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Figures

Appendices

1.0 Introduction

The Enterprise Field Services, LLC (Enterprise) Blanco Plant D-Turbine Lubrication Oil release site is located in Unit Letters N & O, Section 11, Township 29 North, Range 11 West, in San Juan County, New Mexico. The initial release occurred on May 3, 2016, and a subsequent release occurred on May 4, 2016. Both releases were the result of ejection of lubrication seal oil from the blowdown vent pipe during annual testing of the Emergency Shutdown System and equipment maintenance activities being performed at the Blanco Plant facility. Lubrication seal oil accumulated in the gas compressor and associated piping and was emitted through the blowdown vent stack during the depressurization events.

A topographic map of the location reproduced from the United States Geological Society quadrangle map of the area is included as Figure 1 and an aerial site map is included as Figure 2. These maps illustrate the location of the release and downwind impacts.

2.0 Release Summary

Site Name	Blanco Plant D-Turbine Lubrication Oil Release		
Site Location Description	Unit Letters N &O, Section 11, Township 29 North, Range 11 West (N36.73462, W107.96039)		
Land Jurisdiction	Bureau of Land Management (BLM) and Private		
Release Dates	May 3 and 4, 2016	***Reported by***	Thomas Long
Agency Notification	New Mexico Oil Conservation Division (NMOCD) and BLM		
NMOCD Site Rank	30	***Release Source***	Blowdown Vent
Substance Released	Lubrication seal oil		
Distance to Nearest Surface Water	Unnamed, ephemeral wash approximately 140 feet east of release location		
Estimated Depth to Groundwater	Between 50 to 100 feet below grade surface (bgs)	***Distance to Nearest Water Well or Spring***	Greater than 1,000 feet
Approx. Excavation Dimensions	Irregularly shaped, maximum dimensions of approximately 450 feet by 165 feet by 0.5 to 1.5 feet in depth (soils immediately adjacent to the blowdown vent stack concrete footer were removed to a depth of approximately 3 feet)		
Contractor	West States Energy Contractor, Inc. (West States)		
Volume of Soil Transported for Disposal Remediation	Approximately 634 cubic yards	***Disposal Facility***	Envirotech Landfarm (Permit #NM-01-0011)

3.0 NMED Soil Screening Levels/Site Specific Remediation Standards

The release included Resource Conservation and Recovery Act (RCRA) non-exempt oil field waste shown to be non-hazardous via laboratory analysis (see Table 1 and Waste Characterization Laboratory Analytical Report in Appendix A). Based on the nature of the released material, the composite sample collected from saturated soils in the release area was analyzed for constituents of concern. Soil screening levels for industrial use per the New Mexico Environment Department (NMED) Risk Assessment Guidance for Site Investigations and Remediation (July 2015) for these constituents of concern are provided in Tables 1 and 2.

Depth to groundwater at the site is estimated to be between 50 and 100 feet bgs based on the elevation differential between the release location and the wash in Bloomfield Canyon and Citizens Ditch, as well as depth to groundwater information available for nearby water wells registered on the New Mexico Office of the State Engineer online New Mexico Water Rights Reporting System (NMWRRS). A review was completed of the NMWRRS and no water wells were identified within a 1,000 foot radius of the location. No water wells were observed within a 1,000 foot radius of the location during a visual inspection. An unnamed, ephemeral wash traverses the area approximately 140 feet east of the release location.

Site specific remediation standards based on the NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993), were accepted by the BLM and NMOCD. Site specific remediation standards soils at the site are as follows: 10 milligrams per kilogram (mg/kg) benzene, 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 100 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO).

4.0 Field Activities

On May 5, 2016, Enterprise provided cleaning services for impacted property owner's vehicles. Seventeen vehicles were cleaned by Donny's Power Wash Company. Property owners declined cleaning of the exterior of their homes. Impacted bales of hay for feeding livestock were replaced.

Following an onsite meeting with BLM and NMOCD on May 6, 2016, Enterprise began cleaning impacted vegetation with Simple Green® solution utilizing pressure washing equipment and completed the vegetation cleaning on May 7, 2016. A depiction of the areas treated with Simple Green® is included as Figure 2.

Prior to surface disturbance at the site, an archaeological survey was completed which found no cultural material in the work area. On May 23, 2016, Enterprise initiated remedial excavation activities of the surface soils in the saturated area. West States provided heavy equipment operation and repair support. Rule Engineering, LLC (Rule) personnel provided excavation guidance and collected confirmation samples from the resultant excavation. Vigorous larger vegetation and cacti were left in place in the

excavation area and impacted soils around their bases were removed by hand. The final excavation was an irregular shape of which the maximum dimensions measured approximately 450 feet by 165 feet by 0.5 to 1.5 feet in depth (soils immediately adjacent to the blowdown vent stack concrete footer were removed to a depth of approximately 3 feet). Approximately 634 cubic yards were transported to Envirotech Landfarm for disposal/remediation. The remedial excavation was backfilled with clean, imported soils.

The archaeological report is included as Appendix B. A depiction of the excavation with sample locations is included as Figure 3. A copy of the executed C-138 Solid Waste Acceptance Form is included in Appendix C. A photograph log is included in Appendix D.

5.0 Soil Sampling

Rule collected confirmation excavation soil samples SC-1 through SC-21 from the base of the excavation. Laboratory results for two soil samples, SC-14 and SC-19, exceeded the NMOCD action level for TPH (GRO/DRO/MRO) and subsequent to additional excavation of the corresponding areas, were resampled as SC-14R and SC-19R on June 6, 2016. Each confirmation soil sample is a representative composite comprised of five equivalent aliquots of soil collected from the sampled area.

Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B and TPH (GRO/DRO/MRO) per USEPA 8015D. Laboratory analytical results are summarized in Table 2, and the analytical laboratory reports are included in Appendix E.

A portion of each sample was field screened for volatile organic compounds (VOCs) and TPH. Field screening for VOC vapors was conducted with a photoionization detector (PID). Prior to field screening, the PID was calibrated with 100 parts per million (ppm) isobutylene gas. Field analysis for TPH was conducted for selected samples per USEPA Method 418.1, utilizing a total hydrocarbon analyzer. Prior to field analysis, the machine was calibrated following the manufacturer's procedure which includes calculation of a calibration curve using known concentration standards.

6.0 Laboratory Analytical Results

Laboratory analytical results for the excavation confirmation samples (SC-1 through SC-21, SC-14R, and SC-19R) reported benzene and total BTEX concentrations below the laboratory reporting limits, which are below the site specific remediation standards. Laboratory analytical results for the excavation confirmation samples SC-14 and SC-19 reported TPH (GRO/DRO/MRO) concentrations of 234 mg/kg and 125 mg/kg, respectively, which exceed the site specific remediation standard. The areas associated with samples SC-14 and SC-19 were resampled subsequent to additional excavation and laboratory results for SC-14R and SC-19 reported TPH (GRO/DRO/MRO) concentrations

of below the laboratory reporting limits of 47 mg/kg and 50 mg/kg, respectively, which are below site specific remediation standard. Laboratory analytical results for the remainder of the samples reported TPH (GRO/DRO/MRO) concentrations ranging from below the laboratory reporting limits to 84 mg/kg, which are below the site specific remediation standards.

Laboratory analytical results are summarized in Table 2 and the analytical laboratory reports are included in Appendix E.

7.0 Conclusions

The Enterprise Blanco Plant D-Turbine Lubrication Oil release site is located in Unit Letters N & O, Section 11, Township 29 North, Range 11 West, in San Juan County, New Mexico. The initial release occurred on May 3, 2016, and a subsequent release occurred on May 4, 2016. Both releases were the result of ejection of lubrication seal oil from the blowdown vent pipe during annual testing of the Emergency Shutdown System and equipment maintenance activities being performed at the Blanco Plant facility. Lubrication seal oil accumulated in the gas compressor and associated piping and was emitted through the blowdown vent stack during the depressurization events.

Vegetation in the impacted areas were cleaned using Simple Green® power washing and soils were excavated from the saturated area. Confirmation samples were collected from the resultant excavation which was an irregular shape of which the maximum dimensions measured approximately 450 feet by 165 feet by 0.5 to 1.5 feet in depth (soils immediately adjacent to the blowdown vent stack concrete footer were removed to a depth of approximately 3 feet). Laboratory analytical results for the soil confirmation samples (SC-1 through SC-21) reported benzene, total BTEX, and total TPH (GRO/DRO/MRO) concentrations below the site specific remediation standards for all the samples except samples SC-14 and SC-19 which exceeded the site specific remediation standard for TPH (GRO/DRO/MRO). However, laboratory results for samples SC-14R and SC-19R, collected subsequent to additional excavation of the sample areas, reported TPH (GRO/DRO/MRO) concentrations below the site specific remediation standard. Approximately 634 cubic yards of soils were transported to Envirotech Landfarm for disposal/remediation. The remedial excavation was backfilled with clean, imported soils.

Based on laboratory analytical results of the confirmation soil samples, no further soil remediation is recommended. Quarterly vegetation surveys will be conducted for the next six months.

8.0 Closure and Limitations

This report has been prepared for the exclusive use of Enterprise and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Enterprise. All work has been performed in accordance with generally accepted professional environmental consulting practices. No other warranty is expressed or implied.

Tables

Table 1. Waste Characterization Laboratory Analytical Results
Enterprise Field Services, LLC
Blanco Plant D-Turbine Lubrication Oil Release
San Juan County, New Mexico

Sample Name	Date	Sample Location	Benzene (mg/kg)	Toluene (mg/kg)	Ethylben-zene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)
NMED Soil Screening Levels for Industrial Use*			**87.2**	**61,300**	**368**	**4,280**	**--**	**5,000**		
Site Specific Remediation Standards**			**10**	**NE**	**NE**	**NE**	**50**	**100**		
SC-1	5/3/2015	Saturated Soils	1.4	3.2	0.18	1.9	6.7	79	13,000	56,000

Sample Name	Date	Sample Location	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
NMED Soil Screening Levels for Industrial Use*			**21.5**	**25,500**	**1,110**	**505**	**800**	**6,490**	**6,490**	**112**
SC-1	5/25/2016	Saturated Soils	<5.0	<100	<1.0	<5.0	<5.0	<1.0	<5.0	<0.020

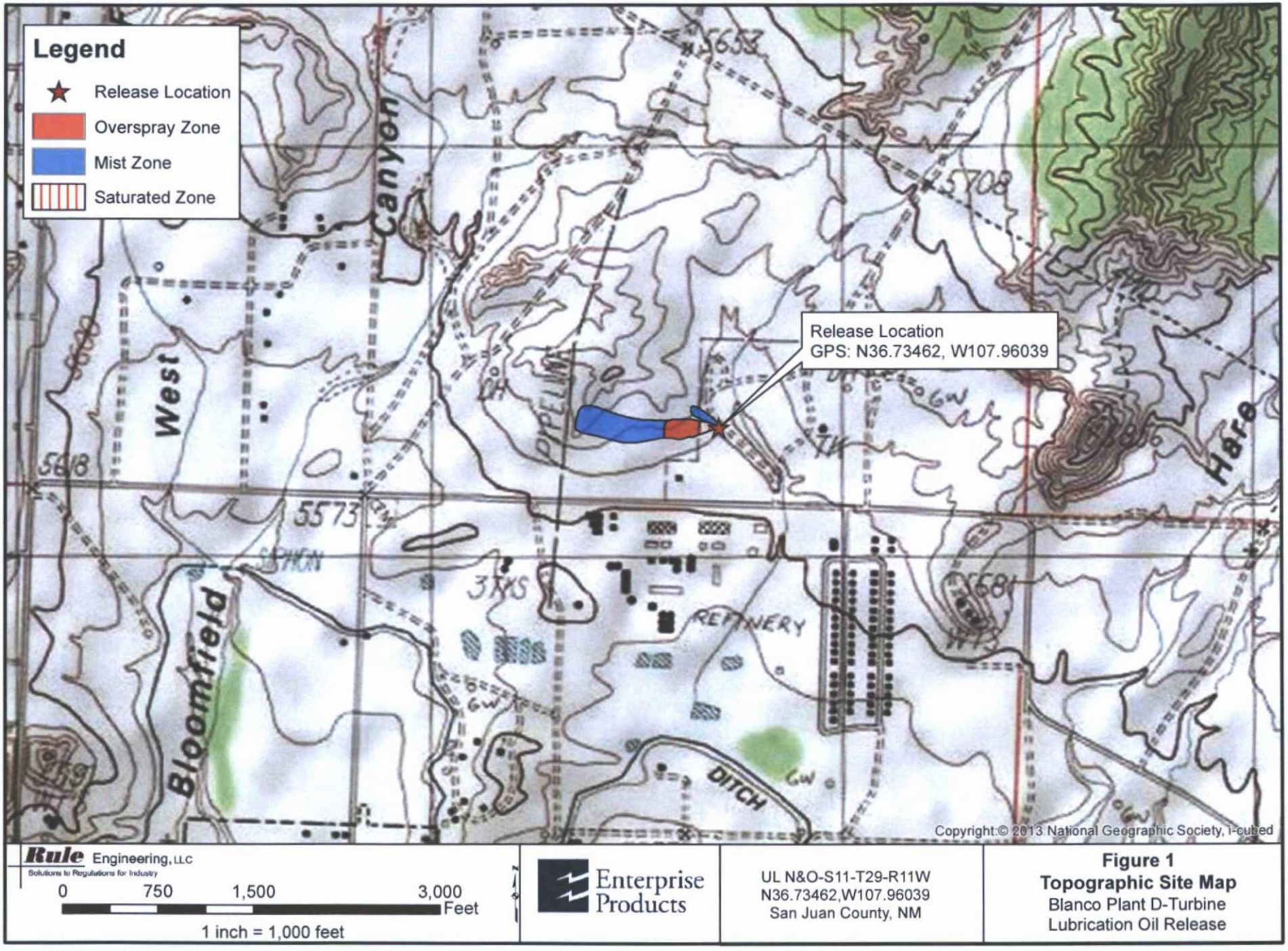
Notes:
ft bgs - feet below grade surface
mg/kg - milligrams per kilogram
NMOCD - New Mexico Oil Conservation Division
BTEX - benzene, toluene, ethylbenzene, and xylenes
TPH - total petroleum hydrocarbons
GRO - gasoline range organics
DRO - diesel range organics
MRO - motor oil range organics
ND - not detected above laboratory reporting limits
*Per New Mexico Environmental Department Risk Assessment Guidance for Investigations and Remediation (July 2015)
**Site specific remediaton standards based on the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases (August 1993)*

Table 2. Confirmation Soil Sampling Laboratory Analytical Results
Enterprise Field Services, LLC
Blanco Plant D-Turbine Lubrication Oil Release
San Juan County, New Mexico

Sample Name	Date	Approximate Sample Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylben-zene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)
NMED Soil Screening Levels for Industrial Use*			**87.2**	**61,300**	**368**	**4,280**	**--**	**5,000**		
Site Specific Remediation Standards**			**10**	**NE**	**NE**	**NE**	**50**	**100**		
Excavation Confirmation Samples										
SC-1	5/25/2016	0.5 to 1	<0.018	<0.037	<0.037	<0.073	<0.165	<3.7	<10	<50
SC-2	5/25/2016	0.5 to 1	<0.019	<0.038	<0.038	<0.076	<0.171	<3.8	13	72
SC-3	5/25/2016	0.5 to 1	<0.022	<0.043	<0.043	<0.086	<0.194	<4.3	<9.1	<46
SC-4	5/25/2016	0.5 to 1	<0.018	<0.036	<0.036	<0.072	<0.162	<3.6	<9.5	<47
SC-5	5/25/2016	0.5 to 1	<0.019	<0.038	<0.038	<0.077	<0.172	<3.8	<9.7	<49
SC-6	5/25/2016	0.5 to 1	<0.019	<0.039	<0.039	<0.078	<0.175	<3.9	<9.6	<48
SC-7	5/25/2016	0.5 to 1	<0.018	<0.035	<0.035	<0.070	<0.158	<3.5	13	55
SC-8	5/25/2016	0.5 to 1	<0.022	<0.044	<0.044	<0.087	<0.197	<4.4	<9.5	<47
SC-9	5/25/2016	0.5 to 1	<0.017	<0.034	<0.034	<0.067	<0.152	<3.4	17	60
SC-10	5/25/2016	0.5 to 1	<0.018	<0.036	<0.036	<0.071	<0.161	<3.6	<9.8	<49
SC-11	5/25/2016	0.5 to 1	<0.017	<0.034	<0.034	<0.068	<0.153	<3.4	<9.5	<47
SC-12	5/25/2016	0.5 to 1	<0.019	<0.039	<0.039	<0.078	<0.175	<3.9	16	68
SC-13	5/25/2016	0.5 to 1	<0.017	<0.035	<0.035	<0.069	<0.156	<3.5	<9.3	<47
SC-14R	6/6/2016	0.5 to 1.5	<0.017	<0.033	<0.033	<0.066	<0.149	<3.3	<9.5	<47
SC-15	5/25/2016	0.5 to 1	<0.018	<0.036	<0.036	<0.072	<0.162	<3.6	<9.2	<46
SC-16	5/25/2016	0.5 to 1	<0.019	<0.037	<0.037	<0.074	<0.167	<3.7	<9.6	<48
SC-17	5/25/2016	0.5 to 1	<0.017	<0.033	<0.033	<0.066	<0.149	<3.3	<9.7	<48
SC-18	5/25/2016	0.5 to 1	<0.018	<0.036	<0.036	<0.071	<0.161	<3.6	<9.7	<48
SC-19R	6/6/2016	0.5 to 1.5	<0.018	<0.035	<0.035	<0.070	<0.158	<3.5	<10	<50
SC-20	5/25/2016	0.5 to 1	<0.018	<0.036	<0.036	<0.072	<0.162	<3.6	<9.6	<48
SC-21	5/25/2016	0.5 to 3	<0.017	<0.035	<0.035	<0.069	<0.156	<3.5	<9.7	<48
Samples Removed by Excavation and Resampled (designated by "R" above)										
SC-14	5/25/2016	0.5 to 1	<0.017	<0.033	<0.033	<0.067	<0.150	<3.3	54	180
SC-19	5/25/2016	0.5 to 1	<0.017	<0.033	<0.033	<0.067	<0.150	<3.3	28	97

Notes:
ft bgs - feet below grade surface
mg/kg - milligrams per kilogram
NMOCD - New Mexico Oil Conservation Division
BTEX - benzene, toluene, ethylbenzene, and xylenes
TPH - total petroleum hydrocarbons
GRO - gasoline range organics
DRO - diesel range organics
MRO - motor oil range organics
ND - not detected above laboratory reporting limits
*Per New Mexico Environmental Department Risk Assessment Guidance for Investigations and Remediation (July 2015)
**Site specific remediaton standards based on the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases (August 1993)*

Figures



Document Path: U:\Enterprise Products\Blanco Plant Stack Release\Blanco Stack Release Topo Map.mxd

Rule Engineering, LLC
Solutions to Regulations for Industry

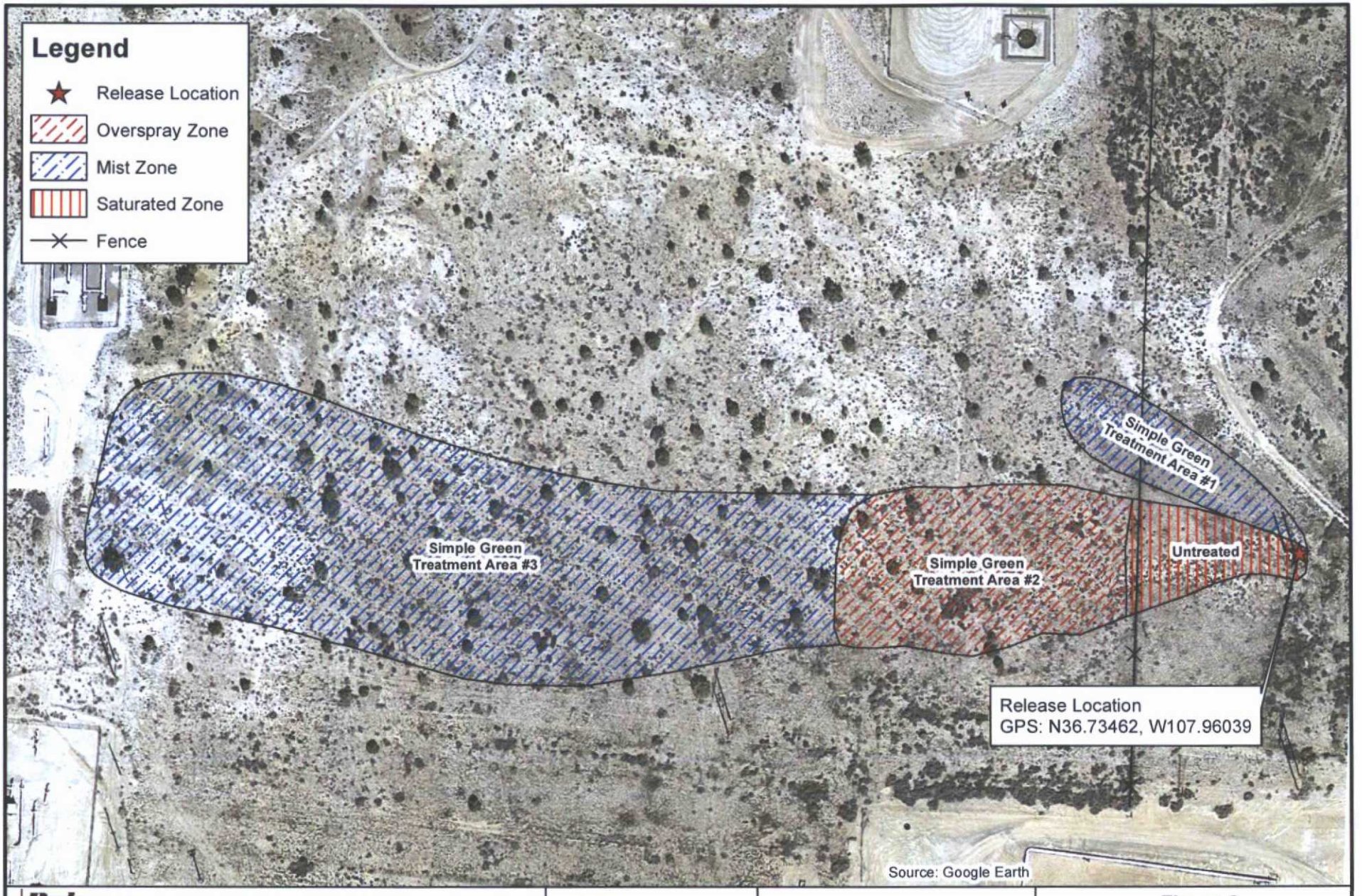
0 750 1,500 3,000 Feet

1 inch = 1,000 feet

Enterprise Products

UL N&O-S11-T29-R11W
N36.73462,W107.96039
San Juan County, NM

Figure 1
Topographic Site Map
Blanco Plant D-Turbine
Lubrication Oil Release



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Rule Engineering, LLC
Solutions to Regulations for Industry

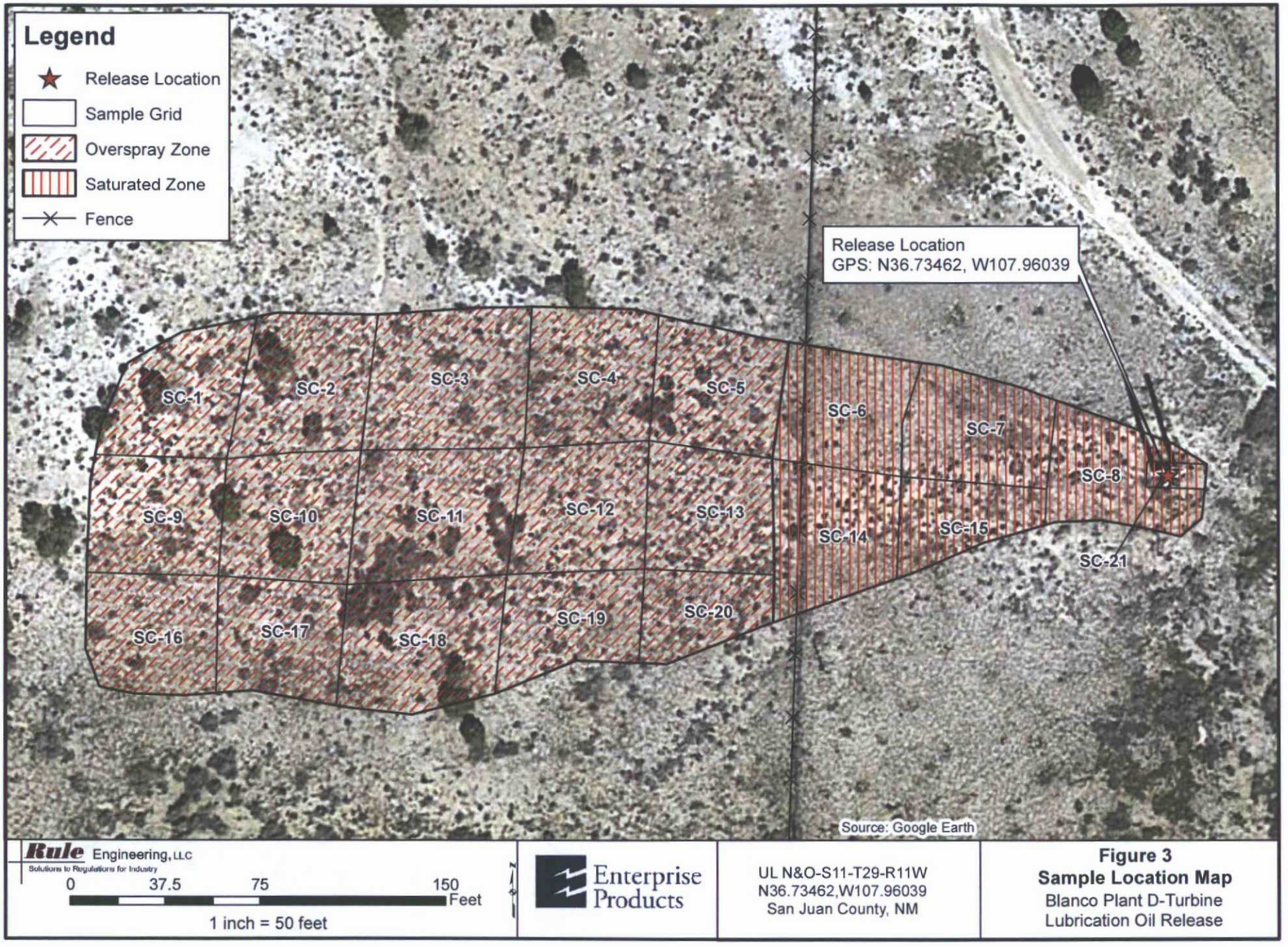
0 100 200 400 Feet

1 inch = 125 feet

Enterprise Products

UL N&O-S11-T29-R11W
N36.73462,W107.96039
San Juan County, NM

Figure 2
Aerial Site Map
Blanco Plant D-Turbine
Lubrication Oil Release


Legend
Release Location
Sample Grid
Overspray Zone
Saturated Zone
Fence
Release Location
GPS: N36.73462, W107.96039
SC-1
SC-2
SC-3
SC-4
SC-5
SC-6
SC-7
SC-8
SC-9
SC-10
SC-11
SC-12
SC-13
SC-14
SC-15
SC-16
SC-17
SC-18
SC-19
SC-20
SC-21
Source: Google Earth
Document Path: U:\Enterprise Products\Blanco Plant Stack Release\Blanco Stack Release Site Map.mxd
Rule Engineering, LLC
Solutions to Regulations for Industry
0
37.5
75
150
Feet
1 inch = 50 feet
Enterprise Products
UL N&O-S11-T29-R11W
N36.73462,W107.96039
San Juan County, NM
Figure 3
Sample Location Map
Blanco Plant D-Turbine
Lubrication Oil Release

Appendix A

Waste Characterization Analytical Laboratory Report

Rule

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 09, 2016

Thomas Long
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141
FAX

RE: Blanco Plant ESD Flare OrderNo.: 1605106

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/4/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1605106**
Date Reported: **5/9/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services
Project: Blanco Plant ESD Flare
Lab ID: 1605106-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 5/3/2016 3:15:00 PM
Received Date: 5/4/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst: **pmf**	
Mercury	ND	0.020		mg/L	1	5/6/2016 10:28:38 AM	25175
EPA METHOD 6010B: TCLP METALS						Analyst: **MED**	
Arsenic	ND	5.0		mg/L	1	5/6/2016 10:28:04 AM	25174
Barium	ND	100		mg/L	1	5/6/2016 10:28:04 AM	25174
Cadmium	ND	1.0		mg/L	1	5/6/2016 10:28:04 AM	25174
Chromium	ND	5.0		mg/L	1	5/6/2016 10:28:04 AM	25174
Lead	ND	5.0		mg/L	1	5/6/2016 10:28:04 AM	25174
Selenium	ND	1.0		mg/L	1	5/6/2016 10:28:04 AM	25174
Silver	ND	5.0		mg/L	1	5/6/2016 10:28:04 AM	25174
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	13000	990		mg/Kg	100	5/5/2016 4:39:02 PM	25146
Motor Oil Range Organics (MRO)	56000	4900		mg/Kg	100	5/5/2016 4:39:02 PM	25146
Surr: DNOP	0	70-130	S	%Rec	100	5/5/2016 4:39:02 PM	25146
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	79	4.8		mg/Kg	1	5/5/2016 9:09:41 AM	25141
Surr: BFB	112	80-120		%Rec	1	5/5/2016 9:09:41 AM	25141
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	1.4	0.024		mg/Kg	1	5/5/2016 9:09:41 AM	25141
Toluene	3.2	0.048		mg/Kg	1	5/5/2016 9:09:41 AM	25141
Ethylbenzene	0.18	0.048		mg/Kg	1	5/5/2016 9:09:41 AM	25141
Xylenes, Total	1.9	0.096		mg/Kg	1	5/5/2016 9:09:41 AM	25141
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	1	5/5/2016 9:09:41 AM	25141

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605106**

09-May-16

Client: Enterprise Field Services
Project: Blanco Plant ESD Flare

Sample ID **MB-25139**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **25139**	RunNo: **34001**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1047876** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		10.00		74.0	70	130			

Sample ID **MB-25146**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **25146**	RunNo: **34001**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1047877** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.6		10.00		76.5	70	130			

Sample ID **LCS-25139**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **25139**	RunNo: **34001**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1048346** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.7		5.000		74.0	70	130			

Sample ID **LCS-25146**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **25146**	RunNo: **34001**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1048347** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.2	65.8	136			
Surr: DNOP	3.9		5.000		77.9	70	130			

Sample ID **MB-25182**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **25182**	RunNo: **34035**
Prep Date: **5/6/2016**	Analysis Date: **5/6/2016**	SeqNo: **1048881** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	70	130			

Sample ID **LCS-25182**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **25182**	RunNo: **34035**
Prep Date: **5/6/2016**	Analysis Date: **5/6/2016**	SeqNo: **1049232** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.4	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605106**

09-May-16

Client: Enterprise Field Services

Project: Blanco Plant ESD Flare

Sample ID **MB-25141**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **25141**	RunNo: **33991**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1047349** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.4	80	120			

Sample ID **LCS-25141**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **25141**	RunNo: **33991**
Prep Date: **5/4/2016**	Analysis Date: **5/4/2016**	SeqNo: **1047350** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.7	80	120			
Surr: BFB	1000		1000		102	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605106**

09-May-16

Client: Enterprise Field Services

Project: Blanco Plant ESD Flare

Sample ID **MB-25141**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **25141**	RunNo: **33991**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1047378** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **LCS-25141**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **25141**	RunNo: **33991**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1047379** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.6	75.3	123			
Toluene	1.0	0.050	1.000	0	102	80	124			
Ethylbenzene	1.0	0.050	1.000	0	104	82.8	121			
Xylenes, Total	3.1	0.10	3.000	0	105	83.9	122			
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			

Sample ID **1605106-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-1**	Batch ID: **25141**	RunNo: **33991**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1047380** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.4	0.025	0.9980	1.372	100	71.5	122			
Toluene	4.0	0.050	0.9980	3.212	75.3	71.2	123			
Ethylbenzene	1.3	0.050	0.9980	0.1799	115	75.2	130			
Xylenes, Total	5.1	0.10	2.994	1.862	107	72.4	131			
Surr: 4-Bromofluorobenzene	1.2		0.9980		120	80	120			S

Sample ID **1605106-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-1**	Batch ID: **25141**	RunNo: **33991**
Prep Date: **5/4/2016**	Analysis Date: **5/5/2016**	SeqNo: **1047381** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.7	0.024	0.9718	1.372	140	71.5	122	14.2	20	S
Toluene	4.5	0.049	0.9718	3.212	133	71.2	123	12.7	20	S
Ethylbenzene	1.4	0.049	0.9718	0.1799	129	75.2	130	7.98	20	
Xylenes, Total	5.6	0.097	2.915	1.862	128	72.4	131	9.62	20	
Surr: 4-Bromofluorobenzene	1.2		0.9718		125	80	120	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605106**

09-May-16

Client: Enterprise Field Services

Project: Blanco Plant ESD Flare

Sample ID **MB-25175**	SampType: **MBLK**	TestCode: **MERCURY, TCLP**							
Client ID: **PBW**	Batch ID: **25175**	RunNo: **34030**							
Prep Date: **5/5/2016**	Analysis Date: **5/6/2016**	SeqNo: **1048594**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID **LCS-25175**	SampType: **LCS**	TestCode: **MERCURY, TCLP**							
Client ID: **LCSW**	Batch ID: **25175**	RunNo: **34030**							
Prep Date: **5/5/2016**	Analysis Date: **5/6/2016**	SeqNo: **1048595**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	104	80	120			

Sample ID **1605106-001AMS**	SampType: **MS**	TestCode: **MERCURY, TCLP**							
Client ID: **SC-1**	Batch ID: **25175**	RunNo: **34030**							
Prep Date: **5/5/2016**	Analysis Date: **5/6/2016**	SeqNo: **1048597**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	100	75	125			

Sample ID **1605106-001AMSD**	SampType: **MSD**	TestCode: **MERCURY, TCLP**							
Client ID: **SC-1**	Batch ID: **25175**	RunNo: **34030**							
Prep Date: **5/5/2016**	Analysis Date: **5/6/2016**	SeqNo: **1048598**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	100	75	125	0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605106**

09-May-16

Client: Enterprise Field Services

Project: Blanco Plant ESD Flare

Sample ID	**MB-25174**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: TCLP Metals**				
Client ID:	**PBW**	Batch ID:	**25174**		RunNo:	**34027**				
Prep Date:	**5/5/2016**	Analysis Date:	**5/6/2016**		SeqNo:	**1048575**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	**LCS-25174**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: TCLP Metals**				
Client ID:	**LCSW**	Batch ID:	**25174**		RunNo:	**34027**				
Prep Date:	**5/5/2016**	Analysis Date:	**5/6/2016**		SeqNo:	**1048576**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	102	80	120			
Barium	ND	100	0.5000	0	98.2	80	120			
Cadmium	ND	1.0	0.5000	0	101	80	120			
Chromium	ND	5.0	0.5000	0	95.3	80	120			
Lead	ND	5.0	0.5000	0	97.4	80	120			
Selenium	ND	1.0	0.5000	0	106	80	120			
Silver	ND	5.0	0.1000	0	103	80	120			

Sample ID	**1605106-001AMS**	SampType:	**MS**		TestCode:	**EPA Method 6010B: TCLP Metals**				
Client ID:	**SC-1**	Batch ID:	**25174**		RunNo:	**34027**				
Prep Date:	**5/5/2016**	Analysis Date:	**5/6/2016**		SeqNo:	**1048583**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.01700	97.3	75	125			
Barium	ND	100	0.5000	0.4336	105	75	125			
Cadmium	ND	1.0	0.5000	0	95.8	75	125			
Chromium	ND	5.0	0.5000	0	90.9	75	125			
Lead	ND	5.0	0.5000	0.001700	91.3	75	125			
Selenium	ND	1.0	0.5000	0.02035	93.9	75	125			
Silver	ND	5.0	0.1000	0	97.2	75	125			

Sample ID	**1605106-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 6010B: TCLP Metals**				
Client ID:	**SC-1**	Batch ID:	**25174**		RunNo:	**34027**				
Prep Date:	**5/5/2016**	Analysis Date:	**5/6/2016**		SeqNo:	**1048584**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.01700	94.1	75	125	0	20	

Qualifiers:

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- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605106**

09-May-16

Client: Enterprise Field Services

Project: Blanco Plant ESD Flare

Sample ID	**1605106-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 6010B: TCLP Metals**				
Client ID:	**SC-1**	Batch ID:	**25174**		RunNo:	**34027**				
Prep Date:	**5/5/2016**	Analysis Date:	**5/6/2016**		SeqNo:	**1048584**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	0.4336	99.3	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	93.1	75	125	0	20	
Chromium	ND	5.0	0.5000	0	88.3	75	125	0	20	
Lead	ND	5.0	0.5000	0.001700	88.6	75	125	0	20	
Selenium	ND	1.0	0.5000	0.02035	92.1	75	125	0	20	
Silver	ND	5.0	0.1000	0	93.4	75	125	0	20	

Qualifiers:

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S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Enterprise | Work Order Number: 1605106 | RcptNo: 1

Received by/date: 05/04/16

Logged By: Lindsay Mangin 5/4/2016 7:55:00 AM

Completed By: Lindsay Mangin 5/4/2016 8:18:33 AM

Reviewed By: 05/04/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: Enterprise Products	Turn-Around Time: ☐ Standard ☒ Rush Results by May 16th
Mailing Address: Farmington, NM	Project Name: Blanco Plant BSD Flare
Phone #: (505) 215-4727	Project #:
Email or Fax#: TomLong	Project Manager: Tom Long
QA/QC Package: Standard ☐ Level 4 (Full Validation)	Sampler: TL
Accreditation: NELAP ☐ Other	On Ice: ☒ Yes ☐ No
EDD (Type)	Sample Temperature: 1.4

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals TCLP	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
5/4/16	1515	Soil	SC-1	(1) 4oz jar	Cool	1605106-001	X		X				X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/4/16	1545	Means Sny	Chris Walls	5/3/16	1545
5/4/16	1940	Chris Walls		05/05/16	0755

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix B

Archeological Report

WCRM
Western Cultural Resource Management, Inc.

May 23, 2016

Mr. Thomas J. Long
Senior Environmental Scientist
Enterprise Production Company
614 Reilly Ave.
Farmington, NM 87401

Dear Thomas:

As requested, the client copy of our report on the archaeological survey of the proposed Blanco Plant-D Turbine Lube Oil Release project has been submitted electronically to you. During the survey, no cultural material was encountered.

Cultural resource clearance for this undertaking to proceed is recommended. The agency copies of the report have been submitted to the Bureau of Land Management, Farmington Field Office, who will review this report and make the final decision on archaeological approval for your project.

Please contact us if you have any questions concerning the report.

Sincerely,

Charles W. Wheeler, Ph.D., RPA
Vice President

enc.
cc: Jim Copeland, BLM
Heather Woods, Rule Engineering (electronic)
Tom Lennon, WCRM

COLORADO P.O. Box 2326, Boulder, CO 80306 · Phone 303-449-1151 Fax 303-530-7716
NEW MEXICO 2603 W. Main St., Suite B, Farmington, NM 87401 · Phone 505-326-7420 Fax 505-324-1107
NEVADA 50 Freeport Blvd., Suite 15, Sparks, NV 89431 · Phone 775-358-9003 Fax 775-358-1387
ARIZONA 3014 N. Hayden Rd., Suite 118, Scottsdale, AZ 85251 · Phone 480-423-6837 Fax 480-874-4719

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 135794	2a. Lead (Sponsoring) Agency: Bureau of Land Management, Farmington Field Office	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:

4. Title of Report: Cultural Resource Inventory of Enterprise Production Company Blanco Plant-D Turbine Lube Oil Release Project, San Juan County, New Mexico

Author: Michael J. Proper

5. Type of Report ☒ Negative ☐ Positive

6. Investigation Type
☐ Research Design ☒ Survey/Inventory ☐ Test Excavation ☐ Excavation ☐ Collections/Non-Field Study
☐ Overview/Lit Review ☐ Monitoring ☐ Ethnographic study ☐ Site specific visit ☐ Other

7. Description of Undertaking (what does the project entail?): Enterprise Production Company proposes to remediate an area of approximately 250 x 450 ft. The area affected is enclosed by a T-post and snow fence barrier and will have an area of potential effect (APE) of 2.58 acres. The reclamation will involve mechanical equipment used during all phases of the restoration. Currently, the remediation plan is under development to determine a method to treat the area affected by the oil release.

8. Dates of Investigation: May 10, 2016

9. Report Date: May 23, 2016

10. Performing Agency/Consultant: Western Cultural Resource Management, Inc.
Principal Investigator: Thomas J. Lennon
Field Supervisor: Michael J. Proper
Field Personnel Names: Michael J. Proper

11. Performing Agency/Consultant Report No.: WCRM(F)1438
Project No.: 16F042

12. Applicable Cultural Resource Permit No(s): 25-2920-15-QQ

13. Client/Customer (project proponent): Enterprise Production Company
Contact: Thomas J. Long
Address: 614 Reilly Ave., Farmington, New Mexico 87401
Phone: (505) 599-2286

14. Client/Customer Project No.: AFE No. A25492

15. Land Ownership Status ***(Must be indicated on project map):***

Land Owner	Acres Surveyed*	Acres in APE
Bureau of Land Management, Farmington Field Office	4.14	2.58
TOTALS	**4.14**	**2.58**

*as calculated in ArcGIS

16. Records Search(es): A literature review was conducted prior to the cultural resource inventory. Two previously recorded sites are located within 0.25 mi of the project area (Appendix B, for agency use only). No sites in the vicinity of the project area are listed on the National Register of Historic Places or State Register of Cultural Properties. According to Van Valkenburgh (1974) no place sacred to the Navajo is located in the vicinity of the project area. A search was conducted of the online GLO records which identified several historic features. On the 1878 GLO map a road was identified as "Road to Las Animas River" it passes 1.0 mi southwest of the project area. Citizens Ditch was illustrated 0.3 mi to the south and a cabin was identified 0.5 mi to the southwest on the 1910 GLO map. Two fences are also shown, running east-west and are over a 0.3 mi southeast of the project area.

Van Valkenburgh, Richard F.
1974 *Navajo Sacred Places* and *A Short History of the Navajo People*. Garland American Indian Ethnohistory Series, Navajo Indians, 3 Vols. Garland Publishing, Inc., New York and London.

Date of ARMS File Review: 5/9/2016	**Name of Reviewer:** Bob Estes	
Date of NR/SR File Review: 5/11/2016	**Name of Reviewer:** Michael J. Proper	
Date of Other Agency File Review: 5/9/2016	**Name of Reviewer:** Deborah V. Gibson	**Agency:** Bureau of Land Management, Farmington Field Office

17. Survey Data:

a. Source Graphics ☐ NAD 27 ☒ NAD 83
☒ USGS 7.5' (1:24,000) topo map ☐ Other topo map, Scale:
☒ GPS Unit Accuracy ☐ <1.0m ☒ 1-10m ☐ 10-100m ☐ >100m

b.

USGS 7.5' Topographic Map Name	USGS Quad Code
Bloomfield, NM 1985 (provisional edition)	36107-F8

c. County: San Juan

17. Survey Data (continued):

d. Nearest City or Town: Bloomfield, New Mexico

e. Legal Description:

Township (N/S)	Range (E/W)	Section	¼ ¼ ¼
29N	11W	11*	E½, SE¼, SW¼.
			W½, SW¼, SE¼

* template anchored on SE corner and southern section line

Projected legal description? Yes [ ], No [X] **Unplatted [ ]**

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

18. Survey Field Methods:
Intensity: ☒ 100% coverage ☐ <100% coverage

Configuration: ☒ block survey units ☐ linear survey units (l x w): ☐ other survey units (specify):

Scope: ☒ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)

Coverage Method: ☒ systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): 15 **Crew Size:** 1 **Fieldwork Dates:** May 10, 2016

Survey Person Hours: 6 **Recording Person Hours:** 0 **Total Hours:** 6

Additional Narrative: Survey of the project area was conducted on May 10, 2016, under partly cloudy skies with warm temperatures by WCRM archaeologist Michael J. Proper who walked parallel transects 50 ft apart. The area of inventory for the project area includes the 250 x 450 ft fenced area and a 100 ft cultural buffer zone, for a total surveyed area of 450 x 650 ft. Relevant waypoints were recorded in the field using a handheld GPS unit accurate to 1 to 10 m.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project area is located on south-facing slopes of a low mesa between West Fork of Bloomfield and Hare Canyons, approximately 0.42 mi north from Citizens Ditch. Elevation ranges from 5620 to 5660 ft. Sediment is sandy loam with gravel inclusions. Vegetation in the project area consists of an overstory of juniper with an understory of big sagebrush, four-wing saltbush, Indian ricegrass, cheat grass, ephedra, prickly pear cactus, snakeweed, Russian thistle, narrowleaf yucca, wolfberry, and cholla.

20.a. Percent Ground Visibility: 50 **b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):** Energy development, livestock grazing, and recreation are activities currently taking place in the project area.

21. CULTURAL RESOURCE FINDINGS ☐ **Yes, See Page 3** ☒ **No, Discuss Why:** No cultural resources were located.

22. Required Attachments (check all appropriate boxes):
- ☒ **USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn**
- ☒ **Copy of NMCRIS Mapserver Map Check**
- ☐ **LA Site Forms - new sites (*with sketch map & topographic map*)**
- ☐ **LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)**
- ☐ **Historic Cultural Property Inventory Forms**
- ☐ **List and Description of isolates, if applicable** (see p. 3)
- ☐ **List and Description of Collections, if applicable**

23. Other Attachments:
- ☐ **Photographs and Log**
- ☐ **Other Attachments**

(Describe):

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Charles W. Wheeler, Ph.D., RPA

Signature _____ **Date** 5/23/16 **Title (if not PI):**

25. Reviewing Agency:
Reviewer's Name/Date

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable): ☐ **Yes** ☐ **No**

26. SHPO
Reviewer's Name/Date:

HPD Log #:

SHPO File Location:

Date sent to ARMS:

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.: 135794	2. Lead (Sponsoring) Agency: Bureau of Land Management, Farmington Field Office	3. Lead Agency Report No.:

SURVEY RESULTS: No cultural resources were located during the survey.

Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited *(site update form required)*: 0
Previously recorded sites not relocated ***(site update form required):*** 0
TOTAL SITES VISITED: 0
Total isolates recorded: 0 **Non-selective isolate recording?** ☐
Total structures recorded *(new and previously recorded, including acequias)*: 0

MANAGEMENT SUMMARY: Cultural resource approval for this undertaking to proceed is recommended.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG

Sites Discovered:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

MONITORING LA NUMBER LOG *(site form required)*

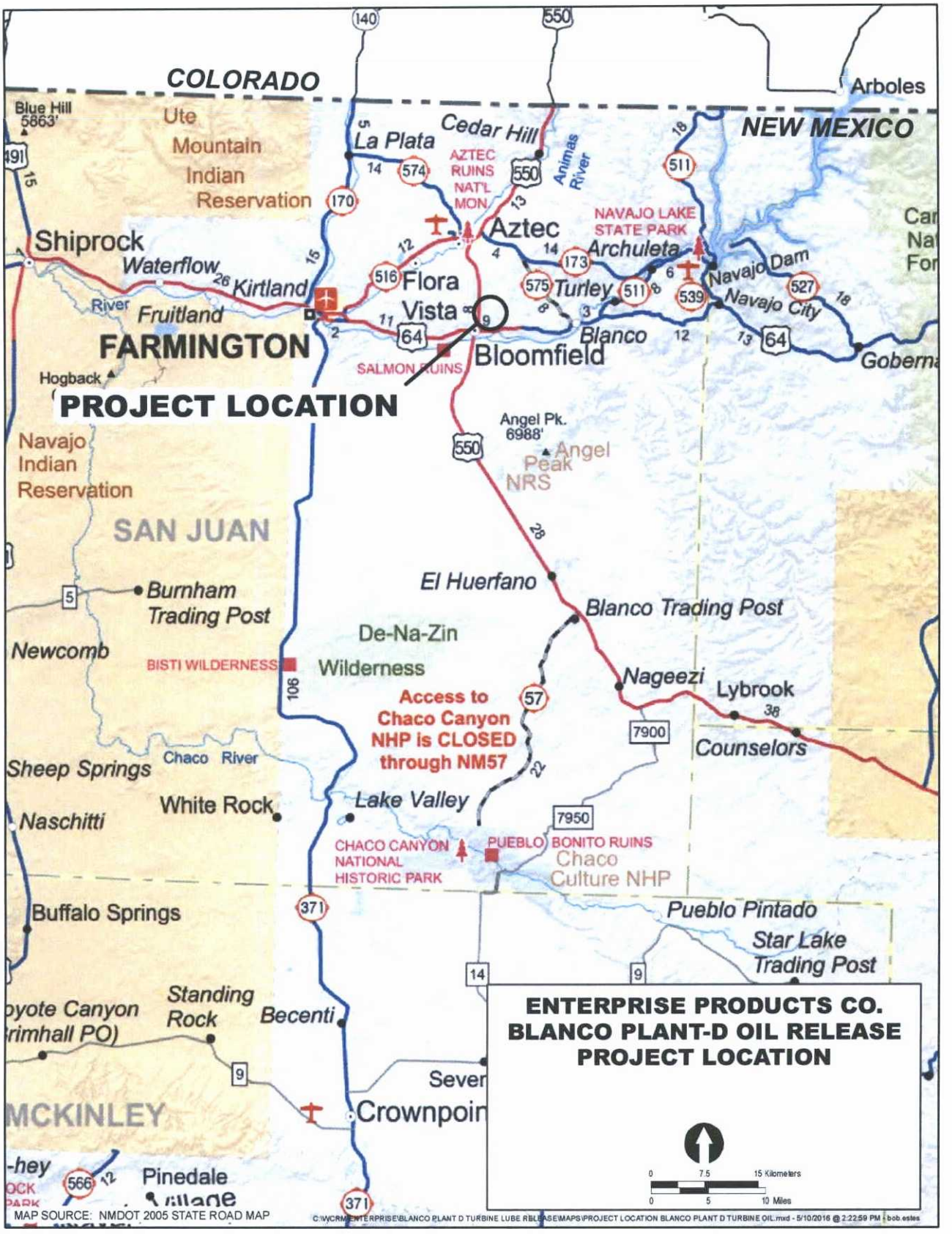
Sites Discovered *(site form required)* : **Previously recorded sites** *(Site update form required)*:

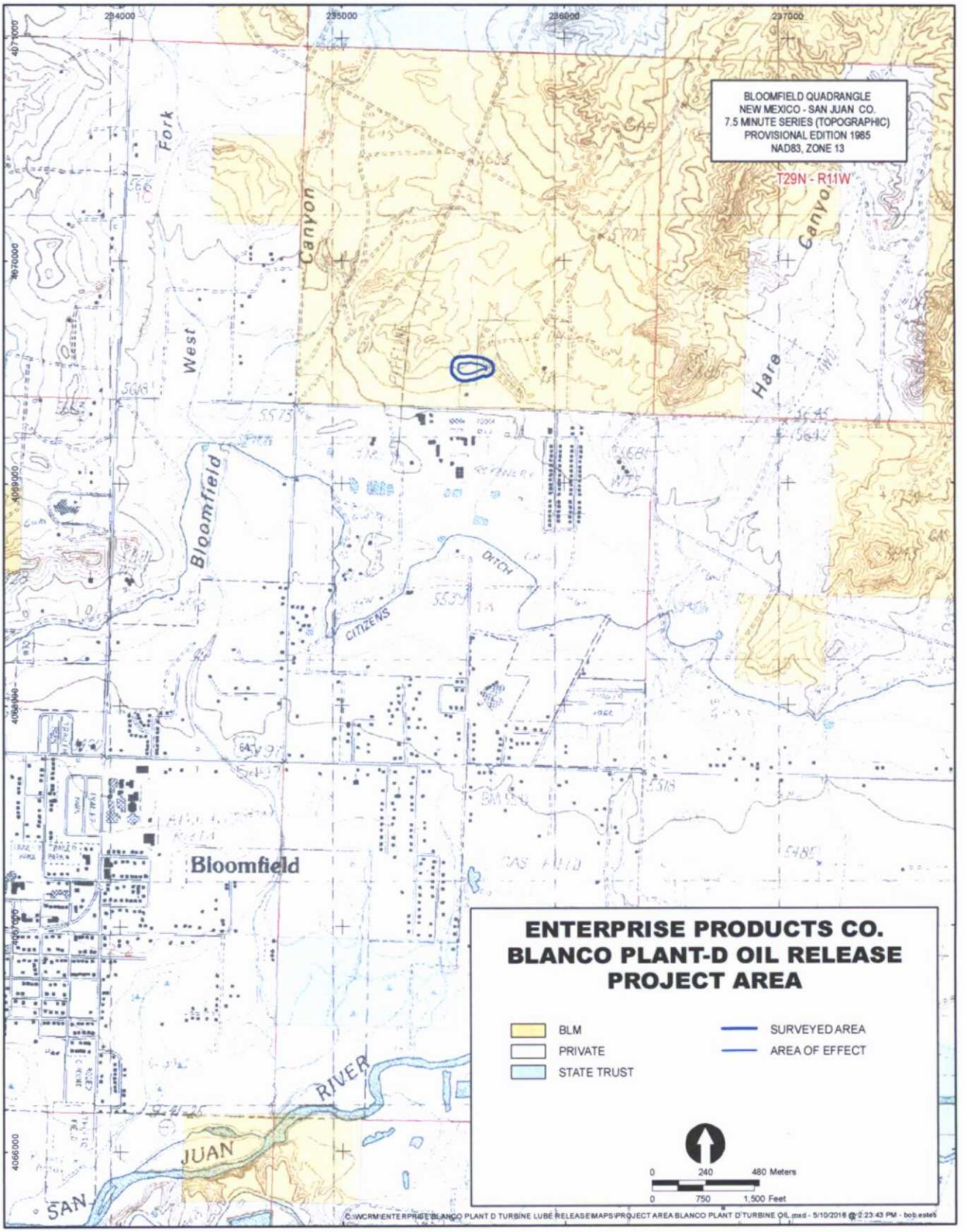
LA No.	Field/Agency No.	LA No.	Field/Agency No.

Areas outside known nearby site boundaries monitored? Yes ☐, No ☐ If no explain why:

TESTING & EXCAVATION LA NUMBER LOG *(site form required)*

Tested LA number(s)	Excavated LA number(s)


COLORADO
NEW MEXICO
Arboles
Blue Hill 5863'
Ute Mountain Indian Reservation
La Plata
Cedar Hill
AZTEC RUINS NAT'L MON
Animas River
Aztec
NAVAJO LAKE STATE PARK
Archuleta
Navajo Dam
Navajo City
Shiprock
Waterflow
Kirtland
Flora Vista
Turley
Blanco
Fruitland
FARMINGTON
Hogback
PROJECT LOCATION
SALMON RUINS
Bloomfield
Angel Pk. 6988'
Angel Peak NRS
Navajo Indian Reservation
SAN JUAN
Burnham Trading Post
El Huerfano
Blanco Trading Post
De-Na-Zin Wilderness
Newcomb
BISTI WILDERNESS
Access to Chaco Canyon NHP is CLOSED through NM57
Nageezi
Lybrook
Counselors
Sheep Springs
Chaco River
White Rock
Naschitti
Lake Valley
CHACO CANYON NATIONAL HISTORIC PARK
PUEBLO BONITO RUINS
Chaco Culture NHP
Buffalo Springs
Pueblo Pintado
Star Lake Trading Post
Standing Rock
Becenti
MCKINLEY
Crownpoint
Pinedale
ENTERPRISE PRODUCTS CO.
BLANCO PLANT-D OIL RELEASE
PROJECT LOCATION
0 7.5 15 Kilometers
0 5 10 Miles
MAP SOURCE: NMDOT 2005 STATE ROAD MAP
C:\WCRM\ENTERPRISE\BLANCO PLANT D TURBINE LUBE RELEASE\MAPS\PROJECT LOCATION BLANCO PLANT D TURBINE OIL.mxd - 5/10/2016 @ 2:22:59 PM - bob.estes


BLOOMFIELD QUADRANGLE
NEW MEXICO - SAN JUAN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
PROVISIONAL EDITION 1985
NAD83, ZONE 13
T29N - R11W
ENTERPRISE PRODUCTS CO.
BLANCO PLANT-D OIL RELEASE
PROJECT AREA
BLM
PRIVATE
STATE TRUST
SURVEYED AREA
AREA OF EFFECT
0 240 480 Meters
0 750 1,500 Feet
Bloomfield
West Fork
Canyon
Hare Canyon
Bloomfield
CITIZENS
DITCH
SAN JUAN
RIVER
C:\WCRM\ENTERPRISE\BLANCO PLANT D TURBINE LUBE RELEASE\MAPS\PROJECT AREA BLANCO PLANT D TURBINE OIL.mxd - 5/10/2016 @ 2:23:43 PM - bob.estes

Appendix A

No plats

Appendix C

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico 97057-0776
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401 May/June 2016

2. **Originating Site:**
Blanco Plant D-Turbine Lube Oil Release Site

3. **Location of Material (Street Address, City, State or ULSTR):**
Unit Letter O Section 11 Township 29 North Range 11 West; 36.734617, -107.960433

4. **Source and Description of Waste:** Hydrocarbon impacted soil from a lubrication oil release.
5. Estimated Volume 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 634 (yd³) / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long (Thomas Long) representative or authorized agent for Enterprise Field Services, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, (Thomas Long) 5-20-16, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

6. **Transporter: West States Energy Contractors, HBL, Flying M**

OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree TITLE: Environmental Manager DATE: 5/24/16

SIGNATURE: _____ TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

Appendix D

Photograph Log

Photograph Log
Blanco Plant D-Turbine Lubrication Oil Release
Enterprise Field Services, LLC

Photograph #1	
Client: Enterprise	
Site Name: Blanco Plant D-Turbine Lubrication Oil Release	
Date Photo Taken: May 25, 2016	
Release Location: N36.73462, W107.96039 N&O-11-29N-11W San Juan County, NM	
Photo Taken by: Thomas Long	Description: Facing northwest, view of the western portion of the final excavation.

Photograph #2	
Client: Enterprise	
Site Name: Blanco Plant D-Turbine Lubrication Oil Release	
Date Photo Taken: May 25, 2016	
Release Location: N36.73462, W107.96039 N&O-11-29N-11W San Juan County, NM	
Photo Taken by: Thomas Long	Description: Facing north, view of the central portion of the final excavation.

Photograph Log
Blanco Plant D-Turbine Lubrication Oil Release
Enterprise Field Services, LLC

Photograph #3	
Client: Enterprise	
Site Name: Blanco Plant D-Turbine Lubrication Oil Release	
Date Photo Taken: May 25, 2016	
Release Location: N36.73462, W107.96039 N&O-11-29N-11W San Juan County, NM	
Photo Taken by: Thomas Long	Description: Facing northwest, view of the western portion of the final excavation.

Photograph #4	
Client: Enterprise	
Site Name: Blanco Plant D-Turbine Lubrication Oil Release	
Date Photo Taken: May 25, 2016	
Release Location: N36.73462, W107.96039 N&O-11-29N-11W San Juan County, NM	
Photo Taken by: Heather Woods	Description: Facing west, view of the south side of the final excavation near the blowdown vent.

Photograph Log
Blanco Plant D-Turbine Lubrication Oil Release
Enterprise Field Services, LLC

Photograph #5	
Client: Enterprise	
Site Name: Blanco Plant D-Turbine Lubrication Oil Release	
Date Photo Taken: May 25, 2016	
Release Location: N36.73462, W107.96039 N&O-11-29N-11W San Juan County, NM	
Photo Taken by: Heather Woods	Description: Facing west, view of the north side of the final excavation near the blowdown vent.

Appendix E

Confirmation Soil Sampling Analytical Laboratory Report

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 31, 2016

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX

RE: Enterprise Blanco Plant D Turbine OrderNo.: 1605B88

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 21 sample(s) on 5/26/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-1
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:08:00 PM
Lab ID: 1605B88-001
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/27/2016 1:55:02 PM	25515
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/27/2016 1:55:02 PM	25515
Surr: DNOP	99.3	70-130		%Rec	1	5/27/2016 1:55:02 PM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/26/2016 2:31:46 PM	A34501
Surr: BFB	91.4	80-120		%Rec	1	5/26/2016 2:31:46 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/26/2016 2:31:46 PM	B34501
Toluene	ND	0.037		mg/Kg	1	5/26/2016 2:31:46 PM	B34501
Ethylbenzene	ND	0.037		mg/Kg	1	5/26/2016 2:31:46 PM	B34501
Xylenes, Total	ND	0.073		mg/Kg	1	5/26/2016 2:31:46 PM	B34501
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/26/2016 2:31:46 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-2
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:14:00 PM
Lab ID: 1605B88-002
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	13	9.9		mg/Kg	1	5/27/2016 2:50:37 PM	25515
Motor Oil Range Organics (MRO)	72	50		mg/Kg	1	5/27/2016 2:50:37 PM	25515
Surr: DNOP	95.8	70-130		%Rec	1	5/27/2016 2:50:37 PM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/26/2016 2:56:15 PM	A34501
Surr: BFB	89.5	80-120		%Rec	1	5/26/2016 2:56:15 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/26/2016 2:56:15 PM	B34501
Toluene	ND	0.038		mg/Kg	1	5/26/2016 2:56:15 PM	B34501
Ethylbenzene	ND	0.038		mg/Kg	1	5/26/2016 2:56:15 PM	B34501
Xylenes, Total	ND	0.076		mg/Kg	1	5/26/2016 2:56:15 PM	B34501
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/26/2016 2:56:15 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-3
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:16:00 PM
Lab ID: 1605B88-003
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/27/2016 3:34:18 PM	25515
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/27/2016 3:34:18 PM	25515
Surr: DNOP	87.3	70-130		%Rec	1	5/27/2016 3:34:18 PM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	5/26/2016 3:20:50 PM	A34501
Surr: BFB	87.2	80-120		%Rec	1	5/26/2016 3:20:50 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	5/26/2016 3:20:50 PM	B34501
Toluene	ND	0.043		mg/Kg	1	5/26/2016 3:20:50 PM	B34501
Ethylbenzene	ND	0.043		mg/Kg	1	5/26/2016 3:20:50 PM	B34501
Xylenes, Total	ND	0.086		mg/Kg	1	5/26/2016 3:20:50 PM	B34501
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	5/26/2016 3:20:50 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-4
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:30:00 PM
Lab ID: 1605B88-004 **Matrix:** MEOH (SOIL) **Received Date:** 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/27/2016 3:56:04 PM	25515
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/27/2016 3:56:04 PM	25515
Surr: DNOP	95.3	70-130		%Rec	1	5/27/2016 3:56:04 PM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/26/2016 3:45:26 PM	A34501
Surr: BFB	90.5	80-120		%Rec	1	5/26/2016 3:45:26 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/26/2016 3:45:26 PM	B34501
Toluene	ND	0.036		mg/Kg	1	5/26/2016 3:45:26 PM	B34501
Ethylbenzene	ND	0.036		mg/Kg	1	5/26/2016 3:45:26 PM	B34501
Xylenes, Total	ND	0.072		mg/Kg	1	5/26/2016 3:45:26 PM	B34501
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/26/2016 3:45:26 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-5
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:03:00 PM
Lab ID: 1605B88-005
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/27/2016 4:17:50 PM	25515
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/27/2016 4:17:50 PM	25515
Surr: DNOP	85.1	70-130		%Rec	1	5/27/2016 4:17:50 PM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/26/2016 5:48:01 PM	A34501
Surr: BFB	88.2	80-120		%Rec	1	5/26/2016 5:48:01 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/26/2016 5:48:01 PM	B34501
Toluene	ND	0.038		mg/Kg	1	5/26/2016 5:48:01 PM	B34501
Ethylbenzene	ND	0.038		mg/Kg	1	5/26/2016 5:48:01 PM	B34501
Xylenes, Total	ND	0.077		mg/Kg	1	5/26/2016 5:48:01 PM	B34501
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/26/2016 5:48:01 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-6
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 4:10:00 PM
Lab ID: 1605B88-006
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/27/2016 4:39:38 PM	25516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2016 4:39:38 PM	25516
Surr: DNOP	85.4	70-130		%Rec	1	5/27/2016 4:39:38 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	5/26/2016 6:12:24 PM	A34501
Surr: BFB	95.4	80-120		%Rec	1	5/26/2016 6:12:24 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/26/2016 6:12:24 PM	B34501
Toluene	ND	0.039		mg/Kg	1	5/26/2016 6:12:24 PM	B34501
Ethylbenzene	ND	0.039		mg/Kg	1	5/26/2016 6:12:24 PM	B34501
Xylenes, Total	ND	0.078		mg/Kg	1	5/26/2016 6:12:24 PM	B34501
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	5/26/2016 6:12:24 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-7
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 5:29:00 PM
Lab ID: 1605B88-007
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	13	9.5		mg/Kg	1	5/27/2016 5:01:12 PM	25516
Motor Oil Range Organics (MRO)	55	47		mg/Kg	1	5/27/2016 5:01:12 PM	25516
Surr: DNOP	93.8	70-130		%Rec	1	5/27/2016 5:01:12 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/26/2016 6:36:45 PM	A34501
Surr: BFB	94.4	80-120		%Rec	1	5/26/2016 6:36:45 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/26/2016 6:36:45 PM	B34501
Toluene	ND	0.035		mg/Kg	1	5/26/2016 6:36:45 PM	B34501
Ethylbenzene	ND	0.035		mg/Kg	1	5/26/2016 6:36:45 PM	B34501
Xylenes, Total	ND	0.070		mg/Kg	1	5/26/2016 6:36:45 PM	B34501
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	5/26/2016 6:36:45 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-8
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:20:00 PM
Lab ID: 1605B88-008
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/27/2016 5:23:00 PM	25516
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/27/2016 5:23:00 PM	25516
Surr: DNOP	89.6	70-130		%Rec	1	5/27/2016 5:23:00 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	5/26/2016 7:01:17 PM	A34501
Surr: BFB	92.0	80-120		%Rec	1	5/26/2016 7:01:17 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	5/26/2016 7:01:17 PM	B34501
Toluene	ND	0.044		mg/Kg	1	5/26/2016 7:01:17 PM	B34501
Ethylbenzene	ND	0.044		mg/Kg	1	5/26/2016 7:01:17 PM	B34501
Xylenes, Total	ND	0.087		mg/Kg	1	5/26/2016 7:01:17 PM	B34501
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/26/2016 7:01:17 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-9
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:08:00 PM
Lab ID: 1605B88-009
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	17	9.2		mg/Kg	1	5/27/2016 5:44:41 PM	25516
Motor Oil Range Organics (MRO)	60	46		mg/Kg	1	5/27/2016 5:44:41 PM	25516
Surr: DNOP	93.4	70-130		%Rec	1	5/27/2016 5:44:41 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	5/26/2016 7:25:49 PM	A34501
Surr: BFB	88.8	80-120		%Rec	1	5/26/2016 7:25:49 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/26/2016 7:25:49 PM	B34501
Toluene	ND	0.034		mg/Kg	1	5/26/2016 7:25:49 PM	B34501
Ethylbenzene	ND	0.034		mg/Kg	1	5/26/2016 7:25:49 PM	B34501
Xylenes, Total	ND	0.067		mg/Kg	1	5/26/2016 7:25:49 PM	B34501
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/26/2016 7:25:49 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-10
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:25:00 PM
Lab ID: 1605B88-010
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/27/2016 6:28:10 PM	25516
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/27/2016 6:28:10 PM	25516
Surr: DNOP	92.6	70-130		%Rec	1	5/27/2016 6:28:10 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/26/2016 7:50:25 PM	A34501
Surr: BFB	87.6	80-120		%Rec	1	5/26/2016 7:50:25 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/26/2016 7:50:25 PM	B34501
Toluene	ND	0.036		mg/Kg	1	5/26/2016 7:50:25 PM	B34501
Ethylbenzene	ND	0.036		mg/Kg	1	5/26/2016 7:50:25 PM	B34501
Xylenes, Total	ND	0.071		mg/Kg	1	5/26/2016 7:50:25 PM	B34501
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	5/26/2016 7:50:25 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-11
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:37:00 PM
Lab ID: 1605B88-011
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/27/2016 6:49:52 PM	25516
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/27/2016 6:49:52 PM	25516
Surr: DNOP	94.1	70-130		%Rec	1	5/27/2016 6:49:52 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	5/26/2016 8:15:01 PM	A34501
Surr: BFB	91.1	80-120		%Rec	1	5/26/2016 8:15:01 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/26/2016 8:15:01 PM	B34501
Toluene	ND	0.034		mg/Kg	1	5/26/2016 8:15:01 PM	B34501
Ethylbenzene	ND	0.034		mg/Kg	1	5/26/2016 8:15:01 PM	B34501
Xylenes, Total	ND	0.068		mg/Kg	1	5/26/2016 8:15:01 PM	B34501
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/26/2016 8:15:01 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-12
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:56:00 PM
Lab ID: 1605B88-012
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	16	9.9		mg/Kg	1	5/27/2016 7:11:31 PM	25516
Motor Oil Range Organics (MRO)	68	49		mg/Kg	1	5/27/2016 7:11:31 PM	25516
Surr: DNOP	98.6	70-130		%Rec	1	5/27/2016 7:11:31 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	5/26/2016 8:39:39 PM	A34501
Surr: BFB	87.5	80-120		%Rec	1	5/26/2016 8:39:39 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/26/2016 8:39:39 PM	B34501
Toluene	ND	0.039		mg/Kg	1	5/26/2016 8:39:39 PM	B34501
Ethylbenzene	ND	0.039		mg/Kg	1	5/26/2016 8:39:39 PM	B34501
Xylenes, Total	ND	0.078		mg/Kg	1	5/26/2016 8:39:39 PM	B34501
Surr: 4-Bromofluorobenzene	97.9	80-120		%Rec	1	5/26/2016 8:39:39 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-13
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:01:00 PM
Lab ID: 1605B88-013
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/27/2016 9:50:32 AM	25516
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/27/2016 9:50:32 AM	25516
Surr: DNOP	95.8	70-130		%Rec	1	5/27/2016 9:50:32 AM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/26/2016 9:04:09 PM	A34501
Surr: BFB	84.6	80-120		%Rec	1	5/26/2016 9:04:09 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/26/2016 9:04:09 PM	B34501
Toluene	ND	0.035		mg/Kg	1	5/26/2016 9:04:09 PM	B34501
Ethylbenzene	ND	0.035		mg/Kg	1	5/26/2016 9:04:09 PM	B34501
Xylenes, Total	ND	0.069		mg/Kg	1	5/26/2016 9:04:09 PM	B34501
Surr: 4-Bromofluorobenzene	96.8	80-120		%Rec	1	5/26/2016 9:04:09 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-14
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:09:00 PM
Lab ID: 1605B88-014
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	54	9.4		mg/Kg	1	5/27/2016 10:20:08 AM	25516
Motor Oil Range Organics (MRO)	180	47		mg/Kg	1	5/27/2016 10:20:08 AM	25516
Surr: DNOP	95.3	70-130		%Rec	1	5/27/2016 10:20:08 AM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/26/2016 9:28:49 PM	A34501
Surr: BFB	85.1	80-120		%Rec	1	5/26/2016 9:28:49 PM	A34501
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/26/2016 9:28:49 PM	B34501
Toluene	ND	0.033		mg/Kg	1	5/26/2016 9:28:49 PM	B34501
Ethylbenzene	ND	0.033		mg/Kg	1	5/26/2016 9:28:49 PM	B34501
Xylenes, Total	ND	0.067		mg/Kg	1	5/26/2016 9:28:49 PM	B34501
Surr: 4-Bromofluorobenzene	95.0	80-120		%Rec	1	5/26/2016 9:28:49 PM	B34501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-15
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:53:00 PM
Lab ID: 1605B88-015
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/27/2016 10:47:25 AM	25516
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/27/2016 10:47:25 AM	25516
Surr: DNOP	86.0	70-130		%Rec	1	5/27/2016 10:47:25 AM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/26/2016 7:41:42 PM	25505
Surr: BFB	107	80-120		%Rec	1	5/26/2016 7:41:42 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/26/2016 7:41:42 PM	25505
Toluene	ND	0.036		mg/Kg	1	5/26/2016 7:41:42 PM	25505
Ethylbenzene	ND	0.036		mg/Kg	1	5/26/2016 7:41:42 PM	25505
Xylenes, Total	ND	0.072		mg/Kg	1	5/26/2016 7:41:42 PM	25505
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	5/26/2016 7:41:42 PM	25505

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-16
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:10:00 PM
Lab ID: 1605B88-016
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/27/2016 11:14:38 AM	25516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2016 11:14:38 AM	25516
Surr: DNOP	83.8	70-130		%Rec	1	5/27/2016 11:14:38 AM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/26/2016 8:05:06 PM	25505
Surr: BFB	110	80-120		%Rec	1	5/26/2016 8:05:06 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/26/2016 8:05:06 PM	25505
Toluene	ND	0.037		mg/Kg	1	5/26/2016 8:05:06 PM	25505
Ethylbenzene	ND	0.037		mg/Kg	1	5/26/2016 8:05:06 PM	25505
Xylenes, Total	ND	0.074		mg/Kg	1	5/26/2016 8:05:06 PM	25505
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	5/26/2016 8:05:06 PM	25505

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-17
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:12:00 PM
Lab ID: 1605B88-017
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/27/2016 11:41:57 AM	25516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2016 11:41:57 AM	25516
Surr: DNOP	86.8	70-130		%Rec	1	5/27/2016 11:41:57 AM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/26/2016 8:28:27 PM	25505
Surr: BFB	110	80-120		%Rec	1	5/26/2016 8:28:27 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/26/2016 8:28:27 PM	25505
Toluene	ND	0.033		mg/Kg	1	5/26/2016 8:28:27 PM	25505
Ethylbenzene	ND	0.033		mg/Kg	1	5/26/2016 8:28:27 PM	25505
Xylenes, Total	ND	0.066		mg/Kg	1	5/26/2016 8:28:27 PM	25505
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	5/26/2016 8:28:27 PM	25505

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-18
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:40:00 PM
Lab ID: 1605B88-018
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/27/2016 12:09:15 PM	25516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2016 12:09:15 PM	25516
Surr: DNOP	84.8	70-130		%Rec	1	5/27/2016 12:09:15 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/26/2016 8:51:59 PM	25505
Surr: BFB	109	80-120		%Rec	1	5/26/2016 8:51:59 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/26/2016 8:51:59 PM	25505
Toluene	ND	0.036		mg/Kg	1	5/26/2016 8:51:59 PM	25505
Ethylbenzene	ND	0.036		mg/Kg	1	5/26/2016 8:51:59 PM	25505
Xylenes, Total	ND	0.071		mg/Kg	1	5/26/2016 8:51:59 PM	25505
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	5/26/2016 8:51:59 PM	25505

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-19
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 1:44:00 PM
Lab ID: 1605B88-019
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	28	9.8		mg/Kg	1	5/27/2016 12:43:35 PM	25516
Motor Oil Range Organics (MRO)	97	49		mg/Kg	1	5/27/2016 12:43:35 PM	25516
Surr: DNOP	86.7	70-130		%Rec	1	5/27/2016 12:43:35 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/26/2016 9:15:28 PM	25505
Surr: BFB	107	80-120		%Rec	1	5/26/2016 9:15:28 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/26/2016 9:15:28 PM	25505
Toluene	ND	0.033		mg/Kg	1	5/26/2016 9:15:28 PM	25505
Ethylbenzene	ND	0.033		mg/Kg	1	5/26/2016 9:15:28 PM	25505
Xylenes, Total	ND	0.067		mg/Kg	1	5/26/2016 9:15:28 PM	25505
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	5/26/2016 9:15:28 PM	25505

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-20
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:16:00 PM
Lab ID: 1605B88-020
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/27/2016 12:27:01 PM	25516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2016 12:27:01 PM	25516
Surr: DNOP	105	70-130		%Rec	1	5/27/2016 12:27:01 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/26/2016 9:38:58 PM	25505
Surr: BFB	109	80-120		%Rec	1	5/26/2016 9:38:58 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/26/2016 9:38:58 PM	25505
Toluene	ND	0.036		mg/Kg	1	5/26/2016 9:38:58 PM	25505
Ethylbenzene	ND	0.036		mg/Kg	1	5/26/2016 9:38:58 PM	25505
Xylenes, Total	ND	0.072		mg/Kg	1	5/26/2016 9:38:58 PM	25505
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	5/26/2016 9:38:58 PM	25505

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-21
Project: Enterprise Blanco Plant D Turbine
Collection Date: 5/25/2016 2:40:00 PM
Lab ID: 1605B88-021
Matrix: MEOH (SOIL)
Received Date: 5/26/2016 7:54:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/27/2016 12:48:37 PM	25516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2016 12:48:37 PM	25516
Surr: DNOP	110	70-130		%Rec	1	5/27/2016 12:48:37 PM	25516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/26/2016 10:02:31 PM	25505
Surr: BFB	110	80-120		%Rec	1	5/26/2016 10:02:31 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/26/2016 10:02:31 PM	25505
Toluene	ND	0.035		mg/Kg	1	5/26/2016 10:02:31 PM	25505
Ethylbenzene	ND	0.035		mg/Kg	1	5/26/2016 10:02:31 PM	25505
Xylenes, Total	ND	0.069		mg/Kg	1	5/26/2016 10:02:31 PM	25505
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	5/26/2016 10:02:31 PM	25505

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605B88**

31-May-16

Client: Rule Engineering LLC

Project: Enterprise Blanco Plant D Turbine

Sample ID **MB-25516**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **25516**	RunNo: **34489**
Prep Date: **5/26/2016**	Analysis Date: **5/26/2016**	SeqNo: **1063830** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.3		10.00		83.4	70	130			

Sample ID **LCS-25516**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **25516**	RunNo: **34489**
Prep Date: **5/26/2016**	Analysis Date: **5/26/2016**	SeqNo: **1063831** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.2	62.6	124			
Surr: DNOP	4.4		5.000		88.1	70	130			

Sample ID **LCS-25515**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **25515**	RunNo: **34493**
Prep Date: **5/26/2016**	Analysis Date: **5/26/2016**	SeqNo: **1063925** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.0	62.6	124			
Surr: DNOP	4.8		5.000		95.5	70	130			

Sample ID **MB-25515**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **25515**	RunNo: **34493**
Prep Date: **5/26/2016**	Analysis Date: **5/26/2016**	SeqNo: **1063926** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.7	70	130			

Sample ID **MB-25467**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **25467**	RunNo: **34489**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064652** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.1	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605B88**

31-May-16

Client: Rule Engineering LLC

Project: Enterprise Blanco Plant D Turbine

Sample ID **LCS-25467**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **25467**			RunNo: **34489**					
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**			SeqNo: **1064665**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.2	70	130			

Sample ID **1605B88-006AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **SC-6**	Batch ID: **25516**			RunNo: **34525**					
Prep Date: **5/26/2016**	Analysis Date: **5/27/2016**			SeqNo: **1065519**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	9.4	47.13	9.426	96.4	33.9	141			
Surr: DNOP	4.6		4.713		96.7	70	130			

Sample ID **1605B88-006AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **SC-6**	Batch ID: **25516**			RunNo: **34525**					
Prep Date: **5/26/2016**	Analysis Date: **5/27/2016**			SeqNo: **1065520**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	9.8	48.83	9.426	92.7	33.9	141	0.285	20	
Surr: DNOP	4.7		4.883		96.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605B88**

31-May-16

Client: Rule Engineering LLC

Project: Enterprise Blanco Plant D Turbine

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **A34501**	RunNo: **34501**
Prep Date:	Analysis Date: **5/26/2016**	SeqNo: **1064397** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.7	80	120			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **A34501**	RunNo: **34501**
Prep Date:	Analysis Date: **5/26/2016**	SeqNo: **1064398** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.1	80	120			
Surr: BFB	1000		1000		104	80	120			

Sample ID **MB-25505**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **25505**	RunNo: **34502**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064463** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		107	80	120			

Sample ID **LCS-25505**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **25505**	RunNo: **34502**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064464** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.4	80	120			
Surr: BFB	1200		1000		120	80	120			S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605B88**

31-May-16

Client: Rule Engineering LLC

Project: Enterprise Blanco Plant D Turbine

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B34501**	RunNo: **34501**
Prep Date:	Analysis Date: **5/26/2016**	SeqNo: **1064418** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B34501**	RunNo: **34501**
Prep Date:	Analysis Date: **5/26/2016**	SeqNo: **1064419** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.10	1.000	0	101	61	143			
Benzene	0.97	0.025	1.000	0	96.6	75.3	123			
Toluene	0.99	0.050	1.000	0	99.2	80	124			
Ethylbenzene	1.0	0.050	1.000	0	101	82.8	121			
Xylenes, Total	3.1	0.10	3.000	0	102	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID **MB-25505**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **25505**	RunNo: **34502**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064483** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID **LCS-25505**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **25505**	RunNo: **34502**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064484** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.98	0.10	1.000	0	98.4	61	143			
Benzene	0.96	0.025	1.000	0	96.3	75.3	123			
Toluene	0.98	0.050	1.000	0	98.2	80	124			
Ethylbenzene	0.97	0.050	1.000	0	96.8	82.8	121			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605B88**

31-May-16

Client: Rule Engineering LLC

Project: Enterprise Blanco Plant D Turbine

Sample ID **LCS-25505**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **25505**	RunNo: **34502**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064484** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	2.9	0.10	3.000	0	96.3	83.9	122			
Surr: 4-Bromofluorobenzene	1.2		1.000		117	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL Work Order Number: 1605888 RcptNo: 1

Received by/date: [signature] 05/26/16

Logged By: Lindsay Mangin 5/26/2016 7:54:00 AM [signature]

Completed By: Lindsay Mangin 5/26/2016 8:08:37 AM [signature]

Reviewed By: [signature] 05/26/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: Rule Engineering, LLC	Turn-Around Time: ☐ Standard ☒ Rush Friday 5/27
Mailing Address: 501 Airport Dr, Suite 205	Project Name: Enterprise Blanco Plant-D Turbine
Farmington, NM 87401	Project #:
Phone #: (505) 716-2787	
Email or Fax#: hwoods@ruleengineering.com	Project Manager: Heather Woods
QA/QC Package: Standard ☐ Level 4 (Full Validation)	Sampler: H. Woods / J. Valdez
Accreditation: NELAP ☐ Other	On Ice: ☒ Yes ☐ No
EDD (Type)	Sample Temperature: 1.5

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1605858	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
5/16	1308	Soil	SC-1	~~Moist Jar~~ (1) 4oz Glass	~~Moist~~/Cold	-001	X		X													
5/16	1314	Soil	SC-2			-002	X		X													
5/16	1316	Soil	SC-3			-003	X		X													
5/16	1330	Soil	SC-4			-004	X		X													
5/16	1403	Soil	SC-5			-005	X		X													
5/16	1610	Soil	SC-6			-006	X		X													
5/16	1729	Soil	SC-7			-007	X		X													
5/16	1420	Soil	SC-8			-008	X		X													
5/16	1308	Soil	SC-9			-009	X		X													
5/16	1325	Soil	SC-10			-010	X		X													
5/16	1337	Soil	SC-11			-011	X		X													
5/16	1456	Soil	SC-12			-012	X		X													

Date	Time	Relinquished by:	Received by:	Date	Time
5/16	1915	Heather M. Woods	Christine Walters	5/25/16	1915
5/16	2030	Christine Walters		05/26/16	0754

Remarks: Direct Bill to Enterprise

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: Rule Engineering, LLC	Turn-Around Time: ☐ Standard ☒ Rush Friday 5/27
Mailing Address: 501 Airport Dr, Suite 205	Project Name: Enterprise Blanco Plant-D Turbine
Farmington, NM 87401	Project #:
Phone #: (505)716-2787	
Email or Fax#: hwoods@ruleengineering.com	Project Manager: H. Woods
QA/QC Package: Standard ☐ Level 4 (Full Validation)	
Accreditation: NELAP ☐ Other	Sampler: H. Woods/J. Valdez
EDD (Type)	On Ice: ☑ Yes ☐ No
	Sample Temperature: 1.5

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1605B88	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
5/16	1401	Soil	SC-13	MeOH Kit (1) 4oz Glass	MeOH/Cold	-013	X		X													
5/16	1409	Soil	SC-14			-014	X		X													
5/16	1453	Soil	SC-15			-015	X		X													
5/16	1310	Soil	SC-16			-016	X		X													
5/16	1312	Soil	SC-17			-017	X		X													
5/16	1340	Soil	SC-18			-018	X		X													
5/16	1344	Soil	SC-19			-019	X		X													
5/16	1416	Soil	SC-20			-020	X		X													
5/16	1440	Soil	SC-21			-021	X		X													

Date	Time	Relinquished by:	Received by:	Date	Time
5/16	1915	Heather M. Woods	Christine Walls	5/25/16	1915
5/16	2030	Christine Walls		05/26/16	0754

Remarks: Direct Bill to Enterprise

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 05, 2016

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX

RE: Enterprise Blanco OrderNo.: 1606251

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/7/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued June 13, 2016.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Project: Enterprise Blanco
Lab ID: 1606251-001

Client Sample ID: SC-14R
Collection Date: 6/6/2016 10:00:00 AM
Matrix: MEOH (SOIL) **Received Date:** 6/7/2016 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/7/2016 10:10:51 AM	25700
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2016 10:10:51 AM	25700
Surr: DNOP	87.5	70-130		%Rec	1	6/7/2016 10:10:51 AM	25700
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/7/2016 10:01:50 AM	25678
Surr: BFB	104	80-120		%Rec	1	6/7/2016 10:01:50 AM	25678
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	6/7/2016 10:01:50 AM	25678
Toluene	ND	0.033		mg/Kg	1	6/7/2016 10:01:50 AM	25678
Ethylbenzene	ND	0.033		mg/Kg	1	6/7/2016 10:01:50 AM	25678
Xylenes, Total	ND	0.066		mg/Kg	1	6/7/2016 10:01:50 AM	25678
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	6/7/2016 10:01:50 AM	25678

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Project: Enterprise Blanco
Lab ID: 1606251-002
Matrix: MEOH (SOIL)
Client Sample ID: SC-19R
Collection Date: 6/6/2016 10:20:00 AM
Received Date: 6/7/2016 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2016 10:32:44 AM	25700
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2016 10:32:44 AM	25700
Surr: DNOP	93.6	70-130		%Rec	1	6/7/2016 10:32:44 AM	25700
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	6/7/2016 10:25:17 AM	25678
Surr: BFB	101	80-120		%Rec	1	6/7/2016 10:25:17 AM	25678
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	6/7/2016 10:25:17 AM	25678
Toluene	ND	0.035		mg/Kg	1	6/7/2016 10:25:17 AM	25678
Ethylbenzene	ND	0.035		mg/Kg	1	6/7/2016 10:25:17 AM	25678
Xylenes, Total	ND	0.070		mg/Kg	1	6/7/2016 10:25:17 AM	25678
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	6/7/2016 10:25:17 AM	25678

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1606251**

05-Jul-16

Client: Rule Engineering LLC

Project: Enterprise Blanco

Sample ID **MB-25700**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **25700**	RunNo: **34721**
Prep Date: **6/7/2016**	Analysis Date: **6/7/2016**	SeqNo: **1071404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	70	130			

Sample ID **LCS-25700**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **25700**	RunNo: **34721**
Prep Date: **6/7/2016**	Analysis Date: **6/7/2016**	SeqNo: **1071405** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	93.0	62.6	124			
Surr: DNOP	4.5		5.000		90.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1606251**

05-Jul-16

Client: Rule Engineering LLC
Project: Enterprise Blanco

Sample ID **MB-25678**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **25678**	RunNo: **34739**
Prep Date: **6/6/2016**	Analysis Date: **6/7/2016**	SeqNo: **1072052** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	80	120			

Sample ID **LCS-25678**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **25678**	RunNo: **34739**
Prep Date: **6/6/2016**	Analysis Date: **6/7/2016**	SeqNo: **1072053** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.6	80	120			
Surr: BFB	1100		1000		110	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1606251**

05-Jul-16

Client: Rule Engineering LLC

Project: Enterprise Blanco

Sample ID **MB-25678**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **25678**	RunNo: **34739**
Prep Date: **6/6/2016**	Analysis Date: **6/7/2016**	SeqNo: **1072068** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **LCS-25678**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **25678**	RunNo: **34739**
Prep Date: **6/6/2016**	Analysis Date: **6/7/2016**	SeqNo: **1072069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.0	75.3	123			
Toluene	0.94	0.050	1.000	0	94.3	80	124			
Ethylbenzene	0.96	0.050	1.000	0	95.6	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	95.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **1606251-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-14R**	Batch ID: **25678**	RunNo: **34739**
Prep Date:	Analysis Date: **6/7/2016**	SeqNo: **1072070** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.63	0.017	0.6627	0	95.0	71.5	122			
Toluene	0.64	0.033	0.6627	0	95.9	71.2	123			
Ethylbenzene	0.62	0.033	0.6627	0	93.2	75.2	130			
Xylenes, Total	1.9	0.066	1.988	0	93.1	72.4	131			
Surr: 4-Bromofluorobenzene	0.74		0.6627		112	80	120			

Sample ID **1606251-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-14R**	Batch ID: **25678**	RunNo: **34739**
Prep Date:	Analysis Date: **6/7/2016**	SeqNo: **1072071** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.58	0.017	0.6627	0	86.8	71.5	122	8.94	20	
Toluene	0.60	0.033	0.6627	0	90.5	71.2	123	5.79	20	
Ethylbenzene	0.61	0.033	0.6627	0	91.9	75.2	130	1.50	20	
Xylenes, Total	1.8	0.066	1.988	0	92.2	72.4	131	0.978	20	
Surr: 4-Bromofluorobenzene	0.72		0.6627		108	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **RULE ENGINEERING LL** Work Order Number: **1606251** RcptNo: **1**

Received by/date: 06/07/16

Logged By: **Lindsay Mangin** **6/7/2016 7:40:00 AM**

Completed By: **Lindsay Mangin** **6/7/2016 7:45:41 AM**

Reviewed By: 06/07/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

ent: Rule Engineering

ailing Address: 501 Airport Dr, Suite 205

Farmington, NM 87401

one #: (505) 716-2767

ail or Fax#: hwoods@ruleengineering.com

/QC Package:

Standard ☐ Level 4 (Full Validation)

creditation

NELAP ☐ Other _____

EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush Same Day

Project Name: Enterprise Blanco

Project #:

Project Manager: H. Woods

Sampler: H. Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.6

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1606251	BTEX + MTBE + TMB (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
6/16	1000	Soil	SC-14R	(1) 4oz Glass	Cold	-001	X		X													
6/16	1020	Soil	SC-19R	(1) 4oz Glass	Cold	-002	X		X													

Date	Time	Relinquished by:	Received by:	Date	Time
6/6	1729	Heather M. Woods	Chrystal Weeks	6/6/16	1729
6/6	1821	Chrystal Weeks		06/07/16	0740

Remarks: Direct Bill to Enterprise | AFE: A25492 | Attn: Tom Long

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.