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 Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

### **Release Notification**

## **Responsible Party**

Responsible Party: Enterprise Field Services, LLC			vices, LLC	OGRID:	151618		
Contact Name: Thomas Long		Contact '	Contact Telephone: <b>505-599-2286</b>				
Contact email:tjlong@eprod.com				Incident	Incident # (assigned by OCD): nVF1908136109		
Contact mail <b>87401</b>	ling address:	614 Reilly Ave,	Farmington, NM				
			Location o	f Release S	Source		
Latitude 36.7	31516		Longitude -10	07.965945	(NAD 83 in decimal degrees to 5 decimal places)		
Site Name BI	lanco Stor	age S Tanks		Site Type	e Natural Gas Condensate Storage Tanks		
Date Release	Discovered	: 3/8/2019		Serial Nu	imber (if applicable): <b>N/A</b>		
TT '. T			D				
Unit Letter	Section	Township	Range		unty		
D	14	29N	11W	San	Juan		
Surface Owner	r: State	Federal Tri	ibal	-	Release		
				lculations or specif	ic justification for the volumes provided below)		
Crude Oil	l	Volume Released (bbls)			Volume Recovered (bbls)		
Produced	Water	Volume Released (bbls)			Volume Recovered (bbls)		
		Is the concentration of dissolved chloride in produced water >10,000 mg/l?			☐ Yes ☐ No		
	ate	Volume Released	d (bbls): <b>Unknown</b>	l	Volume Recovered (bbls):		
Natural G	Gas	Volume Released	d (Mcf): Unknown		Volume Recovered (Mcf):		
Other (describe) Volume/Weight Released (provide units):		Volume/Weight Recovered (provide units)					

Cause of Release: On March 8, 2019, after removal of the existing condensate storage tanks, Enterprise encountered a historical release within the Blanco Storage S Tanks secondary containment structure. No fluids were present within the secondary containment. Remediation of the historical release has been initiated. Enterprise has determined this release is required to be remediated to the first tier NMOCD remediation standard of 10 ppm Benzene, 50 ppm BTEX, 100 ppm TPH and 600 ppm Chloride. A third party closure report (Site

Characterization and Remediation Plan, Ensolum LLC, dated March 24, 2021) has been included with this "Final C-141."

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## **Site Assessment/Characterization**

Ints information must be provided to the appropriate district office no later than 90 days after the release discovery date.			
What is the shallowest depth to groundwater beneath the area affected by the release?	<50 (ft bgs)		
Did this release impact groundwater or surface water?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes □ No		
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No		
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No		
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No		
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ⊠ No		
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			

Characterization Report Checklist: Each of the following items must be included in the report.
Character Report Checking. Each of the following wents must be the factor of the following
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☐ Data table of soil contaminant concentration data
Depth to water determination
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
Boring or excavation logs
Photographs including date and GIS information
Topographic/Aerial maps
Laboratory data including chain of custody
Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan Received by OCD: 8/15/2023 10:45:18 AM Form C-141 State of New Mexico Page 3 Oil Conservation Division

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and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

regulations all operators are required to report and/or file ce public health or the environment. The acceptance of a C-14 failed to adequately investigate and remediate contamination	d complete to the best of my knowledge and understand that pursuant to OCD rules and certain release notifications and perform corrective actions for releases which may endanger 41 report by the OCD does not relieve the operator of liability should their operations have on that pose a threat to groundwater, surface water, human health or the environment. In we the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name:Scott Drewry_	Title: Contractor
Signature: Scal Day	Date:8/15/23
email:sdrewry@eprod.com	Telephone: 713-381-5696
OCD Only	
Received by:	Date:

## **Remediation Plan**

Remediation Plan Unecklist:	Lach of the following items must be included in the pla	n.
	• • •	

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Received by OCD: 8/15/2023 10:45:18 AM Form C-141 State of New Mexico Page 4 Oil Conservation Division

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Facility ID	
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<u>Deferral Requests Only</u> : Each of the following items must be confirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Extents of contamination must be fully delineated.
□ Contamination does not cause an imminent risk to human health, the environment, or groundwater.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.
Printed Name: Scott Drewry Title: Contractor
Signature: Date:8/15/23  email:sdrewry@eprod.com Telephone:713-381-5696
OCD Only
Received by: Date:
Approved
Signature: Nelson Velez Date: 01/30/2024



#### ENTERPRISE PRODUCTS PARTNERS L.P. ENTERPRISE PRODUCTS GP, LLC (General Partner)

**ENTERPRISE PRODUCTS OPERATING LLC** 

June 16, 2021

Submitted online via OCD E-Permitting: <a href="https://www.apps.emnrd.state.nm.us/OCD/OCDPermitting/default.aspx">https://www.apps.emnrd.state.nm.us/OCD/OCDPermitting/default.aspx</a>

New Mexico Energy, Minerals & Natural Resources Department – Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

Submittal: Site Characterization Report and Remediation Plan (Ensolum, March 24, 2021)

RE: Enterprise Field Services, LLC

Blanco Storage S Tanks Release (March 8, 2019)

Off CR4900, San Juan Co., NM [S14, T29N R11W (36.731516° N, 107.965945° W)]

Incident ID No. NVF1908136109

Dear Mr. Smith:

Enterprise Products Operating LLC (Enterprise), on behalf of Enterprise Field Services, LLC, is pleased to submit to the New Mexico (NM) Energy, Minerals & Natural Resources Department (EMNRD) – Oil Conservation Division (OCD) an electronic copy of the above-referenced document prepared by Ensolum, LLC (Ensolum) dated March 24, 2021. The subject document is associated with the March 8, 2019 discovery of historical soil impact at the above-referenced location (the "Site"). The attached document summarizes the remediation and delineation activities that were implemented at the Site between March 2019 and February 2020. The corrective action and delineation activities were performed to reduce constituent of concern (COC) concentrations in the on-site soils to below the applicable NM EMNRD OCD closure criteria and to delineate the extent of remaining soil impact.

Data presented in the attached document indicates that COC concentrations in excess of the applicable closure criteria remain at the Site near the tank battery, beneath the transfer pump foundations, under the loading dock, near the hairpin lines (west of the excavation), beneath the overhead piping supports, and beneath the fire hydrant. The soils in these areas were not removed due to structural and safety concerns. COCs in other areas of the excavation are now below the applicable closure criteria.

Based on the information presented in the attached report, **Enterprise requests the deferment of final reclamation**, including remediation of the upper four (4) feet of soil to comply with the requirements of Paragraph (1) of Subsection D of 19.15.29.13 New Mexico Administrative Code (NMAC), until after the facility is decommissioned (or until other changes allow) to avoid damaging existing structures and appurtenances at the facility.

Enterprise appreciates the Oil Conservation Division's (OCD's) continued assistance and guidance in bringing closure to this Site. Should you have any questions, comments, or concerns, or require additional information, please feel free to contact me any time at (713) 381-8780, or at gemiller@eprod.com.

Sincerely,

Gregory E. Miller, P.G. Supervisor, Environmental Rodney M. Sartor, REM Sr. Director, Environmental

Ensolum, Houston, TX – Mr. Marc E. Gentry < MGentry@ensolum.com>

ec:



#### SITE CHARACTERIZATION REPORT AND REMEDIATION PLAN

Property:

NW ¼, S14 T29N R11W San Juan County, New Mexico

Incident ID No. NVF1908136109

March 24, 2021 Ensolum Project No. 05A1226045

Prepared for:

Enterprise Field Services, LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Thomas Long

Prepared by:

Chad D'Aponti

Field Environmental Scientist

Kyle Summers, CPG Sr. Project Manager

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#### SITE CHARACTERIZATION REPORT AND REMEDIATION PLAN

NW ¼, S14 T29N R11W San Juan County, New Mexico

Ensolum Project No. 05A1226045

#### 1.0 INTRODUCTION

#### 1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Blanco Storage S Tanks (2019) (Site)
Incident ID	NVF1908136109
Location:	36.731516° North, 107.965945° West Northwest (NW) ¼ of Section 14, Township 29 North, Range 11 West San Juan County, New Mexico
Property:	Private Land (Enterprise)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On March 8, 2019, while reconfiguring a tank battery and constructing new secondary containment, a historical release was identified at the Blanco Storage S containment Site. On March 8, 2019, Enterprise initiated activities to remediate and evaluate the petroleum hydrocarbon impact.

The **Topographic Map** depicting the location of the Site is included as **Figure 1**, and the **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

#### 1.2 Project Objective

The primary objective of the corrective action and delineation activities was to reduce constituent of concern (COC) concentrations in the on-site soils to below the applicable New Mexico EMNRD OCD closure criteria and to determine the extent of impacted soils remaining in place.

#### 2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following bullets are provided in **Appendix B**.

The OSE tracks the usage and assignment of water rights and water well installations and records
this information in the Water Rights Reporting System (WRRS) database. Water wells and other
points of diversion (PODs) are each assigned POD numbers in the database (which is searchable



and includes an interactive map). Numerous PODs were identified in the OSE WRRS database within the same Public Land Survey System (PLSS) section as the Site, as well as in the adjacent PLSS sections. The exact location of many of the PODs is unknown. The average depth to water for the PODs that are located in the same PLSS section and in adjacent PLSS sections of the Site is approximately 27 feet below grade surface (bgs). A nearby monitoring well network (SJ-04127) located at the Blanco Plant South Flare Pit and D Plant includes 11 permitted and several unpermitted groundwater monitoring wells. The nearest monitoring well (unpermitted) in this network is located approximately 980 feet northeast of the Site (at a slightly higher elevation) with a depth to water of approximately 16 feet bgs (based on published data). Small seeps were observed in some areas of the sandstone during excavation activities at the Site, but no recharge was observed (**Figure A**, **Appendix B**).

- No cathodic protection wells were identified within a one (1) mile radius of the Site (Figure B, Appendix B).
- The Site is not located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse. An irrigation canal is located approximately 830 feet southwest of the Site (**Figure C**, **Appendix B**).
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet from a permanent residence, school, hospital, institution, or church (Figure D, Appendix B).
- Based on information identified in the OSE WRRS database there are no springs, or private domestic fresh water wells used by less than five (5) households for domestic or stock watering purposes identified within 500 feet of the Site (Figure E, Appendix B).
- Based on information identified in the OSE WRRS database there are no fresh water wells or springs identified within 1,000 feet of the Site (**Figure E**, **Appendix B**).
- The Site is located within the City of Bloomfield.
- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not located within 300 feet of a wetland (**Figure F**, **Appendix B**).
- Based on information identified on the New Mexico Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine (**Figure G**, **Appendix B**).
- The Site is not located within an unstable area.
- Based on information identified in the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not located within a 100-year floodplain (Figure H, Appendix B).

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:



Closure Criteria for Soils Impacted by a Release										
Constituent *	Method	Limit								
Chloride	EPA 300.0 or SM4500 CI B	600 mg/kg								
TPH (GRO+DRO+MRO) <sup>1</sup>	EPA SW-846 Method 8015	100 mg/kg								
BTEX <sup>2</sup>	EPA SW-846 Method 8021 or 8260	50 mg/kg								
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg								

<sup>\*</sup>Constituents are measured in milligrams per kilogram (mg/kg)

#### 3.0 SOIL REMEDIATION ACTIVITIES

On March 8, 2019, Enterprise initiated activities to facilitate the remediation of petroleum hydrocarbon impact. During the remediation and corrective action activities, Wood Group USA, Inc., (Wood Group) and West States Energy Contractors, Inc., (West States) provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 129 feet long and 104 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 15 feet below grade surface (bgs).

The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sandy clay underlain by sandstone.

Approximately 9,943 cubic yards (yd³) of petroleum hydrocarbon affected soils/sandstone and 1,766 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance forms are provided in **Appendix C**. The excavation was ultimately backfilled with imported fill and then contoured to match the surrounding grade.

**Figure 3** (**Appendix A**) is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to Site features. **Figure 4** (**Appendix A**) is a map that identifies areas of requested soil deferment. Photographic documentation of the field activities is included in **Appendix D**.

#### 4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil/sandstone samples from the excavation utilizing a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil/sandstone sampling program included the collection of 67 composite soil/sandstone samples (S-1 through S-67) from the excavation floor and walls. The composite samples were comprised of five (5) aliquots each, per guidelines outlined in Subsection D of 19.15.29.12 NMAC. Hand tools and an excavator, operated by Wood Group and West States, were utilized to obtain fresh aliquots from each area of the excavation. In addition, a combination of 19 composite and grab soil/sandstone samples (HB-1 @1'-H through HB-15 @11') were collected from horizontal or vertical borings utilizing a hand auger. For the purposes of this report, soil/sandstone samples and soil/sandstone borings will be referred to as soil samples and soil borings, respectively.

<sup>1 –</sup> Total Petroleum Hydrocarbon (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO)

<sup>&</sup>lt;sup>2</sup> – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX)



The New Mexico EMNRD OCD approved a 400 square foot (ft²) sample interval variance for the remediation confirmation sampling activities. Although access to some areas was somewhat limited due to ongoing construction and compaction at the Site, Enterprise attempted to maintain this sampling interval throughout the remedial activities. Regulatory correspondence is provided in **Appendix E**.

#### March 2019

On March 8, 2019, subsequent to the removal of storage tanks, Enterprise collected soil samples to evaluate apparent historic impact within the secondary containment. Composite soil samples S-2 (0'-5'), S-3 (0'-5'), S-4 (0'-3'), and S-5 (0'-3') were collected from the walls of the initial excavation within the tank containment area. Composite soil sample S-1 (5') was collected from the floor of the initial excavation within the tank containment area. Sampling locations were limited by ongoing construction activities related to the new tank battery. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for composite soil samples S-2 through S-5. In response to the data exceedances, the containment area was further excavated to remove petroleum hydrocarbon impacts. Soils associated with composite soil samples S-2 through S-4 were removed by excavation and transported to the landfarm for disposal/remediation. Soils associated with composite soil sample S-5 provide structural support for overhead piping and these soils remain in place. At this time, Enterprise upgraded the Site to a "reportable" release and the New Mexico EMNRD OCD was notified.

On March 26, 2019, composite soil samples S-6 (0'-8'), S-7 (0'-8'), S-8 (0'-8'), S-9 (0'-8'), S-10 (0'-8'), and S-11 (0'-8') were collected from the walls of the excavation. Composite soil samples S-12 (8') and S-13 (8') were collected from the floor of the excavation. The New Mexico EMNRD OCD was notified of the sampling event although no representative was present during this sampling event.

Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for composite soil samples S-6 through S-9 and S-11. The excavation was extended to remove petroleum hydrocarbon impacts. Soils associated with composite soil samples S-6, S-7, and S-11 were removed by excavation and transported to the landfarm for disposal/remediation. Soils associated with composite soil samples S-8 and S-9 were not removed and remain in place adjacent to the new tank battery. Due to safety concerns related to the depth of the excavation adjacent to the new tank battery and concerns with regard to the support of the transfer pipeline and tank battery, further excavation to the north and immediately adjacent to the tank battery was suspended. The New Mexico EMNRD OCD granted Enterprise the approval to backfill a portion of the excavation for stability. Excavation was continued to the east, west, and south.

#### **April 2019**

On April 15, 2019, composite soil samples S-14 (0'-8'), S-15 (0'-8'), S-16 (0'-8'), S-17 (0'-8'), and S-18 (0'-8') were collected from the east wall of the excavation. Composite soil sample S-19 (8') was collected from the floor of the excavation. The New Mexico EMNRD OCD was notified of the sampling event although no representative was present during this sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for composite soil samples S-14, S-17, and S-18. In response to the data exceedances, Enterprise extended the excavation. Soils associated with composite soil samples S-14, S-17, and S-18 were removed by excavation and transported to the landfarm for disposal/remediation.

On April 23, 2019, composite soil samples S-20 (0'-8'), S-21 (0'-8'), and S-22 (0'-8'), were collected from the walls of the excavation. A New Mexico EMNRD OCD representative was present during this sampling event.

On April 25, 2019, composite soil sample S-23 (0'-8') was collected from the wall of the excavation. The New Mexico EMNRD OCD was notified of the sampling event although no representative was present during this sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for S-23. The excavation was extended, and soil associated with composite soil sample S-23 was removed by excavation and transported to the landfarm for disposal/remediation.



#### May 2019

On May 3, 2019, composite soil samples S-24 (0'-8'), S-25 (0'-8'), S-26 (0'-8'), S-27 (0'-8'), and S-28 (0'-8') were collected from the south walls of the excavation. Composite soil samples S-29 (8'), S-30 (8'), and S-31 (8') were collected from the floor of the excavation. The New Mexico EMNRD OCD was notified of the sampling event although no representative was present during this sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for composite soil samples S-24 and S-25. Soils associated with the composite soil samples were not removed from the Site due to concerns regarding the structural support of the concrete loading dock, underground utilities/piping, and the nearby drip tank.

On May 7, 2019, two (2) composite soil samples (S-32 and S-33) were collected beneath the concrete loading dock and near the drip tank line to horizontally delineate residual impact. Due to structural stability concerns, the five (5) aliquots for each of these samples were collected from one (1) to two (2) feet horizontally (into the wall), across the eight (8) foot vertical face of the wall, utilizing a hand auger.

#### June 2019

On June 11, 2019, composite soil samples S-34 (0'-12'), S-35 (0'-12'), S-38 (0'-12'), S-39 (0'-6'), S-44 (0'-12'), and S-45 (0'-10') were collected from the walls of the excavation. Composite soil samples S-36 (12'), S-37 (12'), S-40 (12'), S-41 (8'), S-42 (10'), and S-43 (12') were collected from the floor of the excavation. A New Mexico EMNRD OCD representative was present during this sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for composite soil sample S-38. Soil associated with composite soil sample S-38 was not removed and remains in place. Due to safety concerns related to the depth of the excavation and support of the transfer pipeline, further excavation to the north and immediately adjacent to the transfer pipeline was suspended.

A non-reportable release of condensate from a temporary transfer hose occurred at the Site shortly after the June 11, 2019 sampling event. The release flowed into the excavation in the vicinity of previous sample locations S-37 and S-40 through S-43, which had already been partially backfilled and compacted. Enterprise provided a courtesy notification of the release to the New Mexico EMNRD OCD and the affected backfill soils were removed, and the area was reassessed to evaluate potential petroleum hydrocarbon impact. On June 24, 2019, composite soil samples S-46 (12'), S-48 (12'), S-49 (8'), S-50 (12'), and S-51 (10') were collected from the floor of the excavation to replace composite soil samples S-37 and S-40 through S-43 that were potentially affected by the secondary release. Additionally, composite soil sample S-47 (10'-12') was collected from a short internal wall within the excavation. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during the sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for soil sample S-49. In response to the exceedance, Enterprise deepened the excavation in the vicinity of samples S-41 and S-49. Soil associated with composite soil sample S-49 was removed by excavation and transported to the landfarm for disposal/remediation.

On June 27, 2019, composite soil sample S-52 (9') was collected from the floor of the deepened excavation to replace composite soil sample S-49. The New Mexico EMNRD OCD was notified of the sampling event although no representative was present during the sampling event.

#### **July 2019**

On July 18, 2019, four (4) soil borings (HB-1 through HB-4) were advanced horizontally into the sidewall of the excavation, adjacent to the tank battery and associated transfer line to delineate petroleum hydrocarbon impact. The soil borings were advanced into the sandstone up to four (4) feet horizontally utilizing a hand auger, below the depth of the buried transfer line, at a vertical depth of approximately 6.5 to 8.0 feet bgs. Grab samples HB-1 (1'), HB-2 (4'), HB-3 (4') and HB-4 (4') were collected from the soil borings once a horizontal distance was reached that no longer indicated hydrocarbon impact based on field screenings. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during the sampling event.



On July 23, 2019, five (5) soil borings (HB-5 through HB-9) were advanced horizontally into the wall of the excavation in the vicinity of composite soil sample S-38 and adjacent to the tank battery and associated transfer line, to horizontally delineate petroleum hydrocarbon impact. The New Mexico EMNRD OCD was verbally notified of the sampling event, but a representative was not present during the sampling event. The samples were collected at a horizontal distance of one (1) foot into the wall, at which point a grab sample was collected. As noted in **Table 1** (**Appendix F**), the laboratory did not complete the analytical suite on these samples until after the hold time had expired. Enterprise was not able to duplicate these samples because that portion of the excavation had been backfilled and compacted during construction activities.

#### September 2019

On September 6, 2019, two (2) additional soil borings (HB-10 and HB-11) were advanced from the ground surface vertically, north of HB-5 through HB-9, to further delineate the hydrocarbon impact adjacent to the tank battery utilizing a hand auger. Soil boring samples HB-10 (1'-5') and HB -11 (1'-5') were collected from the soil borings. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during the sampling event.

#### January 2020

On January 17, 2020, composite soil sample S-54 (0'-15') was collected from the sloped wall adjacent to the transfer pumps and their concrete foundation. Composite soil sample S-53 (15') was collected from the floor of the excavation. The New Mexico EMNRD OCD was verbally notified of the sampling event, but a representative was not present during the sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for soil sample S-54. These soils remain in place due to concerns related to the structural integrity of the transfer pumps. The area south of S-54 had been partially backfilled and compacted (as part of the construction activities) and could not be sampled. This area is assumed to be impacted as it relates to the deferment discussion in **Section 7.0**.

On January 21, 2020, composite soil sample S-56 (0'-15') was collected from the north wall of the excavation. Composite soil sample S-57 (0'-15') was collected from the sloped wall adjacent to the transfer pumps and their concrete foundation. Composite soil sample S-55 (15') was collected from the floor of the excavation. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during the sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for composite soil sample S-57. These soils remain in place due to concerns related to the structural integrity of the transfer pumps.

On January 22, 2020, composite soil sample S-58 (0'-15') was collected from the wall of the excavation. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during the sampling event.

On January 28, 2020, composite soil sample S-60 (0'-12') was collected from the wall of the excavation. Composite soil sample S-59 (12') was collected from the floor of the excavation. A New Mexico EMNRD OCD representative was present during the sampling event.

On January 29, 2020, composite soil sample S-61 (0'-12') was collected from the wall of the excavation. The New Mexico EMNRD OCD was verbally notified of the sampling event, but a representative was not present during the sampling event. Analytical results indicated exceedances of the applicable New Mexico EMNRD OCD closure criteria for composite soil sample S-61. These soils were left in place due to concerns about the structural support of the adjacent pipelines.

#### February 2020

On February 4, 2020, composite soil samples S-62 (0'-8') and S-63 (0'-9') were collected from the wall of the excavation. Composite soil samples S-64 (9') and S-65 (9') were collected from the floor of the excavation. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during sampling. Analytical results indicated New Mexico EMNRD OCD closure criteria



exceedances for composite soil sample S-65. The excavation was deepened, and soil associated with composite soil sample S-65 was removed and transported to the landfarm.

On February 6, 2020, composite soil sample S-66 (10') was collected from the floor of the excavation to replace composite soil sample S-65. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during the sampling event. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for composite soil sample S-66. The excavation was deepened, and soil associated with composite soil sample S-66 was removed and transported to the landfarm.

On February 10, 2020, composite soil sample S-67 (10.5') was collected from the floor of the excavation to replace composite soil samples S-65 and S-66. A New Mexico EMNRD OCD representative was present during the planning meeting and sampling event.

On February 12, 2020, four (4) soil borings (HB-12 through HB-15) were advanced west of soil sample S-61 and near the pipelines to delineate the extent of petroleum hydrocarbon impact. The New Mexico EMNRD OCD provided verbal approval to proceed with the advancement of the soil borings although no representative was present during the sampling event. The soil borings were advanced up to 14 feet bgs utilizing a hydro-excavator. Soil boring samples HB-12 (composite, 0'-11'), HB-12 (grab, 14'), HB-13 (composite, 0'-11'), HB-13 (grab, 11'), HB-14 (composite, 0'-9'), HB-14 (grab, 9'), HB-15 (composite, 0'-11'), and HB -15 (grab, 11') were then collected from the sides and bottom of the soil borings utilizing a hand auger. Analytical results indicated New Mexico EMNRD OCD closure criteria exceedances for soil samples HB-15 (0'-11') and HB-15 (11'). Soils associated with the HB-15 samples remain in place and are laterally delineated by the HB-12, HB-13, and HB-14 soil boring locations.

All soil samples were collected and placed in laboratory prepared containers. The containers were labeled and sealed using the laboratory supplied labels and custody seals and were stored on ice in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.

#### 5.0 SOIL LABORATORY ANALYTICAL METHODS

The soil samples were analyzed for BTEX using United States (US) Environmental Protection Agency (EPA) SW-846 Method #8021/8260; TPH GRO/DRO/MRO using US EPA SW-846 Method #8015; and, chlorides using US EPA Method #300.0.

The laboratory analytical results are summarized in **Table 1** (**Appendix F**). The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix G**.

#### 6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results associated with the composite soil samples (S-1, S-5, S-8 through S-10, S-12, S-13, S-15, S-16, S-19, S-20, S-21, S-24 through S-40, S-42 through S-48, S-50 through S-64, S-67, and HB-1 through HB-15) to the applicable New Mexico EMNRD OCD closure criteria. In the event that the laboratory did not quantify a result for BTEX or chloride, Ensolum compared the laboratory supplied practical quantitation limits (PQLs) / reporting limits (RLs) to the New Mexico EMNRD OCD closure criteria. Conversely, due to the high PQLs/RLs associated with the TPH MRO range when using EPA SW-846 Method #8015, Ensolum only compared the quantified TPH results to the New Mexico EMNRD OCD closure criteria.

Soils associated with composite soil samples S-2 through S-4, S-6, S-7, S-11, S-14, S-17, S-18, S-22, S-23, S-41, S-49, S-65, and S-66 were transported to the Envirotech landfarm for disposal/remediation and are not included in the following discussion.



- The laboratory analytical result for composite soil sample S-57 indicates a benzene concentration of 15 mg/kg, which exceeds the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for composite soil samples S-1, S-5, S-19, S-54, S-61, and HB-15 (11') indicate benzene concentrations ranging from 0.028 mg/kg (S-19) to 2.3 mg/kg (S-5), which do not exceed the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for composite soil samples S-5, S-54, and S-57 indicate total BTEX concentrations of 150 mg/kg, 140 mg/kg, and 390 mg/kg, respectively, which exceed the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for composite soil samples S-1, S-8, S-9, S-10, S-19, S-24, S-25, S-32, S-45, S-61, HB-15 (0'-11'), and HB-15 (11') indicate total BTEX concentrations ranging from 0.095 mg/kg (S-32) to 46 mg/kg (S-61), which do not exceed the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil samples S-5, S-8, S-9, S-24, S-25, S-38, S-54, S-57, S-61, HB-15 (0'-11'), and HB-15 (11') indicate combined TPH GRO/DRO/MRO concentrations ranging from 100 mg/kg (S-25) to 8,200 mg/kg (S-57), which exceed the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for composite soil samples S-1, S-10, S-28, S-32, S-39, S-42, S-45, S-50, S-51, S-59, S-63, and S-64 indicate combined TPH GRO/DRO/MRO concentrations ranging from 8.0 mg/kg (S-1) to 64 mg/kg (S-50), which do not exceed the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for composite soil samples S-67 and HB-12@0'-11' indicate chloride concentrations of 69 mg/kg and 75 mg/kg, respectively, which do not exceed the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

The laboratory analytical results are summarized in **Table 1** (**Appendix F**).

#### 7.0 REMEDIATION

The excavation was backfilled with imported fill, compacted, and then contoured as necessary to facilitate traffic, etc. Throughout the course of the remediation activities, Enterprise coordinated with the New Mexico EMNRD OCD with regard to potential deferment options in areas of high risk due to structural and safety concerns.

Based on the information provided herein, Enterprise requests deferment of final remediation and reclamation for the areas identified on **Figure 4** (**Appendix A**) until after the facility or portions of the facility are decommissioned, to avoid damaging existing structures/appurtenances at the facility. At that time, Enterprise will perform final remediation and reclamation of the Site. Enterprise estimates approximately 653 yd<sup>3</sup> of identified petroleum hydrocarbon affected soils from the historic release remain in place near the



tank battery, beneath the transfer pump foundations, under the loading dock, near the hairpin lines (west of the excavation), beneath the overhead piping supports, and beneath the fire hydrant. The actual volume may be less, as Enterprise assumed all the soil beneath the transfer pump foundations (to a depth of 15 feet bgs) and any other significant areas that could not be sampled were affected by the release.

#### 8.0 FINDINGS

- Sixty-seven (67) composite soil samples were collected from the excavation for laboratory analysis. In addition, 19 composite or grab soil samples were collected from soil borings advanced in the vicinity of the excavation or horizontally into the excavation walls.
- Based on laboratory analytical results, soil remaining in place near the tank battery, beneath the transfer pump foundations, under the loading dock, near the hairpin lines (west of the excavation), beneath the overhead piping supports, and beneath the fire hydrant exhibit COC concentrations above the applicable New Mexico EMNRD OCD closure criteria. The soils in the other areas of the excavation exhibit COC concentrations below the New Mexico EMNRD OCD closure criteria.
- Approximately 9,943 yd<sup>3</sup> of petroleum hydrocarbon affected soils and 1,766 bbls of hydroexcavation soil cuttings and water were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and was then contoured to surrounding grade.

#### 9.0 RECOMMENDATION

Enterprise requests the deferment of final reclamation, including remediation of the upper four (4) feet of soil to comply with the requirements of Paragraph (1) of Subsection D of 19.15.29.13 NMAC, until after the facility is decommissioned or until other changes allow, to avoid damaging existing structures/appurtenances at the facility.

#### 10.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

#### 10.1 Standard of Care

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

#### 10.2 Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendation are based solely upon data available to Ensolum at the time of these services.



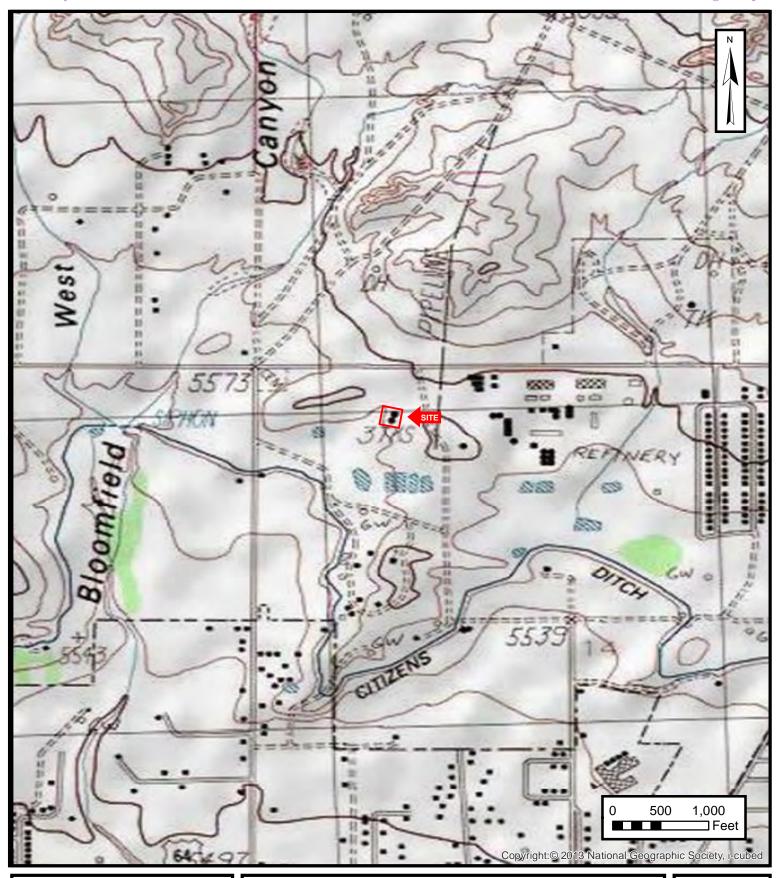
#### 10.3 Reliance

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



**APPENDIX A** 

Figures





#### **TOPOGRAPHIC MAP**

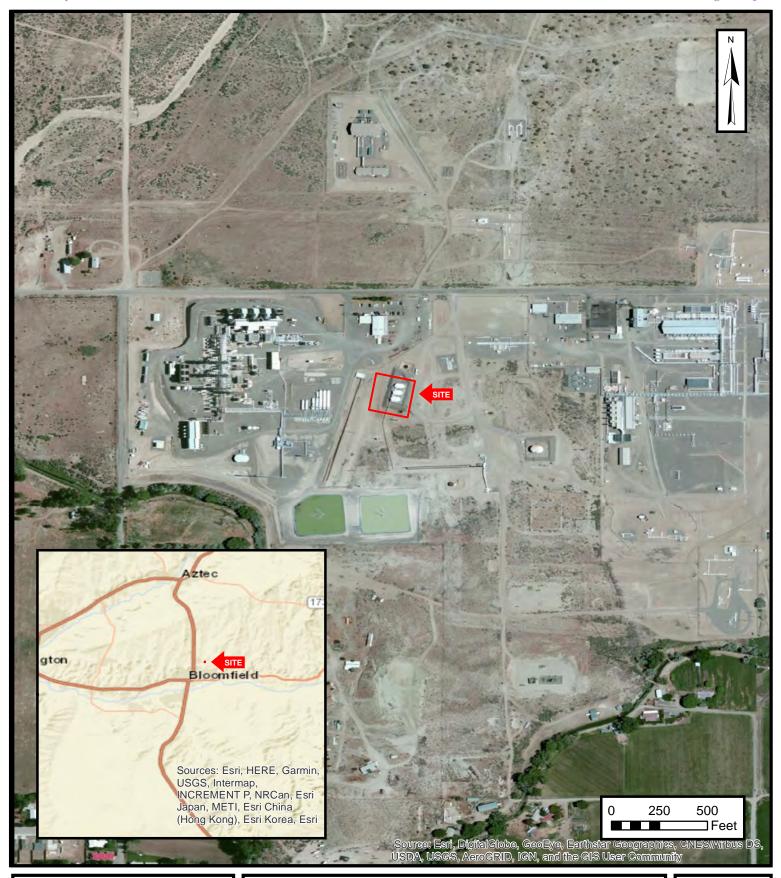
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

NW ¼, S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

PROJECT NUMBER: 05A1226045

**FIGURE** 

1





#### SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

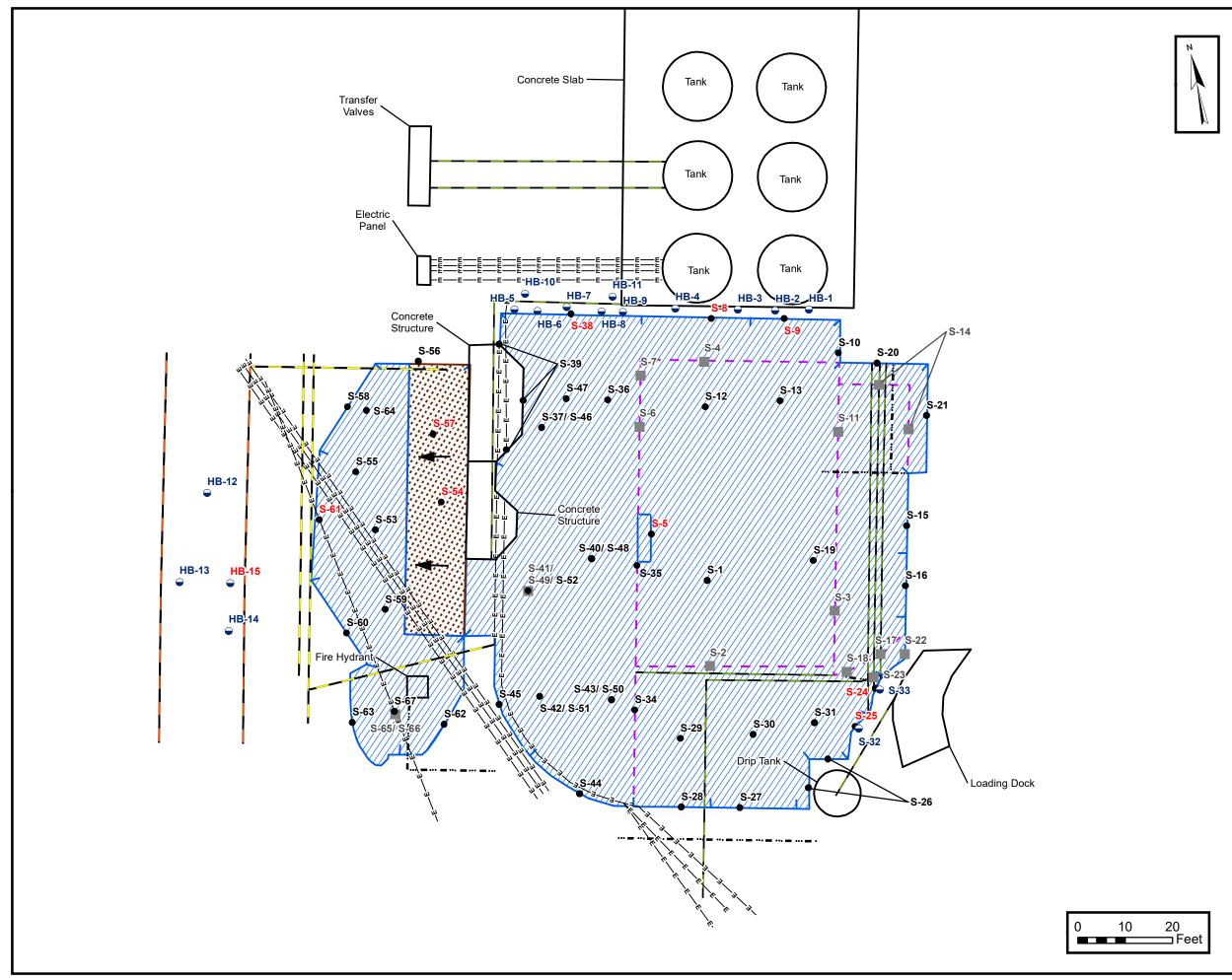
NW ¼, S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

PROJECT NUMBER: 05A1226045

**FIGURE** 

2

Received by OCD: 8/15/2023 10:45:18 AM



#### LEGEND:

- Composite Soil Sample Location
- Composite Sample Location Removed by Excavation
  - Hand Auger Soil Boring



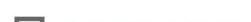
Extent of Excavation (5'-15')

Sloped Excavation Floor (0-15')

- Former Excavation Sidewall
- Transfer Line
- Pipeline
- --- 36" Hairpin Line
- -E-E Electric Line
- **···■** ···• Water Line
  - Hash Mark Indicates Extent of Aliquot
- Collection for Associated Composite Samples

#### Note:

Concentrations for sample IDs in <mark>red</mark> exceed the applicable NM EMNRD OCD Closure Criteria. Soil associated with these samples remain in place.



Environmental & Hydrogeologic Consultants

#### SITE MAP WITH SAMPLE LOCATIONS

ENTERPRISE FIELD SERVICES BLANCO STORAGE S TANKS

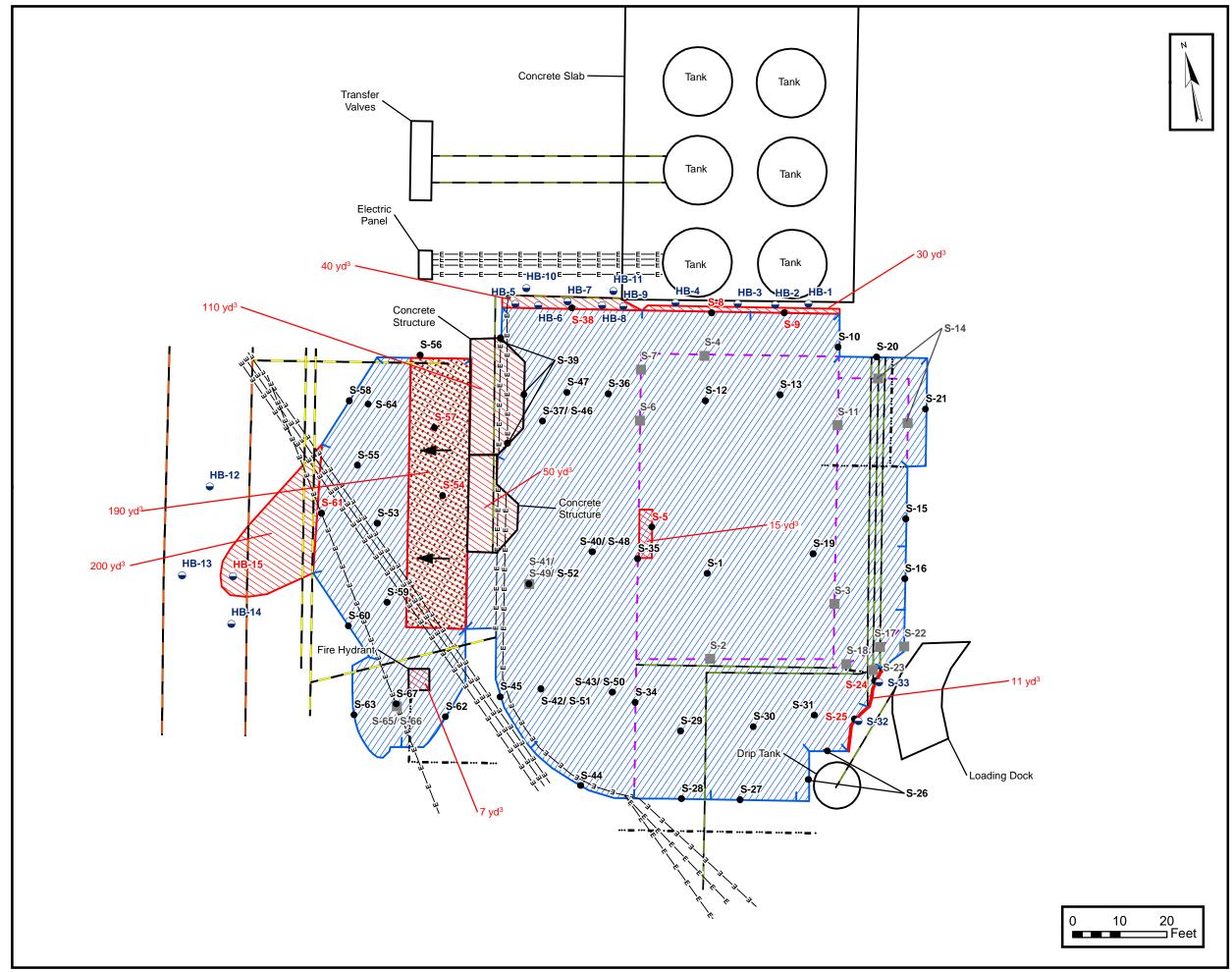
NW ¼, S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

#### **FIGURE**

4

PROJECT NUMBER: 05A1226045

Received by OCD: 8/15/2023 10:45:18 AM



#### LEGEND:

- Composite Soil Sample Location
- Composite Sample Location Removed by Excavation
- Hand Auger Soil Boring



Extent of Excavation (5'-15')

Sloped Excavation Floor (0-15')

Soil Deferment

Former Excavation Sidewall

Transfer Line

- Pipeline

--- 36" Hairpin Line

-E-E Electric Line

**···=···•** Water Line

Hash Mark Indicates Extent of Aliquot
Collection for Associated Composite
Sample

yd³ Estimated Affected Material Remaining in Place

yd³ = cubic yards Concentrations for sample IDs in <mark>red</mark> exceed the applicable NM EMNRD OCD Closure Criteria.

Soil associated with these samples remain in place.



#### **SOIL DEFERMENT AREA MAP**

ENTERPRISE FIELD SERVICES BLANCO STORAGE S TANKS

NE ¼, S14 T29N R11W, San Juan County, New Mexico 36.73135° N, 107.96603° W

#### **FIGURE**

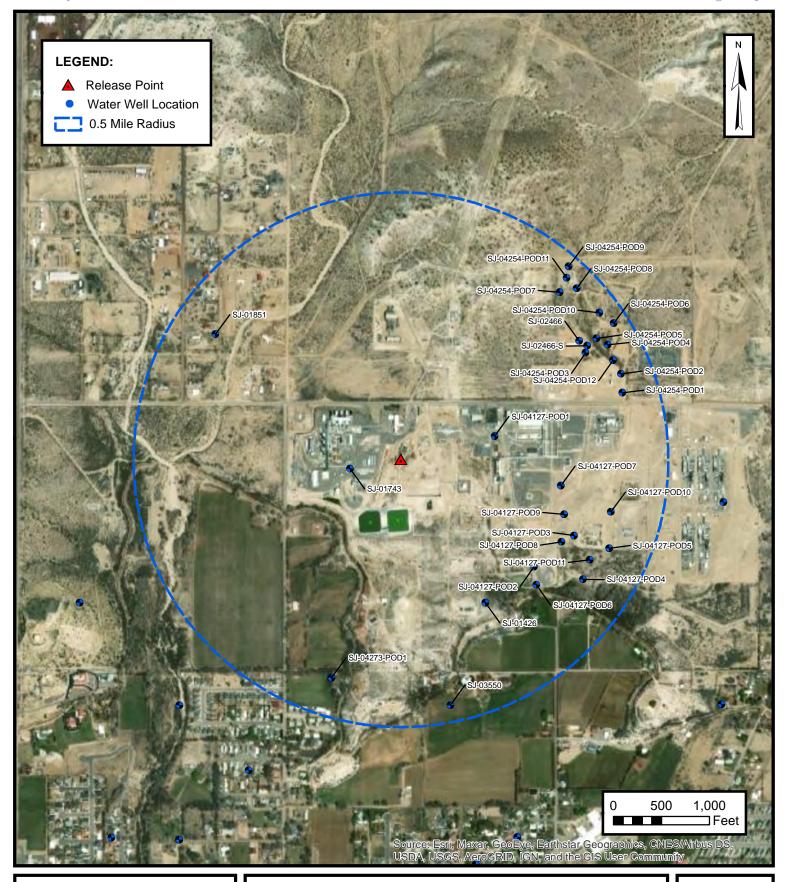


PROJECT NUMBER: 05A1226045



**APPENDIX B** 

Siting Figures and Documentation





#### 0.5 MILE RADIUS WATER WELL MAP

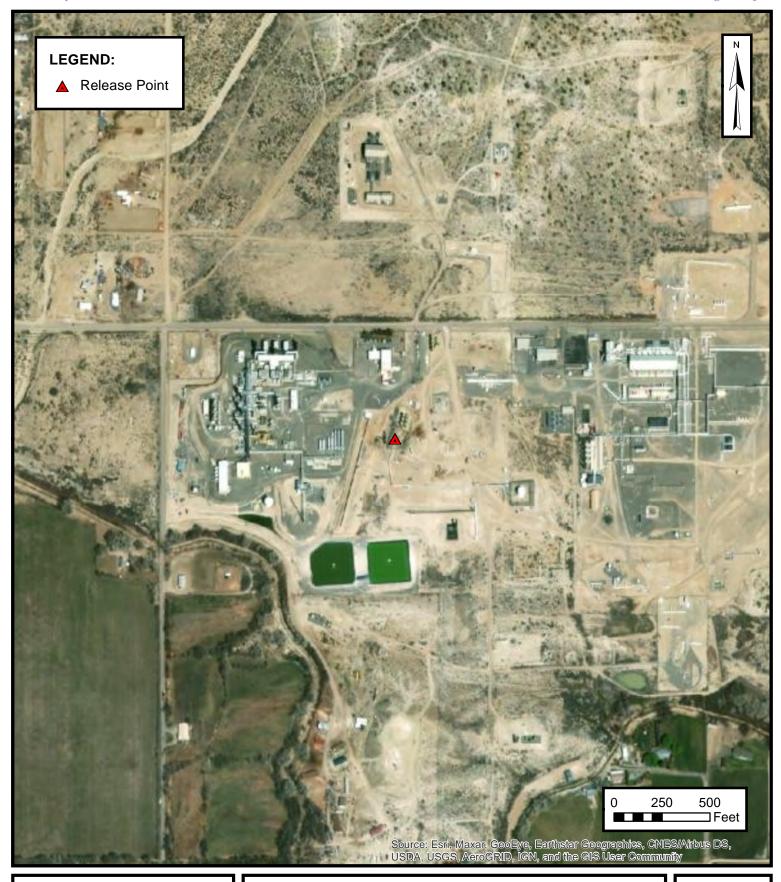
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

NW  $\frac{1}{4}$ , S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

PROJECT NUMBER: 05A1226045

FIGURE

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# CATHODIC PROTECTION WELL RECORDED DEPTH TO WATER

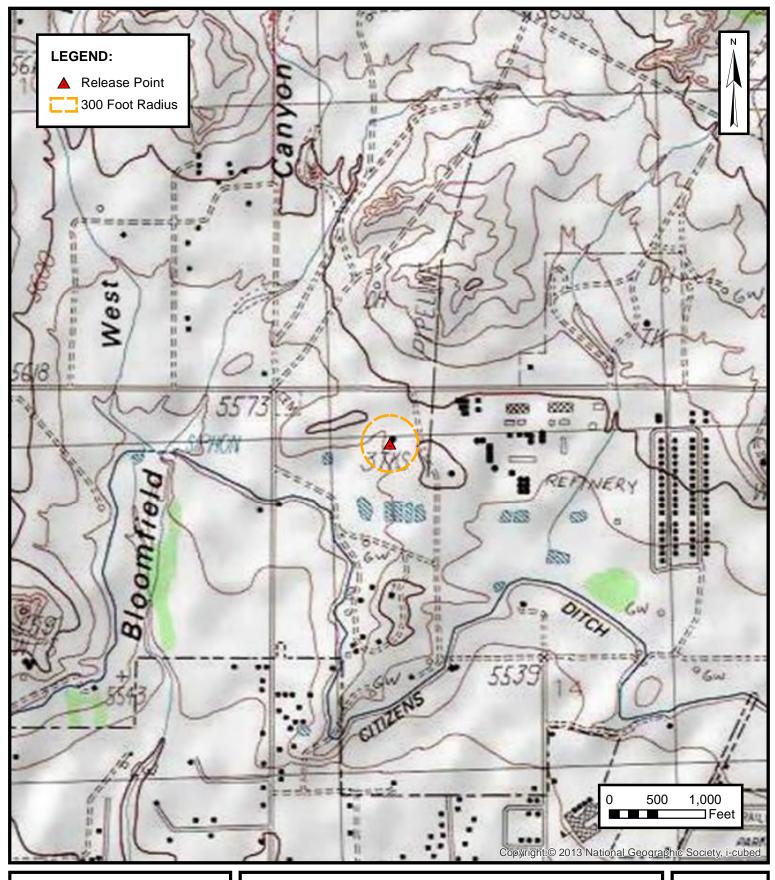
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

NW  $\%,~\rm S14~T29N~R11W,~San~Juan~County,~New~Mexico~36.731516^{\circ}~N,~107.965945^{\circ}~W$ 

PROJECT NUMBER: 05A1226045

**FIGURE** 

B





# 300 FOOT RADIUS WATERCOURSE AND DRAINAGE IDENTIFICATION

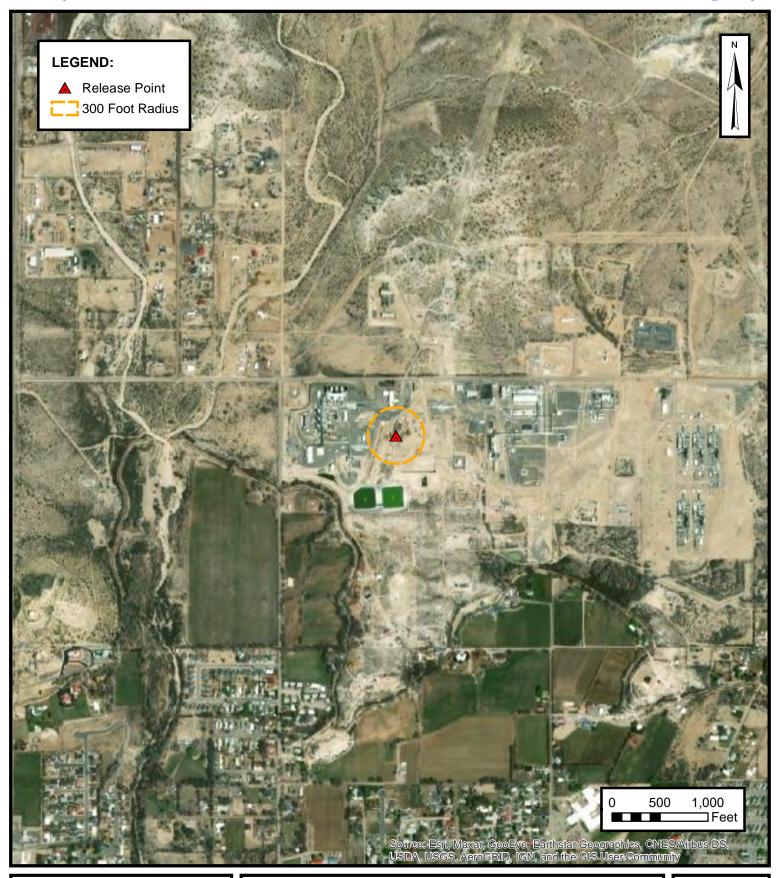
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

NW ¼, S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

PROJECT NUMBER: 05A1226045

FIGURE

C





# 300 FOOT RADIUS OCCUPIED STRUCTURE IDENTIFICATION

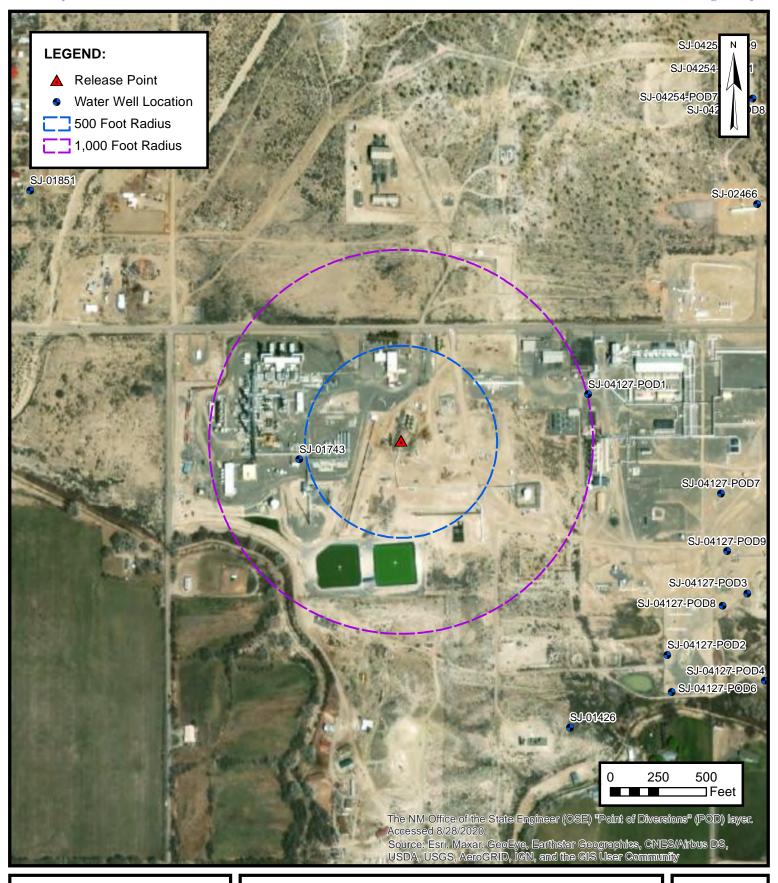
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

NW ¼, S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

PROJECT NUMBER: 05A1226045

**FIGURE** 

D





#### WATER WELL AND NATURAL SPRING LOCATION

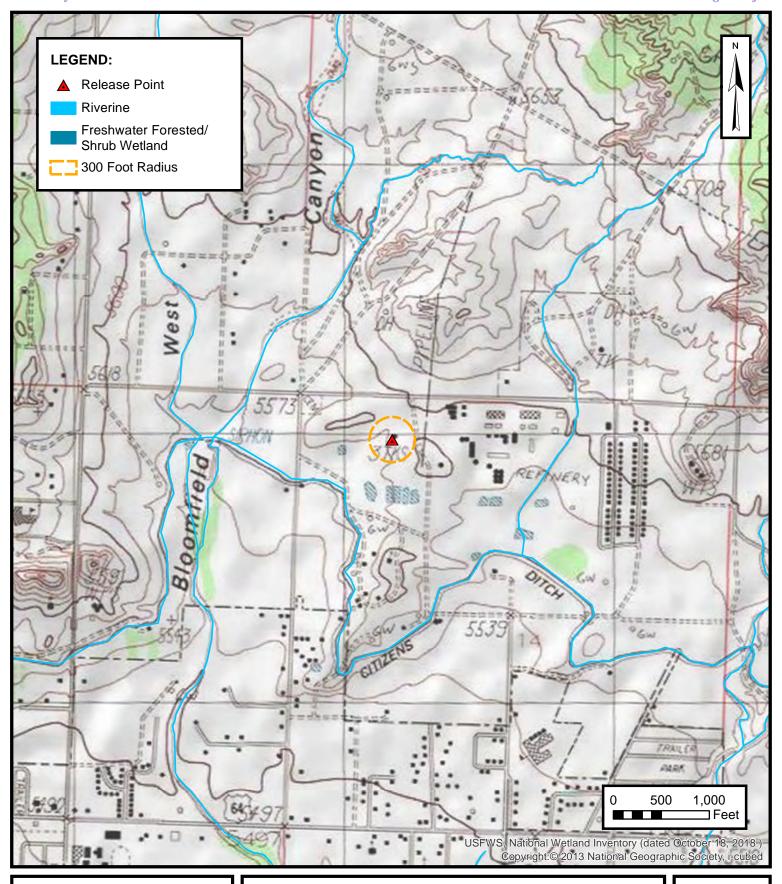
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

NW ¼, S14 T29N R11W, San Juan County, New Mexico  $36.731516^\circ$  N,  $107.965945^\circ$  W

PROJECT NUMBER: 05A1226045

**FIGURE** 

Ε





#### **WETLANDS**

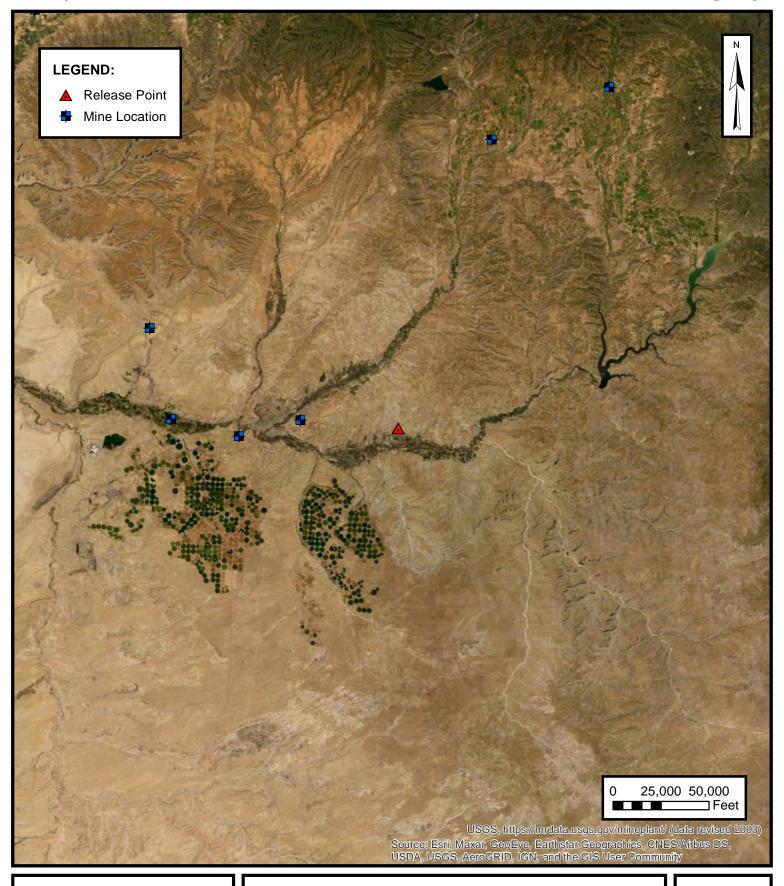
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS NW ¼, S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

PROJECT NUMBER: 05A1226045

**FIGURE** 

F

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#### MINES, MILLS AND QUARRIES

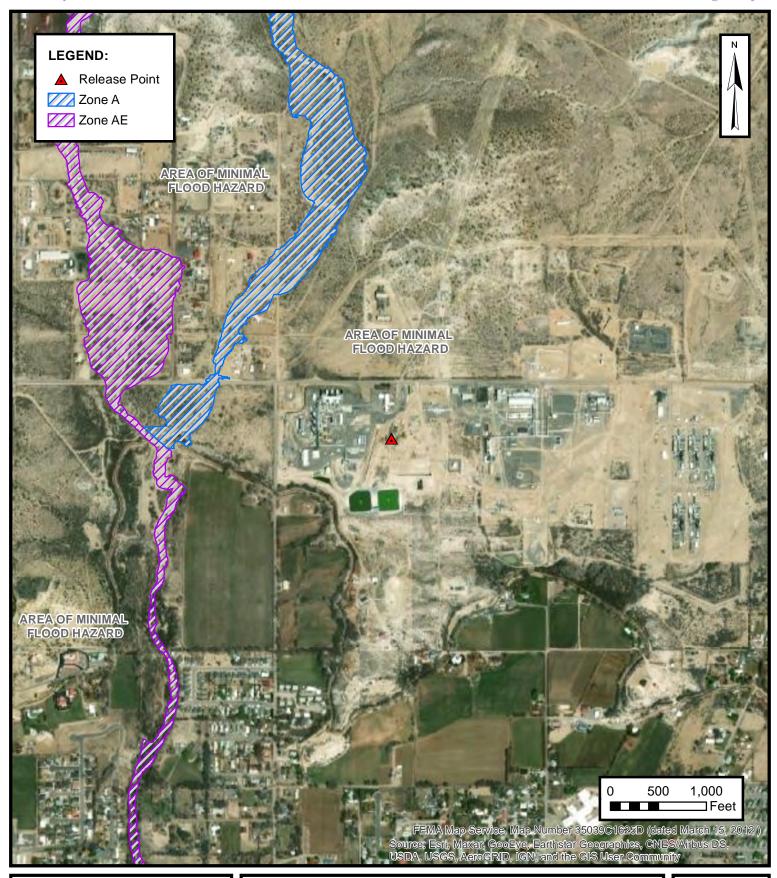
ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS NW ¼, S14 T29N R11W, San Juan County, New Mexico

NW ¼, S14 T29N R11W, San Juan County, New Mexico 36.731516° N, 107.965945° W

PROJECT NUMBER: 05A1226045

**FIGURE** 

G





#### **100-YEAR FLOOD PLAIN MAP**

ENTERPRISE FIELD SERVICES, LLC BLANCO STORAGE S TANKS

NW ¼, S14 T29N R11W, San Juan County, New Mexico  $36.731516^\circ$  N,  $107.965945^\circ$  W

PROJECT NUMBER: 05A1226045

**FIGURE** 

Н

(In feet)



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned,

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)

closed) (quarters are smallest to largest) (NAD83 UTM in meters)

	POD Sub-		Q	Q	Q						Depth	Depth	Water
POD Number	Code basin (	County	64	16	4 5	Sec 1	Tws	Rng	X	Υ	Well	Water	Column
SJ 00007	SJM2	SJ	3	2	2 1	14 2	29N	11W	236085	4069024* 🎒	752		
SJ 00151	SJM2	SJ	4	3	1 2	22 2	29N	11W	233396	4067109* 🌕	45	18	27
SJ 00320	SJM2	SJ	1	3	1 2	22 2	29N	11W	233196	4067309*	38	10	28
SJ 00484	SJM2	SJ	1	3	1 2	22 2	29N	11W	233196	4067309*	37	10	27
SJ 00696	SJM2	SJ		3 -	4 2	22 2	29N	11W	234085	4066368*	34	12	22
SJ 00704	SJM2	SJ		2	1 2	22 2	29N	11W	233714	4067596* 🎒	55	20	35
SJ 00796	SJM2	SJ		2	1 2	22 2	29N	11W	233714	4067596* 🌕	50	8	42
SJ 00812	SJM2	SJ		4	1 2	23 2	29N	11W	235313	4067146* 🎒	44		
SJ 00987	SJM2	SJ			4 1	13 2	29N	11W	237549	4068086*	415	300	115
SJ 01214	SJM2	SJ		3	1 2	22 2	29N	11W	233297	4067210*	49	12	37
SJ 01426	SJM2	SJ		4	1 1	14 2	29N	11W	235366	4068747*	155	10	145
SJ 01557	SJM2	SJ		2	1 2	22 2	29N	11W	233714	4067596*	70	11	59
SJ 01573	SJM2	SJ		3	2 2	23 2	29N	11W	235717	4067135* 🎒	41	21	20
SJ 01610	SJM2	SJ		2	2 2	23 2	29N	11W	236133	4067524* 🎒	52	25	27
SJ 01703	SJM2	SJ		2	1 2	22 2	29N	11W	233714	4067596* 🌍	68	3	65
SJ 01774	SJM2	SJ	2	4	3 1	14 2	29N	11W	235440	4068045*	82	6	76
SJ 01851	SJM2	SJ		4	4 1	10 2	29N	11W	234586	4069572* 🎒	125	48	77
SJ 01870	SJM2	SJ		:	2 2	23 2	29N	11W	235918	4067336* 🎒	58	30	28
SJ 01962	SJM2	SJ	2	2	1 2	24 2	29N	11W	237033	4067599* 🎒	45	12	33
SJ 01974	SJM2	SJ	3	3	4 2	22 2	29N	11W	233984	4066267*	47	11	36
SJ 02020	SJM2	SJ		3	3 2	22 2	29N	11W	233273	4066412*	27	6	21
SJ 02138	SJM2	SJ		2	4 2	22 2	29N	11W	234497	4066770*	40	7	33
SJ 02200	SJM2	SJ			2	22 2	29N	11W	233876	4067015* 🎒	60	22	38
SJ 02378	SJM2	SJ	2	3 -	4 1	15 2	29N	11W	234229	4068080*	75	12	63
SJ 02466	SJM2	SJ	3	3 -	4 1	11 2	29N	11W	235669	4069518 🌕	66		
SJ 02466 S	SJM2	SJ	3	3 -	4 1	11 2	29N	11W	235693	4069503 🌑	65		

\*UTM location was derived from PLSS - see Help

(In feet)

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a

water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)

closed) (quarters are smallest to largest) (NAD83 UTM in meters)

water right mesy	POD Sub-		Q (	<b>ર</b>	)			, , , , , , , , , , , , , , , , , , ,		-	-	Water
POD Number SJ 02529	Code basin ( SJM2	<b>County</b> SJ				29N		<b>X</b> 234396	<b>Y</b> 4066669*	Well 30	Water 9	Column 21
SJ 02578	SJM2	SJ				29N		234007	4067082*	58	24	34
SJ 02721	SJM2	SJ				29N		233702	4067197*		59	0.
SJ 02799	SJM2	SJ				29N		235602	4066839*	56	15	41
SJ 02813	SJM2	SJ				29N		233613	4067495*	59	16	43
SJ 02991	SJM2	SJ				29N		237048	4067998*	60		
SJ 03049	SJM2	SJ				29N		234596	4066669*	33	10	23
SJ 03073	SJM2	SJ				29N		235616	4067234*	30		
SJ 03093	SJM2	SJ	4 3	3 2	22	29N	11W	234207	4067082*	42	22	20
SJ 03130	SJM2	SJ	3 1	2	23	29N	11W	235631	4067434*	50	30	20
SJ 03136	SJM2	SJ	4 4	3	13	29N	11W	237048	4067798*	20		
SJ 03164	SJM2	SJ	1 2	2 4	14	29N	11W	236060	4068423*	75	56	19
SJ 03175	SJM2	SJ	1 2	2 4	14	29N	11W	236060	4068423*	60	24	36
SJ 03188	SJM2	SJ	2 2	2 3	22	29N	11W	233790	4066892* 🌍	45	11	34
SJ 03189	SJM2	SJ	1 2	2 3	22	29N	11W	233590	4066892* 🌍	45	20	25
SJ 03201	SJM2	SJ	3 1	2	23	29N	11W	235631	4067434* 🎒	60	30	30
SJ 03286	SJM2	SJ	1 3	3	23	29N	11W	234784	4066470*	38	28	10
SJ 03343	SJM2	SJ	1 4	1	24	29N	11W	236818	4067200*	35	18	17
SJ 03353	SJM2	SJ	3 1	2	23	29N	11W	235631	4067434* 🌍	45	25	20
SJ 03360	SJM2	SJ	2 4	3	14	29N	11W	235440	4068045* 🌍	40		
SJ 03479	SJM2	SJ	3 2	2 4	22	29N	11W	234396	4066669* 🌍	43	4	39
SJ 03503	SJM2	SJ	3 3	3 2	22	29N	11W	234007	4067082* 🌍	72	18	54
SJ 03532	SJM2	SJ	3 3	3 1	22	29N	11W	233196	4067109* 🌍	49	14	35
SJ 03546	SJM2	SJ	2 4	1	23	29N	11W	235412	4067245* 🎒	50	15	35
SJ 03548	SJM2	SJ	1 1	4	23	29N	11W	235602	4066839*	50	15	35
SJ 03550	SJM2	SJ	1 2	2 3	14	29N	11W	235252	4068445* 🌍	10		
SJ 03557	SJM2	SJ	1 3	3 1	23	29N	11W	234808	4067256* 🌍	50	15	35
SJ 03558	SJM2	SJ	1 3	3 1	23	29N	11W	234808	4067256* 🌍	50	15	35
SJ 03559	SJM2	SJ	4 3	3 1	23	29N	11W	235008	4067056*	45	15	30

\*UTM location was derived from PLSS - see Help

(In feet)

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a

water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

, 	POD Sub-		0	Q C	,			, ,	·	Donth	Donth	Water
POD Number	Code basin (	County	-	-	-	Tws	Rng	х	Y	-	-	Column
SJ 03567	SJM2	SJ	3 2	2 1	23	29N	11W	235226	4067445* 🎒	50	22	28
SJ 03579	SJM2	SJ	1 4	1 4	15	29N	11W	234431	4068068* 🌑	83	30	53
SJ 03591	SJM2	SJ	4 4	1 1	23	29N	11W	235412	4067045* 🌑	55	20	35
SJ 03733 POD1	SJM2	SJ	1 2	2 4	15	29N	11W	234444	4068469* 🎒	64	20	44
SJ 03747 POD1	SJM2	SJ	3 2	2 1	22	29N	11W	233613	4067495* 🌑	47	27	20
SJ 03847 POD1	SJM2	SJ	3 3	3	14	29N	11W	234873	4067937 🌑	74	27	47
SJ 03934 POD1	SJM2	SJ	4 2	2 4	22	29N	11W	234658	4066717 🌑	30	8	22
SJ 03935 POD1	SJM2	SJ	4 2	2 4	22	29N	11W	234693	4066639 🌑	30	10	20
SJ 03980 POD1	SJM2	SJ	4 4	1 3	14	29N	11W	236351	4067548 🌑	70	60	10
SJ 03982 POD1	SJM2	SJ	3 ′	1 1	22	29N	11W	233220	4067494 🌑	54	9	45
SJ 04015 POD1	SJM2	SJ	1 4	1 4	22	29N	11W	234392	4066411 🌑	50	14	36
SJ 04016 POD1	SJM2	SJ	2 4	1 4	22	29N	11W	234636	4066431 🌑	50	10	40
SJ 04137 POD1	SJM2	SJ	4 3	3 2	23	29N	11W	235865	4067052 🌑	44	36	8
SJ 04234 POD1	SJ	SJ			23	29N	11W	236117	4066717 🌍	11	6	5
SJ 04234 POD2	SJ	SJ			23	29N	11W	235948	4066623 🌑	10		
SJ 04254 POD1	SJ	SJ	3	3 4	11	29N	11W	235793	4069359 🌑	100	63	37
SJ 04254 POD2	SJ	SJ	3	3 4	11	29N	11W	235791	4069416 🌑	102	60	42
SJ 04254 POD3	SJ	SJ	3	3 4	11	29N	11W	235688	4069482 🌍	85	46	39
SJ 04254 POD4	SJ	SJ	3	3 4	11	29N	11W	235754	4069504 🌍	100	41	59
SJ 04254 POD5	SJ	SJ	3	3 4	11	29N	11W	235721	4069524 🌍	100	63	37
SJ 04254 POD6	SJ	SJ	3	3 4	11	29N	11W	235774	4069567 🌑	100	64	36
SJ 04254 POD7	SJ	SJ	3	3 4	11	29N	11W	235615	4069664 🌑	85	35	50
SJ 04254 POD8	SJ	SJ	3	3 4	11	29N	11W	235667	4069675 🌑	88	39	49
SJ 04254 POD9	SJ	SJ	3	3 4	11	29N	11W	235645	4069741 🎒	79	23	56
SJ 04273 POD1	SJM2	SJ	1 1	1 3	14	29N	11W	234900	4068537 🌍	50		
SJ 04291 POD1	SJM2	SJ	1 4	4 3	14	29N	11W	235314	4067967 🌍	55		
SJ 04349 POD1	SJM2	SJ	3 3	3 1	22	29N	11W	233159	4067219 🎒	56	56	0

#### \*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability for any particular purpose of the data.

Average Depth to Water: 27 feet

Minimum Depth: 3 feet

Maximum Depth: 300 feet

Record Count: 82

PLSS Search:

**Section(s):** 14, 10, 11, 12, **Township:** 29N **Range:** 11W

13, 15, 22, 23,

24



**APPENDIX C** 

Executed C-138 Solid Waste Acceptance Forms

Form C-138 Revised 08/01/11

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

# DECLIEST FOR ADDROVAL TO ACCEPT SOLID WASTE

Santa Fe, NM 87505

REQUEST FOR AFFROVAL TO ACCEPT SOLID WASTE			
1. Generator Name and Address:			
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401			
2. Originating Site:			
Blanco Storage S Tanks			
2 Location of Matarial (Street Address City, State on III STD).			
3. Location of Material (Street Address, City, State or ULSTR): Section 14 T 29 N R 11W, San Juan County, NM; 36.731441, -107.966012			
Section 14 T 29 N R 11W, San Juan County, NM; 36.731441, -107.966012  March 2019			
4. Source and Description of Waste: Condensate Tank Bottoms, Hydrocarbon impacted soil /sludge.			
Source: Tank Cleaning Activities.			
Description: Hydrocarbon/Produced impacted soil/sludge associated tank cleaning activities.  Estimated Volume 500 yd3 (bbls) Known Volume (to be entered by the operator at the end of the haul)			
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS			
Thorn Long			
I, Thomas Long , representative or authorized agent for Enterprise Products Operating do hereby			
Generator Signature			
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 2-20-19, representative for Enterprise Products Operating authorize to complete  Generator Signature			
Generator Signature			
the required testing/sign the Generator Waste Testing Certification.			
I, Grag Cracker, 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.			
5. Transporter: OFT			
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)			
San Calla			
PRINT NAME: (Veg (Vabre TITLE: Choire MANAGED DATE: 3/3/19			
SIGNATURE: TELEPHONE NO.: Surface Waste Management Facility Authorized Agent  TELEPHONE NO.: 505-632-0615			
<u> </u>			

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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

97057-0992 Form C-138 Revised 08/01/11

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

# REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

REQUEST FOR MITHOUTE TO MCCELL	SOLID WASTE
1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401	AFE: N41242 PayKey: RB21200 PM: Chad Timmerman
2. Originating Site: Blanco Storage S Tanks	
3. Location of Material (Street Address, City, State or ULSTR): NW ¼ NW ¼ Section 14 T 29 N R 11W, San Juan County, NM; 36.731516, -107.9	065945 April/May 2019
4. Source and Description of Waste:	
Source: Overtopping of a storage tank.  Description: Hydrocarbon/Condensate impacted soil associated truck over flow.	
Estimated Volume 50 (yd <sup>3</sup> ) bbls Known Volume (to be entered by the operator at the e	•
5. GENERATOR CERTIFICATION STATEMENT OF W	VASTE STATUS
I, Thomas Long from Lay, representative or authorized agent for Enterprise Products Opera Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US regulatory determination, the above described waste is: (Check the appropriate classification)	Environmental Protection Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production exempt waste.  **Operator Use Only: Waste Acceptance Frequency   Monthly	
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed haza subpart D, as amended. The following documentation is attached to demonstrate the a the appropriate items)	rdous waste as defined in 40 CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge	☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATE	EMENT FOR LANDFARMS
I, Thomas Long  4-15-19, representative for Enterprise Products Operating author  Generator Signature the required testing/sign the Generator Waste Testing Certification.  I, Cry Crabbu, representative for Envirotech, Inc. representative samples of the oil field waste have been subjected to the paint filter test and have been found to conform to the specific requirements applicable to landfarms pursuant to of the representative samples are attached to demonstrate the above-described waste confort 19.15.36 NMAC.	do hereby certify that tested for chloride content and that the samples o Section 15 of 19.15.36 NMAC. The results on the requirements of Section 15 of
5. Transporter: Wood Group or subcontractors OFT, Sucazea, Stan	form, Bailey's yura, La Plate
OCD Permitted Surface Waste Management Facility	
Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: I Address of Facility: Hilltop, NM  Method of Treatment and/or Disposal:  Evaporation Injection Treating Plant Landfarm	NM 01-0011    Landfill   Other
Waste Acceptance Status:	- A
PRINT NAME: Grey Construct SIGNATURE: TELEPHONE NO.:	DATE: 4/8/19 -632-0615

<u>District I</u>
1625 N. French Dr., Hobbs, NM 88240
<u>District II</u>
1301 W. Grand Avenue, Artesia, NM 88210
<u>District III</u>
1000 Rio Brazos Road, Aztec, NM 87410
<u>District IV</u>

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

97057-0992

Form C-138 Revised 08/01/11

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505			
REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE			
1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401	AFE: N41242 PayKey: RB21200 PM: Chad Timmerman		
2. Originating Site: Blanco Storage S Tanks			
3. Location of Material (Street Address, City, State or ULSTR): NW 1/4 NW 1/4 Section 14 T 29 N R 11W, San Juan County, NM; 36.731516, -107.965945	May / June 2019		
4. Source and Description of Waste: Source: Hydrocarbon impacted soil associated with remediation activities from overflowing of	a storage tank.		
Description: Hydrocarbon/Condensate impacted soil associated with remediation activities.  Estimated Volume 100 yd / bbls Known Volume (to be entered by the operator at the end of the	haul) 3842/335 yd3/ bbls		
5. GENERATOR CERTIFICATION STATEMENT OF WASTE ST	ATUS		
I, Thomas Long, representative or authorized agent for Enterprise Products Operating do he  Generator Signature			
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environm regulatory determination, the above described waste is: (Check the appropriate classification)	ental Protection Agency's July 1988		
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production open exempt waste.  Operator Use Only: Waste Acceptance Frequency Monthly Weekly	ations and are not mixed with non-		
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minim characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous wast subpart D, as amended. The following documentation is attached to demonstrate the above-described appropriate items)	te as defined in 40 CFR, part 261,		
☐ 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 5-23-19, representative for Enterprise Products Operating authorizes Environment of Cenerator Signature the required testing/sign the Generator Waste Testing Certification.	otech <u>, Inc.</u> to complete		
I,	15 of 19.15.36 NMAC. The results equirements of Section 15 of		
5. Transporter: Wood Group or subcontractors La Plata, Bailey's, Riley's, S.	tan Horn, Swaszea		
OCD Permitted Surface Waste Management Facility			
Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-00 Address of Facility: Hilltop, NM	11		
Method of Treatment and/or Disposal:  Evaporation Injection Treating Plant Landfarm Landfill	Other		
Waste Acceptance Status:  APPROVED  DENIED (Must B	Be Maintained As Permanent Record)		
	-/ -/ -		
PRINT NAME: Greg Crubrec TITLE: Enuño Managea TELEPHONE NO.:	DATE: <u>\$/22/19</u>		
Surface Waste Management Facility Authorized Agent 505-632-0615			

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

State of New Mexico Energy Minerals and Natural Resources 97257-0992 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-138 Revised 08/01/11

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

### 1220 S. St. Francis Dr., Santa Fe, NM 87505 REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE AFE: N41242 1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 PayKey: RB21200 PM: Chad Timmerman **Originating Site:** Blanco Storage S Tanks Location of Material (Street Address, City, State or ULSTR): June 2019 NW 1/4 NW 1/4 Section 14 T 29 N R 11W, San Juan County, NM; 36.731516, -107.965945 Source and Description of Waste: Source: Hydrocarbon impacted soil associated with remediation activities from overflowing of a storage tank. **Description:** Hydrocarbon/Condensate impacted soil associated with remediation activities. Estimated Volume 100 yd bbls Known Volume (to be entered by the operator at the end of the haul) GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I. Thomas Long representative or authorized agent for Enterprise Products Operating do hereby **Generator Signature** 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-Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load exempt waste. 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 6-20-19, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete I, Thomas Long **Generator Signature** the required testing/sign the Generator Waste Testing Certification. ( rubbal, 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. 5. Transporter: Wood Group or subcontractors 5 Weazea **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: Gray (rabbies TITLE: Envivo Managur DATE: 6/25/19 TELEPHONE NO.: SIGNATURE:

Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

97057-0992 Form

Form C-138 Revised 08/01/11

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

REQUEST FO	OR APPROVAL '	TO ACCEPT SOLID	WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401	AFE: N41242 PayKey: RB21200 PM: Chad Timmerman			
2. Originating Site: Blanco Storage S Tanks				
3. Location of Material (Street Address, City, State or ULSTR): NW 1/4 NW 1/4 Section 14 T 29 N R 11W, San Juan County, NM; 36.731516, -107.965945	Jan / Feb. 2020			
4. Source and Description of Waste: Source: Hydrocarbon impacted soil/sludge associated with remediation activities from overflowing of a storage tank.  Description: Hydrocarbon/Gendensate impacted soil associated with remediation activities.  Estimated Volume 300 (yd³ / bbls) Known Volume (to be entered by the operator at the end of the haul)				
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STA	ATUS			
I, Thomas Long representative or authorized agent for Enterprise Products Operating do hereby  Generator Signature  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 FO	DR LANDFARMS			
I, Thomas Long 1-6-20, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.				
I, Greg Cva blow, 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.				
5. Transporter: Riley Industrial or West States Energy Contractors or subcontractors. De K OCD Permitted Surface Waste Management Facility	bereru, Prado, Yucca			
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   SIGNATURE: Surface Waste Management Facility Authorized Agent   TITLE: Enviro 1714nng un   TELEPHONE NO.: 505-632-0615	Maintained As Permanent Record)  DATE:			

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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 97057-0992 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505

Form C-138 Revised 08/01/11

\*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 Ave, Farmington NM 87401	AFE: N41242 PayKey: RB21200 PM: Chad Timmerman		
2. Originating Site: Blanco Storage S Tanks			
3. Location of Material (Street Address, City, State or ULSTR): NW 1/2 NW 1/2 Section 14 T 29 N R 11W, San Juan County, NM; 36.731516, -107.96	5945 Feb. 2020		
4. Source and Description of Waste: Source: Hydrocarbon impacted soil/sludge associated with remediation activities from Description: Hydrocarbon/Gendensate impacted soil associated with remediation activities. Estimated Volume _300 (yd³ / bbls) Known Volume (to be entered by the operator at the e	nd of the haul) 18/6 yd³/bbls		
5. GENERATOR CERTIFICATION STATEMENT OF WA	ASTE STATUS		
I, Thomas Long , representative or authorized agent for Enterprise Products Operation Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US E regulatory determination, the above described waste is: (Check the appropriate classification)	Invironmental Protection Agency's July 1988		
RCRA Exempt: Oil field wastes generated from oil and gas exploration and product exempt waste.  **Operator Use Only: Waste Acceptance Frequency   Monthly			
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazard subpart D, as amended. The following documentation is attached to demonstrate the about the appropriate items)	lous waste as defined in 40 CFR, part 261,		
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge	☐ Other (Provide description in Box 4)		
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEM	MENT FOR LANDFARMS		
I, Thomas Long 2-10-2020, representative for Enterprise Products Operating author Generator Signature the required testing/sign the Generator Waste Testing Certification.	rizes Envirotech <u>, Inc.</u> to complete		
I, <u>Cweq Cva Lvez</u> , representative for <u>Envirotech, Inc.</u> representative samples of the oil field waste have been subjected to the paint filter test and tent have been found to conform to the specific requirements applicable to landfarms pursuant to of the representative samples are attached to demonstrate the above-described waste conform 19.15.36 NMAC.	Section 15 of 19.15.36 NMAC. The results to the requirements of Section 15 of		
5. Transporter: Riley Industrial or West States Energy Contractors or subcontractors OCD Permitted Surface Waste Management Facility	. Prado, Deterrera, ACE, Yac		
Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NI Address of Facility: Hilltop, NM Method of Treatment and/or Disposal:			
Waste Acceptance Status:	(Must Be Maintained As Permanent Record)		
	MAGE DATE: 2/10/20		

TELEPHONE NO.:

505-632-0615

Syriace Waste Management Facility Authorized Agent

SIGNATURE:



APPENDIX D

Photographic Documentation

Enterprise Field Services, LLC Site Characterization Report and Remediation Plan Blanco Storage S Tanks (2019) Ensolum Project No. 05A1226045



### Photograph 1

Photograph Description: View of the former storage area.



# Photograph 2

Photograph Description: View of the in-process excavation activities.



## Photograph 3



Enterprise Field Services, LLC Site Characterization Report and Remediation Plan Blanco Storage S Tanks (2019) Ensolum Project No. 05A1226045



### Photograph 4

Photograph Description: View of the in-process excavation activities.



### Photograph 5

Photograph Description: View of deferment area represented by samples S-24, S-25, S-32, and S-33.





## Photograph 6

Photograph Description: View of the in-process excavation activities and S-38 sample location (deferment area).



Enterprise Field Services, LLC Site Characterization Report and Remediation Plan Blanco Storage S Tanks (2019) Ensolum Project No. 05A1226045



### Photograph 7

Photograph Description: View of the in-process excavation activities.



### Photograph 8

Photograph Description: View of the in-process excavation activities.



# Photograph 9



Enterprise Field Services, LLC Site Characterization Report and Remediation Plan Blanco Storage S Tanks (2019) Ensolum Project No. 05A1226045



### Photograph 10

Photograph Description: View of the in-process excavation activities.



### Photograph 11

Photograph Description:

Photo on right: View of deferment area represented by samples HB-10@1'-5' and HB-11@1'-5' (from the south after part of the excavation had been backfilled during construction).

Photo on left: The area represents the samples that exceeded the holding time and were replaced by HB-10 & HB-11.





### Photograph 12



Enterprise Field Services, LLC Site Characterization Report and Remediation Plan Blanco Storage S Tanks (2019) Ensolum Project No. 05A1226045



### Photograph 13

Photograph Description: View of the in-process excavation activities.



# Photograph 14





**APPENDIX E** 

Regulatory Correspondence

From: Long, Thomas

To: "Smith, Cory, EMNRD (Cory.Smith@state.nm.us)"

Cc: Stone, Brian

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

**Date:** Thursday, September 5, 2019 7:45:00 AM

#### Cory,

This email is a notification that Enterprise will be installing soil boring and collecting soil samples for laboratory analysis in the west berm at the Blanco Storage facility tomorrow, September 6, 2019 at 9:00 a.m. This will be the replacement sampling for the samples that the laboratory allowed to expire. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

**Sent:** Friday, July 19, 2019 2:37 PM

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Brian,

OCD approves the alternative sampling time please include this approval in your final report.

Thanks.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115

**From:** Stone, Brian < bmstone@eprod.com>

**Sent:** Friday, July 19, 2019 9:45 AM

cory.smith@state.nm.us

**To:** Long, Thomas <<u>tilong@eprod.com</u>>; Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>> **Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

We plan to sample the northwest berm again at 8am on Monday July 22.

From: Stone, Brian

Sent: Thursday, July 18, 2019 3:53 PM

**To:** Long, Thomas <<u>tilong@eprod.com</u>>; 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)'

<<u>Cory.Smith@state.nm.us</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

#### Cory,

My apologies for not providing timely notification on sampling. Per our discussion, we sampled at 4 locations on the northwest berm today. We will continue to backfill and then take more samples higher up.

Brian Stone 970-210-2170

**From:** Long, Thomas < tjlong@eprod.com>

Sent: Monday, July 1, 2019 7:59 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage excavation. All sample results are now below the Tier I standers for this area. Enterprise will backfill the excavation with clean imported fill material which includes the reconstruction of the western berm. Enterprise will also install soil borings in the northwest berm, once backfill levels have been obtained to allow access. Enterprise will continue remediation activities to the west after the reconstruction of the western berm is completed. If you have any questions, please all or email.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Wednesday, June 26, 2019 2:02 PM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This is a follow up to our phone conversation. We will be sampling tomorrow at 10:00 am. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

Sent: Tuesday, June 25, 2019 4:52 PM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for Blanco Storage. All samples results are below the Tier I standard except for S-49 with 165 ppm TPH. We will be excavating more in this area tomorrow and will be re-sampling at 2:00 p.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tjlong@eprod.com

From: Long, Thomas

**Sent:** Friday, June 21, 2019 3:47 PM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us >

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory/Whitney,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis Monday, June 24, 2019 at 12:30 a.m. at Blanco Storage. If you have any questions, please call or email.

Sincerely,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Tuesday, June 18, 2019 3:48 PM **To:** Long, Thomas <<u>tilong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

Thank you for the update, as mentioned on the phone a separate C-141 is not needed for the incident. Please just make note of the incident on the current spill remediation and why additional samples were taken.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com>
Sent: Tuesday, June 18, 2019 2:45 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This is a follow up to our phone conversation earlier today. One of the temporary hoses for loading condensate came unclamped and released approximately 20 barrels of condensate into the western

excavation that we just remediated. We recovered a lot of the released fluids and stopped the release quickly. There was approximately three feet of backfill material that had been compacted in the bottom of the excavation as well. I will keep you informed as to when we have the impacted material excavated and we are ready to collect soil samples for laboratory analysis. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com



**From:** Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Monday, June 17, 2019 7:28 AM **To:** Long, Thomas <<u>tilong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

The OCD will approve the Deferment request for the contaminates underneath the equipment. Please keep in mind that to approve the deferment the contaminates must be fully delineated.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com>
Sent: Wednesday, June 12, 2019 4:08 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage excavation. All samples results are below the Tier I remediation standard except for S-38 with a result of 191 ppm TPH. I have also attached photos of this side wall to demonstrate the location and potential safety hazards. Enterprise requests a deferment of remediation activities in this direction until facility closure, as that additional excavating will jeopardize the structural integrity of the condensate tanks and their concrete foundations. Upon approval of the deferment request, Enterprise will backfill the main excavation with clean import fill material. We still have additional remediation on the west side of the excavation (West of S-41 and north of S-45). Enterprise will coordinate with you when remediation is completed in this area and when final closure samples will be collected for laboratory analysis. If you have any questions, please call or email.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

Sent: Monday, June 10, 2019 7:37 AM

To: 'Smith, Cory, EMNRD' < Cory.Smith@state.nm.us>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is a follow up to our phone conversation and to notify you Enterprise will collecting soil samples for laboratory analysis tomorrow, June 11, 2019 at 8:30 a.m. If you have any questions, please all or email.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Sent:** Friday, May 10, 2019 7:43 AM **To:** Long, Thomas < tilong@eprod.com>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

OCD approves Enterprises Deferment request for Samples S-24/25. Please Include Enterprises determination and OCD approval in your final C-141.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Thursday, May 9, 2019 3:15 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch, lab report, pictures and summary table for the Blanco Storage S

Tanks excavation. We have completed the delineation of the impacted soil underneath and towards the loading dock and drip tank (SE corner of the containment) by installing soil borings horizontally utilizing a hand auger. Aliquots were collected from the soil borings to create composite soil samples S-32 and S-33 at 2-3 foot depths into the side wall. I have calculated approximately 18 cubic yards of impacted soil in place. I used a 20 feet (side wall length) X 8 feet (side wall height) X 3 feet (section thickness). So, 20x8x3/27 = ~18 cubic yards. Any further excavating in this area will jeopardize the existing structures (loading dock and drip tank). Enterprise requests a deferment for the remediation activities until facility closure for the impacted soil in the areas associated with soil composite samples S-24 and S-25. Please acknowledge agreement to this deferment request. If you have any questions, please call or email.

### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Sent:** Monday, May 6, 2019 3:52 PM **To:** Long, Thomas < tilong@eprod.com>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

Has there been any delineation on the other side of the concrete loading dock that Characterizes the size of the remaining impacts?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Monday, May 6, 2019 3:41 PM

To: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage S Tanks excavation. All samples results are below the site specific remediation standard except for S-24 (312 ppm TPH) and S-25 (102 PPM TPH). Enterprise requests a variance for these two sample locations, as that additional remediation by excavating is not practicable, as that it is under mining the concrete loading dock area causing structural instability. The areas where soils samples S-27 through S-31 were collected will be backfilled with clean imported fill material. Please acknowledge if you accept this variance request. If you have any questions, please call or email.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Long, Thomas

**Sent:** Thursday, May 2, 2019 9:03 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to notify you that Enterprise will collect soil samples for laboratory analysis, tomorrow May 3, 2019 at 10:00 a.m. at the Blanco Storage S Tanks excavation. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Monday, April 29, 2019 7:53 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

We will not be ready to sample this morning. I will keep you informed as to the when we will be ready to sample again. If you have any questions, please all or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Friday, April 26, 2019 10:59 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to notify that Enterprise anticipates collecting soil samples for laboratory analysis at for Blanco Storage S Tanks excavation on Monday, April 29, 2019 at 11:00 a.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

**From:** Long, Thomas

Sent: Thursday, April 25, 2019 7:15 AM

**To:** 'Smith, Cory, EMNRD' < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for Blanco Storage S Tanks excavation. We have completed remediation on the east wall and southeast corner of the containment. We will continue remediation on the south and west walls. I will keep you informed as to when we will collect soil samples for laboratory analysis. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Tuesday, April 23, 2019 7:45 AM **To:** Long, Thomas < tilong@eprod.com>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

Got it, hopefully I can get an inspector to it today.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Tuesday, April 23, 2019 7:44 AM

To: Smith, Cory, EMNRD < Cory.Smith@state.nm.us >

**Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Did you get this notification that I sent yesterday as well?

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

Sent: Monday, April 22, 2019 1:18 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

<brandon.powell@state.nm.us>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis from the east wall and southeast wall at the Blanco Storage S Tanks excavation tomorrow, April 23, 2019 at 12:00 p.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tjlong@eprod.com

From: Powell, Brandon, EMNRD < <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a>>

Sent: Wednesday, April 17, 2019 2:18 PM

To: Long, Thomas <tilong@eprod.com>; Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

What would be your proposed timeline be for the additional delineation? Also would there be any constraints to performing in situ remediation? Finally what is the site ranking and why?

Thank You

**Brandon Powell** 

Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Long, Thomas <tilong@eprod.com>
Sent: Wednesday, April 17, 2019 1:10 PM

To: Powell, Brandon, EMNRD < <a href="mailto:Brandon.Powell@state.nm.us">Brandon, EMNRD</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Brandon

<<u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

#### Brandon,

Not completely. Vertical delineation is complete. It terminates at the sandstone approximately eight feet below the base of the secondary containment floor. Lateral delineation to the east is almost complete. Lateral delineation to the west stops at the western berm, as that additional delineation to the west does not exist because of the vertical drop. Northern delineation is not practicable utilizing a track hoe because of the existing concrete foundation and tank farm. Southern delineation is almost complete, but is also not practicable utilizing at track hoe because of the existing utilities and structures. Continuing delineation during remediation has become hazardous and very difficult. Enterprise requests to backfill the current excavation and continue delineation activities by installing soil borings utilizing a hand auger or drilling rig if necessary. Upon completion of delineation activities, development of at remediation plan and subsequent abatement plan. Please acknowledge if you are in agreement. If an onsite meeting is necessary to understand the hazards and difficulties of the project, I am available tomorrow anytime.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us>

**Sent:** Wednesday, April 17, 2019 11:56 AM

To: Long, Thomas <tilong@eprod.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Good morning Tom,

Has the contamination under the lines and under the tanks been fully delineated?

Thank You

**Brandon Powell** 

Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Long, Thomas <tilong@eprod.com>
Sent: Wednesday, April 17, 2019 7:34 AM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us >; Powell, Brandon, EMNRD

<<u>Brandon.Powell@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945 **Importance:** High

Cory/Brandon,

Please find the attached updated site map, analytical summary, lab reports and photos for the Blanco Storage S Tank excavation. I will have to send another email as that all the attachments will not transmit to NMOCD. We have managed to remediate most of the impacted soil. The entire base at sandstone has been remediated. A majority of the east and southeast wall where accessible have been remediated. We cannot continue north as that we will jeopardize the structural stability of the tanks to the north. We cannot move much farther south because of the underground utilities and the existing tank. Excavating the west berm poses a safety risk as that there is a 12-15 foot drop on the west side of the berm. We are in a bind with safety concerns and operational problems mounting with condensate backing up throughout the basin. We need to complete the construction of the new tank farm at this Blanco Storage facility in order to bring condensate in from the field tanks and compressor stations. If this tank farm is not completed and back in service in the near future, we risk losing storage volume in the field and at the compressor stations, which in turn will affect gas gathering operations, as that we cannot pig our pipelines to remove the fluids. Please see the attached pictures and map for details of the underground structures, utilities, safety hazards including height of the western berm and locations where there is a possibility of jeopardizing the structural integrity of the existing equipment. Enterprise requests deferment of further remediation until closure of the facility. Please acknowledge if you agree to this request. Please give me a call to discuss further in detail. I will send a second email with additional photographs.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Friday, April 12, 2019 8:17 AM

**To:** 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Brandon Powell

(<u>brandon.powell@state.nm.us</u>) < <u>brandon.powell@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

### Cory/Brandon,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis at the Blanco Storage S Tanks excavation on Monday, April 15, 2019 at 11:00 a.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Fields, Vanessa, EMNRD < <u>Vanessa.Fields@state.nm.us</u>>

**Sent:** Thursday, March 28, 2019 7:56 AM **To:** Long, Thomas <<u>tilong@eprod.com</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Smith, Cory, EMNRD < Cory.Smith@state.nm.us > **Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Good morning Tom,

Per our phone conversation the OCD grants approval for Enterprise to backfill the base of the excavation and continue remediation to the east, west and south.

Thank you,

Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119

Cell: (505) 419-0463

vanessa.fields@state.nm.us

From: Long, Thomas < tilong@eprod.com > Sent: Wednesday, March 27, 2019 4:44 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD

<<u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

Please find the attached site sketch, summary table and lab report for the Blanco Storage S Tanks excavation. I would like to meet one of you onsite tomorrow to discuss the results and the path forward if it is possible. We have good floor samples as that we ripped through about two feet of sandstone. We are getting close on a couple of wall samples, but you guys have to some see what we are up against. I have attached some pictures. We would like to backfill the base and then continue east, west and south. Please acknowledge receipt of this email and a possibility of meeting in the morning. Maybe at 10:00 a.m.? If you have any questions, please call or email.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

Sent: Monday, March 25, 2019 4:53 PM

**To:** 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>) < <u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

I know this is kind of short notice, but we would like to collect soil samples for laboratory analysis at the Blanco Storage S Tanks excavation tomorrow, Tuesday, March 26, 2019 at 12:00 p.m. Can one of you be available to witness sampling? Please let me know if you can or if we have to reschedule.

Thank you,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Monday, March 25, 2019 9:45 AM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>; Fields, Vanessa,

EMNRD (Vanessa.Fields@state.nm.us) < Vanessa.Fields@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

This email is to notify you that sampling activities at the Blanco Storage S Tanks excavation will be postponed due to additional excavating is required. I will keep you informed as to when we will ready to collect soil sample for laboratory analysis. If you have any questions, please call or email.

Sincerely,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

**From:** Long, Thomas

**Sent:** Friday, March 22, 2019 8:52 AM

To: 'Smith, Cory, EMNRD (Cory, Smith@state.nm.us)' < Cory, Smith@state.nm.us>; Fields, Vanessa,

EMNRD (Vanessa.Fields@state.nm.us) < Vanessa.Fields@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

This email is to notify your that Enterprise will be collecting soil samples for laboratory analysis at the Blanco Storage S Tanks excavation on Monday, March 25, 2019 at 12:00 p.m. This will be a partial sampling as that will have to remediate this release in sections due to equipment and structural stability hazards. Please let me know if you will be onsite to witness sampling. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Friday, March 8, 2019 9:44 AM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>; Fields, Vanessa,

EMNRD (Vanessa.Fields@state.nm.us) < Vanessa.Fields@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Vanessa/Cory,

This email is to notify you that Enterprise has encountered a historical release while removing tank old condensate tanks from the Blanco Storage S containment. The tanks were removed yesterday and we began earth work today and discovered the impacted soil. The release site is located UL D Section 14 T 29 N R 11W, 36.731516, -107.965945. I will keep you informed as the when we will be ready to collect final closure samples. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

 From:
 Smith, Cory, EMNRD

 To:
 Long, Thomas

 Cc:
 Stone, Brian

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

**Date:** Tuesday, January 28, 2020 10:24:59 AM

Tom.

Enterprise may proceeded with sampling at 2PM. I will try to get an inspector to swing by.

#### Thanks

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tjlong@eprod.com> Sent: Tuesday, January 28, 2020 10:00 AM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

Cc: Stone, Brian <br/> <br/> bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is a follow up to our phone conversation earlier. I have attached a site sketch from where we will be collecting the soil sample (S-59) today. As mentioned earlier, it looks like it will be around 2:00 p.m. today. Enterprise requests permission to proceed. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Thursday, January 23, 2020 7:39 AM **To:** Long, Thomas <<u>tiplong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

So long as the contamination is fully delineated vertically and horizontally Enterprise may backfill and request deferment due to the permanent foundation equipment. If the deferment request meets the requirements in 19.15.29.12 NMAC it will be granted.

Please keep in mind that with a deferral the site status will remain open until remediation is completed.

My recommendation if possible would be to continue remediation to reduce future environmental risk.

Thanks.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com > Sent: Wednesday, January 22, 2020 3:28 PM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch, lab reports and photos for the Blanco Storage excavation. Soil samples results for S-54 (2,010 PPM TPH and 142.1 PPM BTEX) and S-57 (8,180 PPM TPH and 386 PPM BTEX) exceed NMOCD Tier I remediation standards. These soils samples were collected from the east side wall of the excavation where the transfer pumps and their concrete foundations exist and we cannot continue excavating in that direction without jeopardizing the structural integrity of the pumps and their foundations. I have attached pictures from where the soil samples were collected. Enterprise requests a deferment of remediation activities until facility closure in these

areas under the transfer pumps and their concrete foundations associated with soils samples S-54 and S-57. In addition, Enterprise requests to backfill the areas from which soils samples S-53, S-55, S-56, and S-58 were collected, as that sample results are compliant with NMOCD Tier I soil remediation standards. Backfilling these areas would allow us to safely continue remediation to the west and south. Please acknowledge acceptance of this deferment and backfilling request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Tuesday, January 21, 2020 4:00 PM

To: 'Smith, Cory, EMNRD' < Cory. Smith@state.nm.us >

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis tomorrow, January 22, 2020 at 1:00 p.m. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Sent:** Tuesday, January 21, 2020 7:26 AM **To:** Long, Thomas <<u>tilong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

OCD approves the 400 sqft Sampling event, please include this approval for your final report.

As for the sampling time, as mentioned on the phone I probably cannot make a 12pm sampling event, and have a tentative meeting at 2PM. Please let me know the sampling time asap due to weather etc.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Tuesday, January 21, 2020 7:18 AM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please the attached site sketch and lab report from the Blanco Storage excavation. S-54 (slope) is a side wall where there is a concrete foundation and pumps. We are continuing in the area of S-53 and to the west and south. We still maybe sampling at noon today. I will keep you informed.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Tuesday, January 21, 2020 7:11 AM **To:** Long, Thomas < tilong@eprod.com > **Cc:** Stone, Brian < bmstone@eprod.com >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

What areas are being sampled from the previous sampling event?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Monday, January 20, 2020 12:27 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to notify you that Enterprise will collecting soil samples for laboratory analysis tomorrow, January 21, 2020 at 12:00 p.m. Also, previously on this project you approved a sample interval variance of 400 square feet per composite sample. Enterprise requests to continue utilizing the 400 square foot sample interval for the duration of the project. Please acknowledge acceptance of this request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Monday, January 13, 2020 2:54 PM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to inform you that Enterprise will be continuing the remediation efforts a Blanco Storage tomorrow. We will remediating to the south and west of S-39. I have attached the latest site sketch for reference. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Sent:** Friday, July 19, 2019 2:37 PM

**To:** Stone, Brian < bmstone@eprod.com >; Long, Thomas < tilong@eprod.com >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Brian,

OCD approves the alternative sampling time please include this approval in your final report.

Thanks,

Cory Smith

**Environmental Specialist** 

Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

Sent: Friday, July 19, 2019 9:45 AM

**To:** Long, Thomas <<u>tilong@eprod.com</u>>; Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>> **Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

We plan to sample the northwest berm again at 8am on Monday July 22.

From: Stone, Brian

Sent: Thursday, July 18, 2019 3:53 PM

To: Long, Thomas <tilong@eprod.com>; 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)'

<<u>Cory.Smith@state.nm.us</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

#### Cory,

My apologies for not providing timely notification on sampling. Per our discussion, we sampled at 4 locations on the northwest berm today. We will continue to backfill and then take more samples higher up.

Brian Stone 970-210-2170

From: Long, Thomas <tilong@eprod.com>
Sent: Monday, July 1, 2019 7:59 AM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage excavation. All sample results are now below the Tier I standers for this area. Enterprise will backfill the excavation with clean imported fill material which includes the reconstruction of the western berm. Enterprise will also install soil borings in the northwest berm, once backfill levels have been obtained to allow access. Enterprise will continue remediation activities to the west after the reconstruction of the

western berm is completed. If you have any questions, please all or email.

## Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Wednesday, June 26, 2019 2:02 PM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This is a follow up to our phone conversation. We will be sampling tomorrow at 10:00 am. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Tuesday, June 25, 2019 4:52 PM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for Blanco Storage. All samples results are below the Tier I standard except for S-49 with 165 ppm TPH. We will be excavating more in this area tomorrow and will be re-sampling at 2:00 p.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

Sent: Friday, June 21, 2019 3:47 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory/Whitney,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis Monday, June 24, 2019 at 12:30 a.m. at Blanco Storage. If you have any questions, please call or email.

Sincerely,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Tuesday, June 18, 2019 3:48 PM **To:** Long, Thomas <<u>tilong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

Thank you for the update, as mentioned on the phone a separate C-141 is not needed for the incident. Please just make note of the incident on the current spill remediation and why additional samples were taken.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 115 cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Tuesday, June 18, 2019 2:45 PM

To: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This is a follow up to our phone conversation earlier today. One of the temporary hoses for loading condensate came unclamped and released approximately 20 barrels of condensate into the western excavation that we just remediated. We recovered a lot of the released fluids and stopped the release quickly. There was approximately three feet of backfill material that had been compacted in the bottom of the excavation as well. I will keep you informed as to when we have the impacted material excavated and we are ready to collect soil samples for laboratory analysis. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Sent:** Monday, June 17, 2019 7:28 AM **To:** Long, Thomas <<u>tijlong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

The OCD will approve the Deferment request for the contaminates underneath the equipment. Please keep in mind that to approve the deferment the contaminates must be

fully delineated.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Wednesday, June 12, 2019 4:08 PM

To: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage excavation. All samples results are below the Tier I remediation standard except for S-38 with a result of 191 ppm TPH. I have also attached photos of this side wall to demonstrate the location and potential safety hazards. Enterprise requests a deferment of remediation activities in this direction until facility closure, as that additional excavating will jeopardize the structural integrity of the condensate tanks and their concrete foundations. Upon approval of the deferment request, Enterprise will backfill the main excavation with clean import fill material. We still have additional remediation on the west side of the excavation (West of S-41 and north of S-45). Enterprise will coordinate with you when remediation is completed in this area and when final closure samples will be collected for laboratory analysis. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Monday, June 10, 2019 7:37 AM

**To:** 'Smith, Cory, EMNRD' < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is a follow up to our phone conversation and to notify you Enterprise will collecting soil samples for laboratory analysis tomorrow, June 11, 2019 at 8:30 a.m. If you have any questions, please all or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Friday, May 10, 2019 7:43 AM **To:** Long, Thomas < tilong@eprod.com>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

OCD approves Enterprises Deferment request for Samples S-24/25. Please Include Enterprises determination and OCD approval in your final C-141.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 115 cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Thursday, May 9, 2019 3:15 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch, lab report, pictures and summary table for the Blanco Storage S Tanks excavation. We have completed the delineation of the impacted soil underneath and towards the loading dock and drip tank (SE corner of the containment) by installing soil borings horizontally utilizing a hand auger. Aliquots were collected from the soil borings to create composite soil samples S-32 and S-33 at 2-3 foot depths into the side wall. I have calculated approximately 18 cubic yards of impacted soil in place. I used a 20 feet (side wall length) X 8 feet (side wall height) X 3 feet (section thickness). So,  $20x8x3/27 = ^18$  cubic yards. Any further excavating in this area will jeopardize the existing structures (loading dock and drip tank). Enterprise requests a deferment for the remediation activities until facility closure for the impacted soil in the areas associated with soil composite samples S-24 and S-25. Please acknowledge agreement to this deferment request. If you have any questions, please call or email.

# Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Monday, May 6, 2019 3:52 PM **To:** Long, Thomas < tilong@eprod.com>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

Has there been any delineation on the other side of the concrete loading dock that Characterizes the size of the remaining impacts?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Monday, May 6, 2019 3:41 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage S Tanks excavation. All samples results are below the site specific remediation standard except for S-24 (312 ppm TPH) and S-25 (102 PPM TPH). Enterprise requests a variance for these two sample locations, as that additional remediation by excavating is not practicable, as that it is under mining the concrete loading dock area causing structural instability. The areas where soils samples S-27 through S-31 were collected will be backfilled with clean imported fill material. Please acknowledge if you accept this variance request. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Thursday, May 2, 2019 9:03 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to notify you that Enterprise will collect soil samples for laboratory analysis, tomorrow May 3, 2019 at 10:00 a.m. at the Blanco Storage S Tanks excavation. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Monday, April 29, 2019 7:53 AM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

We will not be ready to sample this morning. I will keep you informed as to the when we will be ready to sample again. If you have any questions, please all or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tjlong@eprod.com

From: Long, Thomas

**Sent:** Friday, April 26, 2019 10:59 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to notify that Enterprise anticipates collecting soil samples for laboratory analysis at for

Blanco Storage S Tanks excavation on Monday, April 29, 2019 at 11:00 a.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tjlong@eprod.com

From: Long, Thomas

**Sent:** Thursday, April 25, 2019 7:15 AM

To: 'Smith, Cory, EMNRD' < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for Blanco Storage S Tanks excavation. We have completed remediation on the east wall and southeast corner of the containment. We will continue remediation on the south and west walls. I will keep you informed as to when we will collect soil samples for laboratory analysis. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Tuesday, April 23, 2019 7:45 AM **To:** Long, Thomas < tilong@eprod.com>

Cc: Stone, Brian <a href="mailto:bmstone@eprod.com">bmstone@eprod.com</a>; Powell, Brandon, EMNRD <a href="mailto:bmstone@eprod.com">Brandon.Powell@state.nm.us</a>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

Got it, hopefully I can get an inspector to it today.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Tuesday, April 23, 2019 7:44 AM

**To:** Smith, Cory, EMNRD < <a href="mailto:cory.Smith@state.nm.us">cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Did you get this notification that I sent yesterday as well?

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

**From:** Long, Thomas

**Sent:** Monday, April 22, 2019 1:18 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>; Brandon Powell (brandon.powell@state.nm.us)

<brandon.powell@state.nm.us>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis from the east wall and southeast wall at the Blanco Storage S Tanks excavation tomorrow, April 23, 2019 at 12:00 p.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us>

Sent: Wednesday, April 17, 2019 2:18 PM

To: Long, Thomas <tilong@eprod.com>; Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

What would be your proposed timeline be for the additional delineation? Also would there be any constraints to performing in situ remediation? Finally what is the site ranking and why?

Thank You

**Brandon Powell** 

Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Long, Thomas <tilong@eprod.com>
Sent: Wednesday, April 17, 2019 1:10 PM

To: Powell, Brandon, EMNRD < <a href="mailto:Brandon.Powell@state.nm.us">Brandon, EMNRD</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a> <a href="mailto:Brandon.Brandon

<Corv.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Brandon,

Not completely. Vertical delineation is complete. It terminates at the sandstone approximately eight feet below the base of the secondary containment floor. Lateral delineation to the east is almost complete. Lateral delineation to the west stops at the western berm, as that additional delineation to the west does not exist because of the vertical drop. Northern delineation is not practicable utilizing a track hoe because of the existing concrete foundation and tank farm. Southern delineation is almost complete, but is also not practicable utilizing at track hoe because of the existing utilities and structures. Continuing delineation during remediation has become hazardous and very difficult. Enterprise requests to backfill the current excavation and continue delineation activities by installing soil borings utilizing a hand auger or drilling rig if necessary. Upon completion of delineation activities, development of at remediation plan and subsequent abatement plan. Please acknowledge if you are in agreement. If an onsite meeting is necessary to understand the hazards and difficulties of the project, I am available tomorrow anytime.

Sincerely,

Thomas J. Long Senior Environmental Scientist Enterprise Products Company 614 Reilly Ave. Farmington, New Mexico 87401 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com



From: Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us>

**Sent:** Wednesday, April 17, 2019 11:56 AM

**To:** Long, Thomas <<u>tilong@eprod.com</u>>; Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Good morning Tom,

Has the contamination under the lines and under the tanks been fully delineated?

Thank You

**Brandon Powell** 

Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Long, Thomas <tilong@eprod.com>
Sent: Wednesday, April 17, 2019 7:34 AM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us >; Powell, Brandon, EMNRD

<<u>Brandon.Powell@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945 **Importance:** High

Cory/Brandon,

Please find the attached updated site map, analytical summary, lab reports and photos for the Blanco Storage S Tank excavation. I will have to send another email as that all the attachments will not transmit to NMOCD. We have managed to remediate most of the impacted soil. The entire base at sandstone has been remediated. A majority of the east and southeast wall where accessible have been remediated. We cannot continue north as that we will jeopardize the structural stability of the tanks to the north. We cannot move much farther south because of the underground utilities and the existing tank. Excavating the west berm poses a safety risk as that there is a 12-15 foot drop on the west side of the berm. We are in a bind with safety concerns and operational problems

mounting with condensate backing up throughout the basin. We need to complete the construction of the new tank farm at this Blanco Storage facility in order to bring condensate in from the field tanks and compressor stations. If this tank farm is not completed and back in service in the near future, we risk losing storage volume in the field and at the compressor stations, which in turn will affect gas gathering operations, as that we cannot pig our pipelines to remove the fluids. Please see the attached pictures and map for details of the underground structures, utilities, safety hazards including height of the western berm and locations where there is a possibility of jeopardizing the structural integrity of the existing equipment. Enterprise requests deferment of further remediation until closure of the facility. Please acknowledge if you agree to this request. Please give me a call to discuss further in detail. I will send a second email with additional photographs.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Friday, April 12, 2019 8:17 AM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; Brandon Powell

(brandon.powell@state.nm.us) <br/> brandon.powell@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory/Brandon,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis at the Blanco Storage S Tanks excavation on Monday, April 15, 2019 at 11:00 a.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com **From:** Fields, Vanessa, EMNRD < <u>Vanessa.Fields@state.nm.us</u>>

**Sent:** Thursday, March 28, 2019 7:56 AM **To:** Long, Thomas <<u>tilong@eprod.com</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Smith, Cory, EMNRD < Cory.Smith@state.nm.us > **Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Good morning Tom,

Per our phone conversation the OCD grants approval for Enterprise to backfill the base of the excavation and continue remediation to the east, west and south.

Thank you,

Vanessa Fields Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 119

Cell: (505) 419-0463

vanessa.fields@state.nm.us

From: Long, Thomas < tilong@eprod.com>
Sent: Wednesday, March 27, 2019 4:44 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD

<<u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

Please find the attached site sketch, summary table and lab report for the Blanco Storage S Tanks excavation. I would like to meet one of you onsite tomorrow to discuss the results and the path forward if it is possible. We have good floor samples as that we ripped through about two feet of sandstone. We are getting close on a couple of wall samples, but you guys have to some see what we are up against. I have attached some pictures. We would like to backfill the base and then continue east, west and south. Please acknowledge receipt of this email and a possibility of meeting in the morning. Maybe at 10:00 a.m.? If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Monday, March 25, 2019 4:53 PM

To: 'Smith, Cory, EMNRD (<a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>; Fields, Vanessa,

EMNRD (<u>Vanessa.Fields@state.nm.us</u>) < <u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

I know this is kind of short notice, but we would like to collect soil samples for laboratory analysis at the Blanco Storage S Tanks excavation tomorrow, Tuesday, March 26, 2019 at 12:00 p.m. Can one of you be available to witness sampling? Please let me know if you can or if we have to reschedule.

Thank you,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

**From:** Long, Thomas

**Sent:** Monday, March 25, 2019 9:45 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' <<u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa,

EMNRD (<u>Vanessa.Fields@state.nm.us</u>) < <u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

This email is to notify you that sampling activities at the Blanco Storage S Tanks excavation will be postponed due to additional excavating is required. I will keep you informed as to when we will ready to collect soil sample for laboratory analysis. If you have any guestions, please call or email.

Sincerely,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Friday, March 22, 2019 8:52 AM

To: 'Smith, Cory, EMNRD (<a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>; Fields, Vanessa,

EMNRD (Vanessa.Fields@state.nm.us) < Vanessa.Fields@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory/Vanessa,

This email is to notify your that Enterprise will be collecting soil samples for laboratory analysis at the Blanco Storage S Tanks excavation on Monday, March 25, 2019 at 12:00 p.m. This will be a partial sampling as that will have to remediate this release in sections due to equipment and structural stability hazards. Please let me know if you will be onsite to witness sampling. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



**From:** Long, Thomas

Sent: Friday, March 8, 2019 9:44 AM

To: 'Smith, Cory, EMNRD (<a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>; Fields, Vanessa,

EMNRD (<u>Vanessa.Fields@state.nm.us</u>) <<u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Vanessa/Cory,

This email is to notify you that Enterprise has encountered a historical release while removing tank old condensate tanks from the Blanco Storage S containment. The tanks were removed yesterday and we began earth work today and discovered the impacted soil. The release site is located UL D

Section 14 T 29 N R 11W, 36.731516, -107.965945. I will keep you informed as the when we will be ready to collect final closure samples. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.

 From:
 Smith, Cory, EMNRD

 To:
 Long, Thomas

 Cc:
 Stone, Brian; Miller, Greq

**Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

**Date:** Wednesday, February 26, 2020 7:36:59 AM

Tom.

Deferment request are made by submitting a full site characterization/remediation plan and requesting a Deferment.

As previously mentioned I don't see any issues with granting the deferment so long as the impacts are fully characterized and Enterprise provide a time table for the proposed remediation.

In this case your essentially submitting your full closure report, but calling it a site characterization report/remediation plan.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

**From:** Long, Thomas <tjlong@eprod.com> **Sent:** Tuesday, February 25, 2020 12:54 PM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and laboratory analytical summary table for the Blanco Storage excavation. I can send the laboratory reports if required. As pervious discussed during the onsite meeting with you, Enterprise expressed concerns about continuing the excavation activities around the in service existing pipelines in the area of Soil Sample S-61 and to the west due to safety hazards. As discussed and agreed upon, Enterprise installed hydro-excavated soil borings (HB-12 through HB-15) to the west and south of Soil Sample S-61. All sample results were below NMOCD Tier I soil remediation standards except HB-15. The estimated area of impacted soil above NMOCD Tier I soil remediation standards is outlined in green on the attached site sketch. This area has an estimated volume of 250 cubic yards with TPH concentrations ranging from 350 ppm to 940 ppm and no BTEX concentrations exceeding NMOCD remediation standards. Enterprise requests

deferment of remediation activities in this area (outlined in green) until facility decommissioning or until pipeline maintenance activities are scheduled, at which time remediation activities can safely be executed. Please acknowledge agreement of this deferment request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Thursday, February 6, 2020 9:44 AM **To:** Long, Thomas <<u>tilong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

Sounds good ill put it on the calendar.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Thursday, February 6, 2020 9:33 AM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Thanks for the sample variance approval. As previously discussed, I would like to schedule an onsite meeting with you at the Blanco Storage excavation for Monday, February 10, 2020 at 10:00 a.m. to discuss the path forward on this site. Please let me know this still a convenient time. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Thursday, February 6, 2020 9:05 AM **To:** Long, Thomas <<u>tilong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Tom,

I am ok with sampling today.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com> Sent: Thursday, February 6, 2020 7:15 AM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage excavation. Soil Sample S-65 (base) exceeded the NMOCD Tier I remediation standards. The other two soil samples are below the Tier I standards. Enterprise will excavate more in the area of S-65 and resample late this morning or early this afternoon. Enterprise requests a variance for the required 48 hour sample notification. In addition, will be collecting soil samples from two hydro-excavated soil borings west of Soil Sample S-61 to determine delineation to the west. Please acknowledge acceptance of the variance request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas < tilong@eprod.com > Sent: Monday, February 3, 2020 1:26 PM

To: Smith, Cory, EMNRD < Cory.Smith@state.nm.us >

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: Re: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory,

I sent this email earlier. This is notification that Enterprise will collect soil samples for laboratory analysis at Blanco Storage tomorrow, February 4, 2020 at 1:00 p.m. If you have any questions, please call or email.

Tom Long

On Jan 28, 2020, at 10:24 AM, Smith, Cory, EMNRD < Cory.Smith@state.nm.us > wrote:

Tom,

Enterprise may proceeded with sampling at 2PM. I will try to get an inspector to swing by.

#### Thanks

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com > Sent: Tuesday, January 28, 2020 10:00 AM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This email is a follow up to our phone conversation earlier. I have attached a site sketch from where we will be collecting the soil sample (S-59) today. As mentioned earlier, it looks like it will be around 2:00 p.m. today. Enterprise requests permission to proceed. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Thursday, January 23, 2020 7:39 AM **To:** Long, Thomas <<u>tiplong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom.

So long as the contamination is fully delineated vertically and horizontally Enterprise

may backfill and request deferment due to the permanent foundation equipment. If the deferment request meets the requirements in 19.15.29.12 NMAC it will be granted.

Please keep in mind that with a deferral the site status will remain open until remediation is completed.

My recommendation if possible would be to continue remediation to reduce future environmental risk.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com > Sent: Wednesday, January 22, 2020 3:28 PM

To: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

Please find the attached site sketch, lab reports and photos for the Blanco Storage excavation. Soil samples results for S-54 (2,010 PPM TPH and 142.1 PPM BTEX) and S-57 (8,180 PPM TPH and 386 PPM BTEX) exceed NMOCD Tier I remediation standards. These soils samples were collected from the east side wall of the excavation where the transfer pumps and their concrete foundations exist and we cannot continue excavating in that direction without jeopardizing the structural integrity of the pumps and their foundations. I have attached pictures from where the soil samples were collected. Enterprise requests a deferment of remediation activities until facility closure in these areas under the transfer pumps and their concrete foundations associated with soils samples S-54 and S-57. In addition, Enterprise requests to backfill the areas from which soils samples S-53, S-55, S-56, and S-58 were collected, as that sample results are compliant with NMOCD Tier I soil remediation standards. Backfilling these areas would allow us to safely continue remediation to the west and south. Please acknowledge acceptance of this deferment and backfilling request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Long, Thomas

**Sent:** Tuesday, January 21, 2020 4:00 PM

To: 'Smith, Cory, EMNRD' < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis tomorrow, January 22, 2020 at 1:00 p.m. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Tuesday, January 21, 2020 7:26 AM **To:** Long, Thomas <tilong@eprod.com> **Cc:** Stone, Brian <bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom,

OCD approves the 400 sqft Sampling event, please include this approval for your final report.

As for the sampling time, as mentioned on the phone I probably cannot make a 12pm sampling event, and have a tentative meeting at 2PM. Please let me know the sampling time asap due to weather etc.

### Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Tuesday, January 21, 2020 7:18 AM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

Please the attached site sketch and lab report from the Blanco Storage excavation. S-54 (slope) is a side wall where there is a concrete foundation and pumps. We are continuing in the area of S-53 and to the west and south. We still maybe sampling at noon today. I will keep you informed.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Tuesday, January 21, 2020 7:11 AM **To:** Long, Thomas < tilong@eprod.com > **Cc:** Stone, Brian < bmstone@eprod.com >

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

Tom,

What areas are being sampled from the previous sampling event?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com>
Sent: Monday, January 20, 2020 12:27 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This email is to notify you that Enterprise will collecting soil samples for laboratory analysis tomorrow, January 21, 2020 at 12:00 p.m. Also, previously on this project you approved a sample interval variance of 400 square feet per composite sample. Enterprise requests to continue utilizing the 400 square foot sample interval for the duration of the project. Please acknowledge acceptance of this request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

**From:** Long, Thomas

**Sent:** Monday, January 13, 2020 2:54 PM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

Cory,

This email is to inform you that Enterprise will be continuing the remediation efforts a Blanco Storage tomorrow. We will remediating to the south and west of S-39. I have attached the latest site sketch for reference. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

**From:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Sent:** Friday, July 19, 2019 2:37 PM

**To:** Stone, Brian < bmstone@eprod.com >; Long, Thomas < tilong@eprod.com > **Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Brian,

OCD approves the alternative sampling time please include this approval in your final report.

Thanks.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

**From:** Stone, Brian < bmstone@eprod.com>

**Sent:** Friday, July 19, 2019 9:45 AM

**To:** Long, Thomas <<u>tilong@eprod.com</u>>; Smith, Cory, EMNRD

<<u>Cory.Smith@state.nm.us</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

### Cory,

We plan to sample the northwest berm again at 8am on Monday July 22.

From: Stone, Brian

**Sent:** Thursday, July 18, 2019 3:53 PM

**To:** Long, Thomas <<u>tilong@eprod.com</u>>; 'Smith, Cory, EMNRD

(Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

## Cory,

My apologies for not providing timely notification on sampling. Per our discussion, we sampled at 4 locations on the northwest berm today. We will continue to backfill and then take more samples higher up.

Brian Stone 970-210-2170

From: Long, Thomas < tilong@eprod.com>

Sent: Monday, July 1, 2019 7:59 AM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

#### Cory,

Please find the attached site sketch and lab report for the Blanco Storage excavation. All sample results are now below the Tier I standers for this area. Enterprise will backfill the excavation with clean imported fill material which includes the reconstruction of the western berm. Enterprise will also install soil borings in the northwest berm, once backfill levels have been obtained to allow access. Enterprise will continue remediation activities to the west after the reconstruction of the western berm is completed. If you have any questions, please all or email.

## Sincerely,

Thomas J. Long Senior Environmental Scientist Enterprise Products Company 614 Reilly Ave. Farmington, New Mexico 87401 505-599-2286 (office) 505-215-4727 (Cell)

#### tjlong@eprod.com

<image001.jpg>

From: Long, Thomas

**Sent:** Wednesday, June 26, 2019 2:02 PM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This is a follow up to our phone conversation. We will be sampling tomorrow at 10:00 am. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Tuesday, June 25, 2019 4:52 PM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

Please find the attached site sketch and lab report for Blanco Storage. All samples results are below the Tier I standard except for S-49 with 165 ppm TPH. We will be excavating more in this area tomorrow and will be re-sampling at 2:00 p.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Friday, June 21, 2019 3:47 PM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us >

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

# Cory/Whitney,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis Monday, June 24, 2019 at 12:30 a.m. at Blanco Storage. If you have any questions, please call or email.

Sincerely,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Tuesday, June 18, 2019 3:48 PM **To:** Long, Thomas <<u>tilong@eprod.com</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom,

Thank you for the update, as mentioned on the phone a separate C-141 is not needed for the incident. Please just make note of the incident on the current spill remediation and why additional samples were taken.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Tuesday, June 18, 2019 2:45 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This is a follow up to our phone conversation earlier today. One of the temporary hoses for loading condensate came unclamped and released approximately 20 barrels of condensate into the western excavation that we just remediated. We recovered a lot of the released fluids and stopped the release quickly. There was approximately three feet of backfill material that had been compacted in the bottom of the excavation as well. I will keep you informed as to when we have the impacted material excavated and we are ready to collect soil samples for laboratory analysis. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Monday, June 17, 2019 7:28 AM **To:** Long, Thomas <tilong@eprod.com> **Cc:** Stone, Brian <br/>
bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom,

The OCD will approve the Deferment request for the contaminates underneath the equipment. Please keep in mind that to approve the deferment the contaminates must be fully delineated.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Wednesday, June 12, 2019 4:08 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

Please find the attached site sketch and lab report for the Blanco Storage excavation. All samples results are below the Tier I remediation standard except for S-38 with a result of 191 ppm TPH. I have also attached photos of this side wall to demonstrate the location and potential safety hazards. Enterprise requests a deferment of remediation activities in this direction until facility closure, as that additional excavating will jeopardize the structural integrity of the condensate tanks and their concrete foundations. Upon approval of the deferment request, Enterprise will backfill the main excavation with clean import fill material. We still have additional remediation on the west side of the excavation (West of S-41 and north of S-45). Enterprise will coordinate with you when remediation is completed in this area and when final closure samples will be collected for laboratory analysis. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

**From:** Long, Thomas

**Sent:** Monday, June 10, 2019 7:37 AM

To: 'Smith, Cory, EMNRD' < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD

<Brandon.Powell@state.nm.us>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This email is a follow up to our phone conversation and to notify you Enterprise will collecting soil samples for laboratory analysis tomorrow, June 11, 2019 at 8:30 a.m. If

you have any questions, please all or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Smith, Cory, EMNRD < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Sent:** Friday, May 10, 2019 7:43 AM **To:** Long, Thomas < tilong@eprod.com>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD

<Brandon.Powell@state.nm.us>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom.

OCD approves Enterprises Deferment request for Samples S-24/25. Please Include Enterprises determination and OCD approval in your final C-141.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Thursday, May 9, 2019 3:15 PM

**To:** Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD

<Brandon.Powell@state.nm.us>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

Please find the attached site sketch, lab report, pictures and summary table for the Blanco Storage S Tanks excavation. We have completed the delineation of the impacted soil underneath and towards the loading dock and drip tank (SE corner of the containment) by installing soil borings horizontally utilizing a hand auger. Aliquots were collected from the soil borings to create composite soil samples S-32 and S-33 at 2-3 foot depths into the side wall. I have calculated approximately 18 cubic yards of impacted soil in place. I used a 20 feet (side wall length) X 8 feet (side wall height) X 3 feet (section thickness). So, 20x8x3/27 = ~18 cubic yards. Any further excavating in this area will jeopardize the existing structures (loading dock and drip tank). Enterprise requests a deferment for the remediation activities until facility closure for the impacted soil in the areas associated with soil composite samples S-24 and S-25. Please acknowledge agreement to this deferment request. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Monday, May 6, 2019 3:52 PM **To:** Long, Thomas < tilong@eprod.com>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD

<<u>Brandon.Powell@state.nm.us</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom,

Has there been any delineation on the other side of the concrete loading dock that Characterizes the size of the remaining impacts?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 115 corv.smith@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Monday, May 6, 2019 3:41 PM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

#### Cory,

Please find the attached site sketch and lab report for the Blanco Storage S Tanks excavation. All samples results are below the site specific remediation standard except for S-24 (312 ppm TPH) and S-25 (102 PPM TPH). Enterprise requests a variance for these two sample locations, as that additional remediation by excavating is not practicable, as that it is under mining the concrete loading dock area causing structural instability. The areas where soils samples S-27 through S-31 were collected will be backfilled with clean imported fill material. Please acknowledge if you accept this variance request. If you have any questions, please call or email.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

**From:** Long, Thomas

**Sent:** Thursday, May 2, 2019 9:03 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

#### Cory,

This email is to notify you that Enterprise will collect soil samples for laboratory analysis, tomorrow May 3, 2019 at 10:00 a.m. at the Blanco Storage S Tanks

excavation. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

Sent: Monday, April 29, 2019 7:53 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

We will not be ready to sample this morning. I will keep you informed as to the when we will be ready to sample again. If you have any questions, please all or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

**Sent:** Friday, April 26, 2019 10:59 AM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This email is to notify that Enterprise anticipates collecting soil samples for laboratory analysis at for Blanco Storage S Tanks excavation on Monday, April 29, 2019 at 11:00 a.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

**From:** Long, Thomas

**Sent:** Thursday, April 25, 2019 7:15 AM

To: 'Smith, Cory, EMNRD' < <a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD

<Brandon.Powell@state.nm.us>

**Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516, -107.965945

Cory,

Please find the attached site sketch and lab report for Blanco Storage S Tanks excavation. We have completed remediation on the east wall and southeast corner of the containment. We will continue remediation on the south and west walls. I will keep you informed as to when we will collect soil samples for laboratory analysis. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

**Sent:** Tuesday, April 23, 2019 7:45 AM **To:** Long, Thomas < tilong@eprod.com>

Cc: Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD

<Brandon.Powell@state.nm.us>

**Subject:** RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom,

Got it, hopefully I can get an inspector to it today.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com>
Sent: Tuesday, April 23, 2019 7:44 AM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Powell, Brandon, EMNRD

<Brandon.Powell@state.nm.us>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

Did you get this notification that I sent yesterday as well?

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

**From:** Long, Thomas

**Sent:** Monday, April 22, 2019 1:18 PM

To: Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>>
Cc: Stone, Brian <<u>bmstone@eprod.com</u>>; Brandon Powell
(<u>brandon.powell@state.nm.us</u>) <<u>brandon.powell@state.nm.us</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis from the east wall and southeast wall at the Blanco Storage S Tanks excavation tomorrow, April 23, 2019 at 12:00 p.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us>

Sent: Wednesday, April 17, 2019 2:18 PM

**To:** Long, Thomas < tilong@eprod.com >; Smith, Cory, EMNRD

<<u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Tom,

What would be your proposed timeline be for the additional delineation? Also would

there be any constraints to performing in situ remediation? Finally what is the site ranking and why?

#### Thank You

**Brandon Powell** 

Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Long, Thomas < tilong@eprod.com> Sent: Wednesday, April 17, 2019 1:10 PM

To: Powell, Brandon, EMNRD < Brandon.Powell@state.nm.us >; Smith, Cory, EMNRD

<<u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

#### Brandon,

Not completely. Vertical delineation is complete. It terminates at the sandstone approximately eight feet below the base of the secondary containment floor. Lateral delineation to the east is almost complete. Lateral delineation to the west stops at the western berm, as that additional delineation to the west does not exist because of the vertical drop. Northern delineation is not practicable utilizing a track hoe because of the existing concrete foundation and tank farm. Southern delineation is almost complete, but is also not practicable utilizing at track hoe because of the existing utilities and structures. Continuing delineation during remediation has become hazardous and very difficult. Enterprise requests to backfill the current excavation and continue delineation activities by installing soil borings utilizing a hand auger or drilling rig if necessary. Upon completion of delineation activities, development of at remediation plan and subsequent abatement plan. Please acknowledge if you are in agreement. If an onsite meeting is necessary to understand the hazards and difficulties of the project, I am available tomorrow anytime.

#### Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

<image001.jpg>

**From:** Powell, Brandon, EMNRD < <u>Brandon.Powell@state.nm.us</u>>

**Sent:** Wednesday, April 17, 2019 11:56 AM

**To:** Long, Thomas < tilong@eprod.com >; Smith, Cory, EMNRD

<<u>Corv.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Good morning Tom,

Has the contamination under the lines and under the tanks been fully delineated?

#### Thank You

**Brandon Powell** 

Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Long, Thomas < tilong@eprod.com>
Sent: Wednesday, April 17, 2019 7:34 AM

**To:** Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>; Powell, Brandon, EMNRD

<<u>Brandon.Powell@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Importance: High

Cory/Brandon,

Please find the attached updated site map, analytical summary, lab reports and photos for the Blanco Storage S Tank excavation. I will have to send another email as that all the attachments will not transmit to NMOCD. We have managed to remediate most of the impacted soil. The entire base at sandstone has been remediated. A majority of the east and southeast wall where accessible have been remediated. We cannot continue north as that we will jeopardize the structural stability of the tanks to the north. We cannot move much farther south because of the underground utilities and the existing tank. Excavating the west berm poses a safety risk as that there is a 12-15 foot drop on the west side of the berm. We are in a bind with safety concerns and operational problems mounting with condensate backing up throughout the basin. We need to complete the construction of the new tank farm at this Blanco Storage facility in order to bring condensate in from the field tanks and compressor stations. If this tank farm is not completed and back in service in the near future, we risk losing storage

volume in the field and at the compressor stations, which in turn will affect gas gathering operations, as that we cannot pig our pipelines to remove the fluids. Please see the attached pictures and map for details of the underground structures, utilities, safety hazards including height of the western berm and locations where there is a possibility of jeopardizing the structural integrity of the existing equipment. Enterprise requests deferment of further remediation until closure of the facility. Please acknowledge if you agree to this request. Please give me a call to discuss further in detail. I will send a second email with additional photographs.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

**From:** Long, Thomas

Sent: Friday, April 12, 2019 8:17 AM

**To:** 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Brandon Powell (<u>brandon.powell@state.nm.us</u>) < <u>brandon.powell@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Cory/Brandon,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis at the Blanco Storage S Tanks excavation on Monday, April 15, 2019 at 11:00 a.m. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Fields, Vanessa, EMNRD < <u>Vanessa.Fields@state.nm.us</u>>

**Sent:** Thursday, March 28, 2019 7:56 AM

To: Long, Thomas <tjlong@eprod.com>

**Cc:** Stone, Brian < <a href="mailto:bmstone@eprod.com">bmstone@eprod.com</a>>; Smith, Cory, EMNRD

<<u>Cory.Smith@state.nm.us</u>>

Subject: RE: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W,

36.731516, -107.965945

Good morning Tom,

Per our phone conversation the OCD grants approval for Enterprise to backfill the base of the excavation and continue remediation to the east, west and south.

Thank you,

Vanessa Fields Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 119

Cell: (505) 419-0463

vanessa.fields@state.nm.us

From: Long, Thomas < tilong@eprod.com>
Sent: Wednesday, March 27, 2019 4:44 PM

**To:** Smith, Cory, EMNRD < Cory.Smith@state.nm.us >; Fields, Vanessa, EMNRD

<Vanessa.Fields@state.nm.us>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: [EXT] FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory/Vanessa,

Please find the attached site sketch, summary table and lab report for the Blanco Storage S Tanks excavation. I would like to meet one of you onsite tomorrow to discuss the results and the path forward if it is possible. We have good floor samples as that we ripped through about two feet of sandstone. We are getting close on a couple of wall samples, but you guys have to some see what we are up against. I have attached some pictures. We would like to backfill the base and then continue east, west and south. Please acknowledge receipt of this email and a possibility of meeting in the morning. Maybe at 10:00 a.m.? If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

From: Long, Thomas

Sent: Monday, March 25, 2019 4:53 PM

**To:** 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>) < <u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

#### Cory/Vanessa,

I know this is kind of short notice, but we would like to collect soil samples for laboratory analysis at the Blanco Storage S Tanks excavation tomorrow, Tuesday, March 26, 2019 at 12:00 p.m. Can one of you be available to witness sampling? Please let me know if you can or if we have to reschedule.

Thank you,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

Sent: Monday, March 25, 2019 9:45 AM

**To:** 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>) < <u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

**Subject:** FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

#### Cory/Vanessa,

This email is to notify you that sampling activities at the Blanco Storage S Tanks excavation will be postponed due to additional excavating is required. I will keep you informed as to when we will ready to collect soil sample for laboratory analysis. If you

have any questions, please call or email.

Sincerely,

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

**From:** Long, Thomas

**Sent:** Friday, March 22, 2019 8:52 AM

**To:** 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>) < <u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: FW: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Cory/Vanessa,

This email is to notify your that Enterprise will be collecting soil samples for laboratory analysis at the Blanco Storage S Tanks excavation on Monday, March 25, 2019 at 12:00 p.m. This will be a partial sampling as that will have to remediate this release in sections due to equipment and structural stability hazards. Please let me know if you will be onsite to witness sampling. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

**From:** Long, Thomas

**Sent:** Friday, March 8, 2019 9:44 AM

**To:** 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>) < <u>Vanessa.Fields@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com>

Subject: Blanco Storage S Tanks - UL D Section 14 T 29 N R 11W, 36.731516,

-107.965945

Vanessa/Cory,

This email is to notify you that Enterprise has encountered a historical release while removing tank old condensate tanks from the Blanco Storage S containment. The tanks were removed yesterday and we began earth work today and discovered the impacted soil. The release site is located UL D Section 14 T 29 N R 11W, 36.731516, -107.965945. I will keep you informed as the when we will be ready to collect final closure samples. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com

<image001.jpg>

This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.



This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.



**APPENDIX F** 

Table 1 – Soil Analytical Summary



# TABLE 1 Blanco Storage S Tanks (2019) SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite	Sample Depth (feet)	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX <sup>1</sup>	TPH GRO	TPH DRO	TPH MRO	Total Combined TPH	Chloride
		G - Grab	(1001)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(GRO/DRO/MRO) <sup>1</sup> (mg/kg)	(mg/kg)
		Natural Resources I vision Closure Criter		10	NE	NE	NE	50				100	600
				Excavation Compo	site Soil Samples Re	emoved by Excavation	n and Transported	to the Landfarm for D	isposal/Remediation	n			
S-2	3.08.19	С	0 to 5	2.4	12	6.5	58	79	810	100	<50	910	<60
S-3	3.08.19	С	0 to 5	1.9	1.7	3.9	28	36	640	49	<47	690	<60
S-4	3.08.19	С	0 to 3	<0.44	<0.88	2.6	32	35	1,000	110	54	1,200	<60
S-6	3.26.19	С	0 to 8	<0.020	0.63	1.3	9.5	11	220	92	75	390	<60
S-7	3.26.19	С	0 to 8	<0.021	<0.042	0.85	6.3	7.2	160	160	120	440	<60
S-11	3.26.19	С	0 to 8	0.36	3.6	2.3	28	34	440	100	85	630	<60
S-14	4.15.19	С	0 to 8	<0.10	<0.20	<0.20	<0.40	ND	<20	440	250	690	<60
S-17	4.15.19	С	0 to 8	<0.024	<0.048	0.18	1.0	1.2	32	56	73	160	<60
S-18	4.15.19	С	0 to 8	<0.020	<0.041	0.061	0.47	0.53	24	13	<49	37	<60
S-22	4.23.19	С	0 to 8	<0.022	<0.044	<0.044	<0.088	ND	8.2	<9.3	<47	8.2	<60
S-23	4.25.19	С	0 to 8	0.58	3.4	8.3	70	82	1,300	520	210	2,000	<61
S-41	6.11.19	С	8	<0.020	<0.041	<0.041	0.14	0.14	<4.1	14	<48	14	<60
S-49	6.24.19	С	8	<0.019	<0.038	<0.038	<0.076	ND	<3.8	95	70	170	<60
S-65	2.4.20	С	9	<0.021	<0.042	0.055	0.12	0.18	8.7	140	150	300	<60
S-66	2.6.20	С	10	<0.019	<0.037	< 0.037	<0.075	ND	<3.7	69	96	170	<60
						Excavation Comp	osite Soil Samples						
S-1	3.08.19	С	5	0.035	0.064	0.051	0.17	0.32	8.0	<9.8	<49	8.0	<60
S-5	3.08.19	С	0 to 3	2.3	32	9.1	110	150	1,900	64	<48	2,000	<60
S-8	3.26.19	С	0 to 8	<0.099	<0.20	<0.20	1.4	1.4	390	990	570	2,000	<60
S-9	3.26.19	С	0 to 8	<0.11	<0.22	0.65	2.2	2.9	130	24	<50	150	<60
S-10	3.26.19	С	0 to 8	<0.023	0.18	0.13	2.6	2.9	46	<10	<50	46	<60
S-12	3.26.19	С	8	<0.020	<0.041	<0.041	<0.081	ND	<4.1	<9.4	<47	ND	<60
S-13	3.26.19	С	8	<0.021	<0.041	<0.041	<0.082	ND	<4.1	<9.9	<50	ND	<60
S-15	4.15.19	С	0 to 8	<0.021	<0.041	<0.041	<0.083	ND	<4.1	<9.0	<45	ND	<60
S-16	4.15.19	С	0 to 8	<0.026	<0.051	<0.051	<0.10	ND	<5.1	<9.3	<47	ND	<60
S-19	4.15.19	С	8	0.028	0.078	<0.049	<0.097	0.11	<4.9	<9.3	<46	ND	<60
S-20	4.23.19	С	0 to 8	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<9.5	<47	ND	<60
S-21	4.23.19	С	0 to 8	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.7	<48	ND	<60
S-24	5.03.19	С	0 to 8	<0.11	<0.21	<0.21	1.6	1.6	22	150	140	310	<60
S-25	5.03.19	С	0 to 8	<0.12	<0.24	0.25	0.61	0.86	<24	48	55	100	<60
S-26	5.03.19	С	0 to 8	<0.11	<0.22	<0.22	<0.44	ND	<22	<9.8	<49	ND	<60
S-27	5.03.19	С	0 to 8	<0.020	<0.041	<0.041	<0.082	ND	<4.1	<9.5	<47	ND	<59
S-28	5.03.19	С	0 to 8	<0.022	<0.044	<0.044	<0.088	ND	4.8	10	<48	15	<60
S-29	5.03.19	С	8	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<9.7	<49	ND	<60
S-30	5.03.19	С	8	<0.026	<0.051	<0.051	<0.10	ND	<5.1	<9.8	<49	ND	<60
S-31	5.03.19	С	8	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.6	<48	ND	<60



# TABLE 1 Blanco Storage S Tanks (2019) SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite	Sample Depth (feet)	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX <sup>1</sup>	TPH GRO	TPH DRO	TPH MRO	Total Combined TPH	Chloride
		G - Grab	(1553)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(GRO/DRO/MRO) <sup>1</sup> (mg/kg)	(mg/kg)
		Natural Resources I vision Closure Criteri		10	NE	NE	NE	50				100	600
***S-32	5.07.19	С	0 to 8	<0.024	<0.047	0.095	<0.095	0.095	9.0	15	<47	24	<60
***S-33	5.07.19	С	0 to 8	<0.022	<0.043	<0.043	<0.087	ND	<4.3	<9.9	<49	ND	<61
S-34	6.11.19	С	0 to 12	<0.018	<0.036	<0.036	<0.073	ND	<3.6	<9.7	<48	ND	<60
S-35	6.11.19	С	0 to 12	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.5	<47	ND	<60
S-36	6.11.19	С	10	<0.021	<0.043	<0.043	<0.086	ND	<4.3	<9.7	<48	ND	<60
S-37	6.11.19	С	12	<0.022	<0.045	<0.045	<0.090	ND	<4.5	<9.2	<46	ND	<60
S-38	6.11.19	С	0 to 12	<0.10	<0.21	<0.21	<0.41	ND	21	96	74	190	<60
S-39	6.11.19	С	0 to 6	<0.12	<0.23	<0.23	<0.46	ND	<23	42	<49	42	<60
S-40	6.11.19	С	12	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.9	<50	ND	<59
S-42	6.11.19	С	10	<0.022	<0.045	<0.045	<0.089	ND	<4.5	10	<47	10	<60
S-43	6.11.19	С	12	<0.025	<0.050	<0.050	<0.10	ND	<4.7	<9.8	<49	ND	<60
S-44	6.11.19	С	0 to 12	<0.021	<0.042	<0.042	<0.083	ND	<4.2	<9.8	<49	ND	<60
S-45	6.11.19	С	0 to 10	<0.10	<0.21	<0.21	0.57	0.57	22	19	<49	41	<60
S-46	6.24.19	С	12	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<10	<50	ND	<60
S-47	6.24.19	С	10 to 12	<0.020	<0.039	< 0.039	<0.079	ND	<3.9	<9.8	<49	ND	<61
S-48	6.24.19	С	12	<0.020	<0.039	< 0.039	<0.079	ND	<3.9	<9.7	<48	ND	<60
S-50	6.24.19	С	12	<0.022	<0.044	<0.044	<0.089	ND	<4.4	64	<49	64	<60
S-51	6.24.19	С	10	<0.022	<0.044	<0.044	<0.087	ND	<4.4	11	<49	11	<60
S-52	6.27.19	С	9	<0.019	<0.039	< 0.039	<0.078	ND	<3.9	<9.7	<49	ND	<60
S-53	1.17.20	С	15	<0.11	<0.22	<0.22	<0.45	ND	<22	<9.8	<49	ND	<60
S-54	1.17.20	С	0 to 15	1.1	20	11	110	140	1,500	360	150	2,000	<60
S-55	1.21.20	С	15	<0.089	<0.18	<0.18	<0.36	ND	<18	<9.3	<46	ND	<60
S-56	1.21.20	С	0 to 15	<0.095	<0.19	<0.19	<0.38	ND	<19	<9.5	<47	ND	<60
S-57	1.21.20	С	0 to 15	15	75	26	270	390	5,900	1,400	880	8,200	<60
S-58	1.22.20	С	0 to 15	<0.022	<0.044	<0.044	<0.088	ND	<4.4	<9.3	<47	ND	<60
S-59	1.28.20	С	12	<0.11	<0.22	<0.22	<0.43	ND	<22	16	<45	16	<60
S-60	1.28.20	С	0 to 12	<0.11	<0.22	<0.22	<0.44	ND	<22	<8.8	<44	ND	<60
S-61	1.29.20	С	0 to 12	0.25	6.2	3.7	36	46	550	240	150	940	<60
S-62	2.04.20	С	0 to 8	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<9.4	<47	ND	<60
S-63	2.04.20	С	0 to 9	<0.021	<0.041	<0.041	<0.082	ND	<4.1	21	<45	21	<60
S-64	2.04.20	С	9	<0.079	<0.16	<0.16	<0.31	ND	<16	36	<48	36	<60
S-67	2.10.20	С	10.5	<0.022	<0.044	<0.044	<0.088	ND	<4.4	<9.6	<48	ND	69



# TABLE 1 Blanco Storage S Tanks (2019) SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX <sup>1</sup>	TPH GRO	TPH DRO	TPH MRO	Total Combined TPH (GRO/DRO/MRO)1	Chloride
				(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
		Natural Resources I vision Closure Criteri		10	NE	NE	NE	50				100	600
						Delineation	Soil Samples						
HB-1 @1'-H	HB-1 @1'-H 7.18.19 G 6.5 <0.021 <0.041 <0.041 <0.082 ND <4.1 <9.4 <47											ND	<60
HB-2 @4'-H	7.18.19	G	6.5	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<9.9	<50	ND	<60
HB-3 @4'-H	7.18.19	G	6.5	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.1	<46	ND	<60
HB-4 @4'-H	7.18.19	G	6.5	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.2	<46	ND	<60
**HB-5	7.23.19	G	1 H	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<8.9	<45	ND	<60
**HB-6	7.23.19	G	1 H	<0.025	<0.050	< 0.050	<0.10	ND	<5.0	<8.6	<43	ND	<60
**HB-7	7.23.19	G	1 H	<0.025	<0.050	< 0.050	<0.099	ND	<5.0	<9.7	<48	ND	<60
**HB-8	7.23.19	G	1 H	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<9.5	<47	ND	<60
**HB-9	7.23.19	G	1 H	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.8	<49	ND	<60
HB-10 @1'-5'	9.06.19	С	1 to 5	<0.025	< 0.049	< 0.049	<0.099	ND	<4.9	<11	<53	ND	<60
HB-11 @1'-5'	9.06.19	С	1 to 5	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.7	<49	ND	<60
HB-12 @0-11'	2.12.20	С	0 to 11	<0.025	<0.050	< 0.050	<0.099	ND	<5.0	<9.7	<49	ND	75
HB-12 @14'	2.12.20	G	14	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<8.8	<44	ND	<60
HB-13 @0-11'	2.12.20	С	0 to 11	<0.025	<0.050	< 0.050	<0.099	ND	<5.0	<9.8	<49	ND	<60
HB-13 @11'	2.12.20	G	11	<0.025	<0.050	< 0.050	<0.099	ND	<5.0	<9.6	<48	ND	<60
HB-14 @0-9'	2.12.20	С	0 to 9	<0.025	<0.050	< 0.050	<0.099	ND	<5.0	<9.6	<48	ND	<60
HB-14 @9'	2.12.20	G	9	<0.025	<0.050	< 0.050	<0.10	ND	<5.0	<9.8	<49	ND	<60
HB-15 @0-11'	2.12.20	С	0 to 11	<0.12	<0.25	1.1	7.8	8.9	320	130	60	510	<60
HB-15 @11'	2.12.20	G	11	0.26	0.60	0.54	4.1	5.5	110	230	100	440	<60

Note: Concentrations in **bold** and yellow exceed the applicable NM EMNRD Closure Criteria

ND = Not Detected above the Practical Quantitation Limits or Reporting Limits

NA = Not Analyzed

NE = Not Established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

H = Horizontal Grab Samples

<sup>1 =</sup> Total combined concentrations are rounded to two (2) significant figures to match the laboratory resolution of the individual constituents.

<sup>\*\*=</sup>Laboratory exceeded holding time. The area was resampled by soil borings HB-10@1'-5" & HB-11@1'-5'

<sup>\*\*\*=</sup> Sample consisted of aliquots that were collected at horizontal depths of one (1) to two (2) feet into a eight (8) foot vertical wall utilzing a hand auger.



# APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation



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

March 12, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 1903457

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/9/2019 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 3/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-1 5'

 Project:
 Blanco Storage
 Collection Date: 3/8/2019 2:00:00 PM

 Lab ID:
 1903457-001
 Matrix: SOIL
 Received Date: 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	ND	60		mg/Kg	20	3/11/2019 12:58:26 PM	43603
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/11/2019 11:10:40 AM	43602
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/11/2019 11:10:40 AM	43602
Surr: DNOP	96.8	70-130		%Rec	1	3/11/2019 11:10:40 AM	43602
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: RAA
Gasoline Range Organics (GRO)	8.0	4.7		mg/Kg	1	3/11/2019 12:52:03 PM	43599
Surr: BFB	131	73.8-119	S	%Rec	1	3/11/2019 12:52:03 PM	43599
EPA METHOD 8021B: VOLATILES						Analyst	: RAA
Benzene	0.035	0.024		mg/Kg	1	3/11/2019 12:52:03 PM	B58248
Toluene	0.064	0.047		mg/Kg	1	3/11/2019 12:52:03 PM	B58248
Ethylbenzene	0.051	0.047		mg/Kg	1	3/11/2019 12:52:03 PM	B58248
Xylenes, Total	0.17	0.095		mg/Kg	1	3/11/2019 12:52:03 PM	B58248
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	3/11/2019 12:52:03 PM	B58248

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

- \* 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
- PQL Practical Quanitative Limit
- 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 Page 1 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 3/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-2 0-5'

 Project:
 Blanco Storage
 Collection Date: 3/8/2019 2:05:00 PM

 Lab ID:
 1903457-002
 Matrix: SOIL
 Received Date: 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: smb
Chloride	ND	60		mg/Kg	20	3/11/2019 1:10:51 PM	43603
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: Irm
Diesel Range Organics (DRO)	100	10		mg/Kg	1	3/11/2019 11:59:12 AM	43602
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/11/2019 11:59:12 AM	43602
Surr: DNOP	98.3	70-130		%Rec	1	3/11/2019 11:59:12 AM	43602
EPA METHOD 8015D: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	810	230		mg/Kg	50	3/11/2019 1:15:30 PM	43599
Surr: BFB	132	73.8-119	S	%Rec	50	3/11/2019 1:15:30 PM	43599
EPA METHOD 8021B: VOLATILES						Analyst	: RAA
Benzene	2.4	1.1		mg/Kg	50	3/11/2019 1:15:30 PM	B58248
Toluene	12	2.3		mg/Kg	50	3/11/2019 1:15:30 PM	B58248
Ethylbenzene	6.5	2.3		mg/Kg	50	3/11/2019 1:15:30 PM	B58248
Xylenes, Total	58	4.6		mg/Kg	50	3/11/2019 1:15:30 PM	B58248
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	50	3/11/2019 1:15:30 PM	B58248

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

- \* 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
- PQL Practical Quanitative Limit
  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 Page 2 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 3/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-3 0-5'

 Project:
 Blanco Storage
 Collection Date: 3/8/2019 2:10:00 PM

 Lab ID:
 1903457-003
 Matrix: SOIL
 Received Date: 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: smb
Chloride	ND	60		mg/Kg	20	3/11/2019 1:23:16 PM	43603
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	49	9.4		mg/Kg	1	3/11/2019 12:47:26 PM	43602
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/11/2019 12:47:26 PM	43602
Surr: DNOP	99.7	70-130		%Rec	1	3/11/2019 12:47:26 PM	43602
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: RAA
Gasoline Range Organics (GRO)	640	87		mg/Kg	20	3/11/2019 1:38:50 PM	43599
Surr: BFB	176	73.8-119	S	%Rec	20	3/11/2019 1:38:50 PM	43599
EPA METHOD 8021B: VOLATILES						Analyst	: RAA
Benzene	1.9	0.43		mg/Kg	20	3/11/2019 1:38:50 PM	B58248
Toluene	1.7	0.87		mg/Kg	20	3/11/2019 1:38:50 PM	B58248
Ethylbenzene	3.9	0.87		mg/Kg	20	3/11/2019 1:38:50 PM	B58248
Xylenes, Total	28	1.7		mg/Kg	20	3/11/2019 1:38:50 PM	B58248
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	20	3/11/2019 1:38:50 PM	B58248

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

- \* 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
- PQL Practical Quanitative Limit
- 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 Page 3 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 3/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-4 0-3'

 Project:
 Blanco Storage
 Collection Date: 3/8/2019 1:30:00 PM

 Lab ID:
 1903457-004
 Matrix: SOIL
 Received Date: 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: smb
Chloride	ND	60		mg/Kg	20	3/11/2019 1:35:41 PM	43603
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	: Irm
Diesel Range Organics (DRO)	110	9.7		mg/Kg	1	3/11/2019 1:11:54 PM	43602
Motor Oil Range Organics (MRO)	54	49		mg/Kg	1	3/11/2019 1:11:54 PM	43602
Surr: DNOP	99.4	70-130		%Rec	1	3/11/2019 1:11:54 PM	43602
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: RAA
Gasoline Range Organics (GRO)	1000	88		mg/Kg	20	3/11/2019 2:02:05 PM	43599
Surr: BFB	281	73.8-119	S	%Rec	20	3/11/2019 2:02:05 PM	43599
EPA METHOD 8021B: VOLATILES						Analyst	: RAA
Benzene	ND	0.44		mg/Kg	20	3/11/2019 2:02:05 PM	B58248
Toluene	ND	0.88		mg/Kg	20	3/11/2019 2:02:05 PM	B58248
Ethylbenzene	2.6	0.88		mg/Kg	20	3/11/2019 2:02:05 PM	B58248
Xylenes, Total	32	1.8		mg/Kg	20	3/11/2019 2:02:05 PM	B58248
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	20	3/11/2019 2:02:05 PM	B58248

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

- \* 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
- PQL Practical Quanitative Limit
- 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 Page 4 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 3/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-5 0-3'

 Project:
 Blanco Storage
 Collection Date: 3/8/2019 11:30:00 AM

 Lab ID:
 1903457-005
 Matrix: SOIL
 Received Date: 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: smb
Chloride	ND	60		mg/Kg	20	3/11/2019 1:48:05 PM	43603
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: Irm
Diesel Range Organics (DRO)	64	9.7		mg/Kg	1	3/11/2019 2:00:24 PM	43602
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/11/2019 2:00:24 PM	43602
Surr: DNOP	99.6	70-130		%Rec	1	3/11/2019 2:00:24 PM	43602
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: RAA
Gasoline Range Organics (GRO)	1900	170		mg/Kg	50	3/11/2019 2:25:28 PM	43599
Surr: BFB	170	73.8-119	S	%Rec	50	3/11/2019 2:25:28 PM	43599
EPA METHOD 8021B: VOLATILES						Analyst	: RAA
Benzene	2.3	0.86		mg/Kg	50	3/11/2019 2:25:28 PM	B58248
Toluene	32	1.7		mg/Kg	50	3/11/2019 2:25:28 PM	B58248
Ethylbenzene	9.1	1.7		mg/Kg	50	3/11/2019 2:25:28 PM	B58248
Xylenes, Total	110	3.4		mg/Kg	50	3/11/2019 2:25:28 PM	B58248
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	50	3/11/2019 2:25:28 PM	B58248

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

- \* 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
- PQL Practical Quanitative Limit
- 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 Page 5 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1903457

12-Mar-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: MB-43603 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 43603 RunNo: 58259

Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1954599 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Chloride ND 1.5

Sample ID: LCS-43603 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 43603 RunNo: 58259

Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1954600 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual

Chloride 14 1.5 15.00 0 95.3 110

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Sample container temperature is out of limit as specified

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#### OC SUMMARY REPORT

#### Hall Environmental Analysis Laboratory, Inc.

1903457 12-Mar-19

WO#:

130

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: MB-43602 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 43602 RunNo: 58252 Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1953823 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 70 9.6 10.00 95.7

Sample ID: LCS-43602 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 43602 RunNo: 58252 Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1953824 Units: mg/Kg Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 45 50.00 89.8 63.9 124 Surr: DNOP 4.2 5.000 84.8 70 130

Sample ID: 1903457-005AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: S-5 0-3' Batch ID: 43602 RunNo: 58252 Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1954241 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 63.91 179 53.5 150 9.9 49.31 126 S Surr: DNOP 4.931 104 70 130 5.1

Sample ID: 1903457-005AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: S-5 0-3' Batch ID: 43602 RunNo: 58252 Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1954242 Units: mg/Kg %REC LowLimit SPK value SPK Ref Val %RPD **RPDLimit** Qual Analyte Result POI HighLimit Diesel Range Organics (DRO) 94 9.7 48.50 63.91 61.3 53.5 126 47.6 21.7 R Surr: DNOP

101

70

130

0

0

Page 7 of 9

4.850

4.9

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

#### OC SUMMARY REPORT

#### Hall Environmental Analysis Laboratory, Inc.

1000

WO#: 1903457

12-Mar-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: LCS-43599 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 43599 RunNo: 58248 Analysis Date: 3/11/2019 SeqNo: 1953564 Prep Date: 3/9/2019 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 0 80.1 25 5.0 25.00 102 123 Surr: BFB 1000 1000 105 73.8 119 Sample ID: MB-43599 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 43599 RunNo: 58247 Prep Date: 3/9/2019 Analysis Date: 3/11/2019 SeqNo: 1953809 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0 830 Surr: BFB 1000 83.5 73.8 119

TestCode: EPA Method 8015D: Gasoline Range Sample ID: MB-43599 SampType: MBLK Client ID: PBS Batch ID: 43599 RunNo: 58248 Prep Date: 3/9/2019 Analysis Date: 3/11/2019 SeqNo: 1953812 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 940 1000 93.9 73.8 119

Sample ID: LCS-43599 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 43599 RunNo: 58247 Prep Date: 3/9/2019 Analysis Date: 3/11/2019 SeqNo: 1953994 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 25.00 Gasoline Range Organics (GRO) 22 5.0 86.0 80.1 123

104

73.8

119

1000

#### Qualifiers:

Surr: BFB

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL
- Sample container temperature is out of limit as specified

Reporting Detection Limit

Page 8 of 9

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903457

12-Mar-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: 100NG BTEX LCS	SampT	ype: <b>LC</b>	S	Tes	tCode: El						
Client ID: LCSS	Batcl	n ID: <b>B5</b>	8248	F	RunNo: 5	8248					
Prep Date:	Analysis D	Date: 3/	11/2019	8	SeqNo: 1	953805	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.95	0.025	1.000	0	94.8	80	120				
Toluene	0.99	0.050	1.000	0	98.7	80	120				
Ethylbenzene	0.99	0.050	1.000	0	99.2	80	120				
Xylenes, Total	3.0	0.10	3.000	0	101	80	120				
Surr: 4-Bromofluorobenzene	nofluorobenzene 1.0 1.000				101	80	120				

Sample ID: 1903457-001A MS					tCode: El	PA Method	8021B: Volat	iles		
Client ID: S-1 5'	Batch	ID: <b>B5</b>	8248	F	RunNo: 5					
Prep Date:	S	SeqNo: 1954298 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9470	0.03466	92.0	63.9	127			
Toluene	0.97	0.047	0.9470	0.06449	96.0	69.9	131			
Ethylbenzene	0.98	0.047	0.9470	0.05114	97.6	71	132			
Xylenes, Total	3.0	0.095	2.841	0.1740	99.1	71.8	131			
Surr: 4-Bromofluorobenzene	0.96		0.9470		101	80	120			

Sample ID: 1903457-001A N	<b>MSD</b> SampT	ype: <b>MS</b>	SD	TestCode: EPA Method 8021B: Volatiles								
Client ID: S-1 5'	Client ID: S-1 5' Batch ID: B582					RunNo: 58248						
Prep Date:	Analysis D	ate: 3/	11/2019	8	SeqNo: 1	954299	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.87	0.024	0.9470	0.03466	88.4	63.9	127	3.79	20			
Toluene	0.95	0.047	0.9470	0.06449	93.5	69.9	131	2.50	20			
Ethylbenzene	0.94	0.047	0.9470	0.05114	94.1	71	132	3.47	20			
Xylenes, Total	2.9	0.095	2.841	0.1740	96.3	71.8	131	2.69	20			
Surr: 4-Bromofluorobenzene	0.92		0.9470		97.7	80	120	0	0			

Sample ID: RB	SampT	уре: МЕ	BLK	Tes	tCode: El	iles				
Client ID: PBS	F	RunNo: 5								
Prep Date:	rep Date: Analysis Date: 3/11/2019				SeqNo: 1954756 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	0.99		1.000		98.6	80	120			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit PQL
  - % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

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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: ENS	SOLUM AZTEC	Work Order Number	er: 1903457	-500-1	RcptNo:	1
Received By: An	ne Thorne	3/9/2019 10:50:00 A	M	Anne Ann	<del>_</del>	
Completed By: Ani	ne Thorne	3/11/2019 7:49:56 A	М	Avne Stra Avne Stra		
Reviewed By:	B	3/11/19		ame sin	_	
<i>                                      </i>	A 03/1	(119				
Chain of Custody						
1. Is Chain of Custod	=		Yes 🗹	No 🗆	Not Present	
2. How was the samp	le delivered?		Courier			
Log In						
3. Was an attempt ma	ade to cool the sam	oles?	Yes 🗹	No 🗌	NA $\square$	
4. Were all samples re	eceived at a temper	ature of >0° C to 6.0°C	Yes 🗹	No 🗆	na 🗆	•
5. Sample(s) in prope	r container(s)?		Yes 🗹	No 🗀		•
6. Sufficient sample vo	olume for indicated t	est(s)?	Yes 🗸	No 🗌		
7. Are samples (excep	t VOA and ONG) p	operly preserved?	Yes 🗹	No 🗌		
8. Was preservative a	dded to bottles?		Yes 🗌	No 🗹	NA $\square$	
9. VOA vials have zero	headspace?		Yes	No 🗆	No VOA Vials 🗹	·
10. Were any sample o	ontainers received	oroken?	Yes 🗆	No · 🗹	# of preserved	
11. Does paperwork ma			Yes 🗹	No 🗌	bottles checked for pH:	
(Note discrepancies 12. Are matrices correct	``	•	Yes 🗹	No 🗆	(<2 or Adjusted?	>12 unless noted)
13. Is it clear what analy			Yes 🗹	No 🗆	<u> </u>	
14. Were all holding tim (If no, notify custom	es able to be met?		Yes 🗹	No 🗆	Checked by:	
Special Handling (	if applicable)					
15. Was client notified		with this order?	Yes	No 🗆	NA 🗹	
Person Notific	ed:	Date		manager a season of the season		
By Whom:		Via:	eMail	Phone 🗌 Fax	☐ In Person	
Regarding: Client Instruct	lione: I					
16. Additional remarks	***************************************					
And the second of the second o	mp °C Condition	Seal Intact   Seal No	Seal Date	Signed By		
1 1.0	Good	Yes				
	<b>-</b> -		<del></del>	<del></del>		<u></u>

	- HALL ENVIKONMENTAL - ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis	†O:	bO⁴° ∂	S808/s s/8088.1) or 8270 i, NO <sub>2</sub> ,	(GR은 3 bo 3 bo 103 103	EX / Material B (Method B) (Nothod B) (Nothod B) 83 FF, Br, Nothod B) (YOA) (Semisal Colifor B) (YOA)	TPI TOTAL TO	X X	X	x	X X X					Remarks: Por Ton Long AFE # N41343	+ ( Sime Day 3-11-19)	data will be clearly
Tum-Around Time:	100%   100%	Project Name:	Blanco Storage	Project #:	OS-A1226043	Project Manager:	K. Sommers	Sampler: (2 DAport); On ice: XYYes □ No	lers:	Cooler Templomores: 1.0 CM  M. M. H. Container  Container  Preservative  HEAL No.	Type and # Type	405-	1   102		502	705			1	Received by: Ma: Date Time	leceived by: Nia: Date of Finge	utracted to other accredited laboratories. This serves as notice of t
Chain-of-Custody Record	Client: Ensolum		Mailing Address: Log S R. to Bande		Phone #:	email or Fax#. K Summers Bearsolum. com Project Manager.	QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	☐ Az Compliance ☐ Other	ype)			3849 1400 5 5-1 5'	1-5-0 E-S   \   30H	1410   5-3 6-5'	1330   5-4 0-3'	1130 1 8-5 0-3				Relinquished by:    Change La	Date: Trime: Relinquished by:	If necessary, samples submitted to Hall Environmental may be subcon



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

March 28, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

**FAX** 

RE: Blanco Storage OrderNo.: 1903C51

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/27/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 3/28/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-6 0-8'

 Project:
 Blanco Storage
 Collection Date: 3/26/2019 11:00:00 AM

 Lab ID:
 1903C51-001
 Matrix: MEOH (SOIL)
 Received Date: 3/27/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/27/2019 11:38:09 AM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	92	10		mg/Kg	1	3/27/2019 10:01:13 AM	43900
Motor Oil Range Organics (MRO)	75	51		mg/Kg	1	3/27/2019 10:01:13 AM	43900
Surr: DNOP	93.9	70-130		%Rec	1	3/27/2019 10:01:13 AM	43900
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	220	4.1		mg/Kg	1	3/27/2019 8:33:54 AM	43875
Surr: BFB	1140	73.8-119	S	%Rec	1	3/27/2019 8:33:54 AM	43875
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.020		mg/Kg	1	3/27/2019 8:33:54 AM	43875
Toluene	0.63	0.041		mg/Kg	1	3/27/2019 8:33:54 AM	43875
Ethylbenzene	1.3	0.041		mg/Kg	1	3/27/2019 8:33:54 AM	43875
Xylenes, Total	9.5	0.082		mg/Kg	1	3/27/2019 8:33:54 AM	43875
Surr: 4-Bromofluorobenzene	152	80-120	S	%Rec	1	3/27/2019 8:33:54 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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Date Reported: 3/28/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-7 0-8'

 Project:
 Blanco Storage
 Collection Date: 3/26/2019 11:05:00 AM

 Lab ID:
 1903C51-002
 Matrix: MEOH (SOIL)
 Received Date: 3/27/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	60		mg/Kg	20	3/27/2019 11:50:33 AM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	160	10		mg/Kg	1	3/27/2019 10:25:36 AM	43900
Motor Oil Range Organics (MRO)	120	51		mg/Kg	1	3/27/2019 10:25:36 AM	43900
Surr: DNOP	96.4	70-130		%Rec	1	3/27/2019 10:25:36 AM	43900
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	160	4.2		mg/Kg	1	3/27/2019 8:57:27 AM	43875
Surr: BFB	1250	73.8-119	S	%Rec	1	3/27/2019 8:57:27 AM	43875
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.021		mg/Kg	1	3/27/2019 8:57:27 AM	43875
Toluene	ND	0.042		mg/Kg	1	3/27/2019 8:57:27 AM	43875
Ethylbenzene	0.85	0.042		mg/Kg	1	3/27/2019 8:57:27 AM	43875
Xylenes, Total	6.3	0.084		mg/Kg	1	3/27/2019 8:57:27 AM	43875
Surr: 4-Bromofluorobenzene	150	80-120	S	%Rec	1	3/27/2019 8:57:27 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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Date Reported: 3/28/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-8 0-8'

**Project:** Blanco Storage
 Collection Date: 3/26/2019 11:10:00 AM

 **Lab ID:** 1903C51-003
 Matrix: MEOH (SOIL)
 Received Date: 3/27/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/27/2019 12:02:58 PM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	990	19		mg/Kg	2	3/27/2019 1:40:38 PM	43900
Motor Oil Range Organics (MRO)	570	97		mg/Kg	2	3/27/2019 1:40:38 PM	43900
Surr: DNOP	106	70-130		%Rec	2	3/27/2019 1:40:38 PM	43900
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	390	20		mg/Kg	5	3/27/2019 9:20:57 AM	43875
Surr: BFB	290	73.8-119	S	%Rec	5	3/27/2019 9:20:57 AM	43875
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.099		mg/Kg	5	3/27/2019 9:20:57 AM	43875
Toluene	ND	0.20		mg/Kg	5	3/27/2019 9:20:57 AM	43875
Ethylbenzene	ND	0.20		mg/Kg	5	3/27/2019 9:20:57 AM	43875
Xylenes, Total	1.4	0.40		mg/Kg	5	3/27/2019 9:20:57 AM	43875
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	5	3/27/2019 9:20:57 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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Date Reported: 3/28/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-9 0-8'

 Project:
 Blanco Storage
 Collection Date: 3/26/2019 11:15:00 AM

 Lab ID:
 1903C51-004
 Matrix: MEOH (SOIL)
 Received Date: 3/27/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/27/2019 12:15:22 PM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	24	10		mg/Kg	1	3/27/2019 11:38:42 AM	43900
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/27/2019 11:38:42 AM	43900
Surr: DNOP	97.3	70-130		%Rec	1	3/27/2019 11:38:42 AM	43900
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	130	22		mg/Kg	5	3/27/2019 9:44:23 AM	43875
Surr: BFB	186	73.8-119	S	%Rec	5	3/27/2019 9:44:23 AM	43875
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.11		mg/Kg	5	3/27/2019 9:44:23 AM	43875
Toluene	ND	0.22		mg/Kg	5	3/27/2019 9:44:23 AM	43875
Ethylbenzene	0.65	0.22		mg/Kg	5	3/27/2019 9:44:23 AM	43875
Xylenes, Total	2.2	0.43		mg/Kg	5	3/27/2019 9:44:23 AM	43875
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	5	3/27/2019 9:44:23 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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Date Reported: 3/28/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-10 0-8'

**Project:** Blanco Storage Collection Date: 3/26/2019 11:20:00 AM

**Lab ID:** 1903C51-005 **Matrix:** MEOH (SOIL) **Received Date:** 3/27/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	60		mg/Kg	20	3/27/2019 12:27:47 PM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/27/2019 12:03:12 PM	43900
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/27/2019 12:03:12 PM	43900
Surr: DNOP	97.5	70-130		%Rec	1	3/27/2019 12:03:12 PM	43900
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	46	4.6		mg/Kg	1	3/27/2019 10:07:58 AM	43875
Surr: BFB	145	73.8-119	S	%Rec	1	3/27/2019 10:07:58 AM	43875
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.023		mg/Kg	1	3/27/2019 10:07:58 AM	43875
Toluene	0.18	0.046		mg/Kg	1	3/27/2019 10:07:58 AM	43875
Ethylbenzene	0.13	0.046		mg/Kg	1	3/27/2019 10:07:58 AM	43875
Xylenes, Total	2.6	0.093		mg/Kg	1	3/27/2019 10:07:58 AM	43875
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	1	3/27/2019 10:07:58 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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Date Reported: 3/28/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-11 0-8'

**Project:** Blanco Storage Collection Date: 3/26/2019 11:25:00 AM

**Lab ID:** 1903C51-006 **Matrix:** MEOH (SOIL) **Received Date:** 3/27/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/27/2019 12:40:11 PM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	100	10		mg/Kg	1	3/27/2019 12:27:30 PM	43900
Motor Oil Range Organics (MRO)	85	50		mg/Kg	1	3/27/2019 12:27:30 PM	43900
Surr: DNOP	101	70-130		%Rec	1	3/27/2019 12:27:30 PM	43900
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	440	20		mg/Kg	5	3/27/2019 10:31:38 AM	43875
Surr: BFB	356	73.8-119	S	%Rec	5	3/27/2019 10:31:38 AM	43875
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	0.36	0.10		mg/Kg	5	3/27/2019 10:31:38 AM	43875
Toluene	3.6	0.20		mg/Kg	5	3/27/2019 10:31:38 AM	43875
Ethylbenzene	2.3	0.20		mg/Kg	5	3/27/2019 10:31:38 AM	43875
Xylenes, Total	28	0.41		mg/Kg	5	3/27/2019 10:31:38 AM	43875
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	5	3/27/2019 10:31:38 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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# Analytical Report Lab Order 1903C51

Date Reported: 3/28/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-12 8'

**Project:** Blanco Storage
 Collection Date: 3/26/2019 11:30:00 AM

 **Lab ID:** 1903C51-007
 Matrix: MEOH (SOIL)
 Received Date: 3/27/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	60	mg/Kg	20	3/27/2019 12:52:36 PM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	3/27/2019 12:51:54 PM	43900
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/27/2019 12:51:54 PM	43900
Surr: DNOP	92.0	70-130	%Rec	1	3/27/2019 12:51:54 PM	43900
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	3/27/2019 10:55:15 AM	43875
Surr: BFB	91.0	73.8-119	%Rec	1	3/27/2019 10:55:15 AM	43875
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.020	mg/Kg	1	3/27/2019 10:55:15 AM	43875
Toluene	ND	0.041	mg/Kg	1	3/27/2019 10:55:15 AM	43875
Ethylbenzene	ND	0.041	mg/Kg	1	3/27/2019 10:55:15 AM	43875
Xylenes, Total	ND	0.081	mg/Kg	1	3/27/2019 10:55:15 AM	43875
Surr: 4-Bromofluorobenzene	91.7	80-120	%Rec	1	3/27/2019 10:55:15 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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# Analytical Report Lab Order 1903C51

Date Reported: 3/28/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-13 8'

**Project:** Blanco Storage
 Collection Date: 3/26/2019 11:35:00 AM

 **Lab ID:** 1903C51-008
 Matrix: MEOH (SOIL)
 Received Date: 3/27/2019 8:15:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	3/27/2019 1:05:01 PM	43904
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	3/27/2019 1:16:13 PM	43900
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/27/2019 1:16:13 PM	43900
Surr: DNOP	94.7	70-130	%Rec	1	3/27/2019 1:16:13 PM	43900
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	3/27/2019 11:18:40 AM	43875
Surr: BFB	88.9	73.8-119	%Rec	1	3/27/2019 11:18:40 AM	43875
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1	3/27/2019 11:18:40 AM	43875
Toluene	ND	0.041	mg/Kg	1	3/27/2019 11:18:40 AM	43875
Ethylbenzene	ND	0.041	mg/Kg	1	3/27/2019 11:18:40 AM	43875
Xylenes, Total	ND	0.082	mg/Kg	1	3/27/2019 11:18:40 AM	43875
Surr: 4-Bromofluorobenzene	91.8	80-120	%Rec	1	3/27/2019 11:18:40 AM	43875

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1903C51** 

28-Mar-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-43904 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 43904 RunNo: 58669

Prep Date: 3/27/2019 Analysis Date: 3/27/2019 SeqNo: 1971664 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-43904 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 43904 RunNo: 58669

Prep Date: 3/27/2019 Analysis Date: 3/27/2019 SeqNo: 1971665 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.1 90 110

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1903C51** 

28-Mar-19

	NSOLUM lanco Storage
Sample ID: <b>MB-43833</b>	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: <b>43833</b> RunNo: <b>58623</b>
Prep Date: 3/22/2019	Analysis Date: 3/26/2019 SeqNo: 1969454 Units: %Rec
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.0 10.00 50.1 70 130 S
Sample ID: LCS-4386	3 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 43863 RunNo: 58623
Prep Date: 3/25/2019	Analysis Date: 3/27/2019 SeqNo: 1969475 Units: %Rec
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	3.5 5.000 69.8 70 130 S
Sample ID: MB-43863	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 43863 RunNo: 58623
Prep Date: 3/25/2019	Analysis Date: 3/27/2019 SeqNo: 1969476 Units: %Rec
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	8.0 10.00 80.4 70 130
Sample ID: MB-43900	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: <b>43900</b> RunNo: <b>58645</b>
Prep Date: 3/27/2019	Analysis Date: 3/27/2019 SeqNo: 1969555 Units: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO	
Motor Oil Range Organics (N Surr: DNOP	IRO) ND 50 9.3 10.00 93.1 70 130
Sample ID: MB-43901	
Client ID: PBS	Batch ID: <b>43901</b> RunNo: <b>58645</b>
Prep Date: 3/27/2019	·
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	9.6 10.00 96.5 70 130
Sample ID: LCS-4390	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: <b>43900</b> RunNo: <b>58645</b>
Prep Date: 3/27/2019	Analysis Date: 3/27/2019 SeqNo: 1969557 Units: mg/Kg

#### Qualifiers:

Analyte

Surr: DNOP

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

Diesel Range Organics (DRO)

S % Recovery outside of range due to dilution or matrix

Result

45

4.6

PQL

10

ND Not Detected at the Reporting Limit

90.3

91.1

RL Reporting Detection Limit

SPK value SPK Ref Val %REC

50.00

5.000

W Sample container temperature is out of limit as specified at testcode

LowLimit

63.9

70

HighLimit

124

130

%RPD

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**RPDLimit** 

Qual

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1903C51** 

28-Mar-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-43901 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 43901 RunNo: 58645

Prep Date: 3/27/2019 Analysis Date: 3/27/2019 SeqNo: 1969558 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Surr: DNOP
 4.7
 5.000
 93.0
 70
 130

Sample ID: 1903C51-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **S-6 0-8'** Batch ID: **43900** RunNo: **58623** 

Prep Date: 3/27/2019 Analysis Date: 3/27/2019 SeqNo: 1970449 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Diesel Range Organics (DRO)
 130
 10
 50.61
 91.81
 85.1
 53.5
 126

 Surr: DNOP
 5.1
 5.061
 101
 70
 130

Sample ID: 1903C51-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: S-6 0-8' Batch ID: 43900 RunNo: 58623

Prep Date: 3/27/2019 Analysis Date: 3/27/2019 SeqNo: 1970450 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 126 120 91.81 65.6 53.5 8.44 21.7 Diesel Range Organics (DRO) 9.8 48.97 Surr: DNOP 5.1 4.897 105 70 130 0 0

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1903C51

28-Mar-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: MB-43875 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 43875 RunNo: 58672

Prep Date: 3/26/2019 Analysis Date: 3/27/2019 SeqNo: 1970545 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 950 1000 95.2 73.8 119

Sample ID: LCS-43875 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 43875 RunNo: 58672

Prep Date: 3/26/2019 Analysis Date: 3/27/2019 SeqNo: 1970546 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 0 101 80.1 123 Surr: BFB 1000 1000 105 73.8

119

#### Qualifiers:

Holding times for preparation or analysis exceeded

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RLReporting Detection Limit

Sample container temperature is out of limit as specified at testcode

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#### Hall Environmental Analysis Laboratory, Inc.

3.0

0.96

0.10

WO#: **1903C51 28-Mar-19** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-43875 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 43875 RunNo: 58672

Prep Date: 3/26/2019 Analysis Date: 3/27/2019 SeqNo: 1970581 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
 0.98
 1.000
 98.1
 80
 120

3.000

1.000

Sample ID: LCS-43875 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 43875 RunNo: 58672 Units: mg/Kg Prep Date: 3/26/2019 Analysis Date: 3/27/2019 SeqNo: 1970582 PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.025 1.000 0 96.3 80 120 0.96 Benzene Toluene 1.0 0.050 1.000 0 101 80 120 0.050 0 99.6 80 120 Ethylbenzene 1.0 1.000

0

101

95.8

80

80

120

120

#### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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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:	ENSOLUM AZTEC	Work Order Number:	190	3C51		RcptNo	: 1
Received By:	Anne Thorne	3/27/2019 8:15:00 AM			anne A.		
Completed By:	Victoria Zellar	3/27/2019 8:29:58 AM			Victoria Be	llar 1011	1
Reviewed By:	M 3/27/19					labollal	by
	7-1/19					DAD 3/	7719
Chain of Cust	tody			_	_		- 1// (
1. Is Chain of Cu	stody complete?		Yes	✓	No 🗌	Not Present	
2. How was the s	sample delivered?		Cou	<u>rier</u>			
<u>Log In</u>							
3. Was an attemp	pt made to cool the sampl	es?	Yes	<b>✓</b>	No 🗌	NA $\square$	
4. Were all sample	les received at a temperat	ure of >0° C to 6.0°C	Yes	<b>✓</b>	No 🗆	NA $\square$	
5. Sample(s) in p	proper container(s)?		Yes	✓	No 🗌		
6. Sufficient samp	ole volume for indicated te	st(s)?	Yes	<b>✓</b>	No 🗆		
7. Are samples (e	except VOA and ONG) pro	perly preserved?	Yes	<b>✓</b>	No 🗌		
8. Was preservati	ive added to bottles?		Yes		No 🗸	NA $\square$	
9. VOA vials have	e zero headspace?		Yes		No 🗌	No VOA Vials 🗸	
10. Were any sam	ple containers received be	oken?	Yes		No 🗸	# of preserved	
44.5						bottles checked	
	rk match bottle labels? ncies on chain of custody)		Yes	•	No 🗀	for pH:	r >12 unless noted)
	orrectly identified on Chair		Yes	<b>✓</b>	No 🗌	Adjusted?	
13. Is it clear what	analyses were requested	?	Yes	<b>✓</b>	No 🗌		
	g times able to be met?		Yes	✓	No 🗌	Checked by:	DAD 3/27/19
	stomer for authorization.)						
	ng (if applicable) ified of all discrepancies w	vith this order?	Yes		No 🗌	NA 🗹	
Person N	Notified:	Date:					
By Whor	m:	Via:	eM	ail Ph	one  Fax	☐ In Person	
Regardin	ng:						
Client Ins	structions:						
16. Additional rem	narks:						_
17. Cooler Inform	<u>nation</u>						
Cooler No	Temp °C Condition	Seal Intact Seal No S	eal D	ate 5	Signed By		
1	1.0 Good	Yes					

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	TPH (Method 418.1)  EDB (Method 504.1)  RCRA 8 Metals  Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  8260B (VOA)  8250 (Semi-VOA)  Air Bubbles (Yor N)		5 5-19 * Same Dong of Long of Long of Same Dong of Same D
49011 Tel. 5	(ORO \ DRO \ DRO \ MRO \ MRO \ MRO (GRO Only)		Pay Pay Pre I
	✓ BIEX + MISE + IMBS (8051)	+ + × × 6	is possibi
Turn-Around Time: 100% Rush  ☐ Standard Ø Rush 3-37-19  Project Name:	Project Manager:  \$\hat{k}, \sum \text{Summers}\$\$  Sampler: \$\text{Apont}, \$\text{On Ice:} \$\text{Apont}, \$\text{Container}\$\$  Container Preservative HEAL No. Type and # Type    00305   1 \frac{\partial Cool}{\partial Cool} -00	-004 -007 -007 -007 -007	Date Date Date Date of the serves as
Chain-of-Custody Record  Ensolum  Address: La S Rio Grande  Oit A Artec Nin  ##:	A Summaris & ensolum. Com  Level 4 (Full Validation)  Other  Matrix Sample Request ID  \$ 5-6 0-8'  \$ 5-6 0-8'		Relinquished by:    Mile
Chain-of- Client: Enselvan  Client: Enselvan  Mailing Address: La	MA History (Type)  □ EDD (Type)  □ Date Time	1 2 2 2 2	5 5



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

April 17, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

**FAX** 

RE: Blanco Storage OrderNo.: 1904752

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/16/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/17/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-14

**Project:** Blanco Storage Collection Date: 4/15/2019 10:00:00 AM

**Lab ID:** 1904752-001 **Matrix:** MEOH (SOIL) **Received Date:** 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	60		mg/Kg	20	4/16/2019 11:31:42 AM	44358
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	TOM
Diesel Range Organics (DRO)	440	8.7		mg/Kg	1	4/16/2019 9:43:11 AM	44349
Motor Oil Range Organics (MRO)	250	43		mg/Kg	1	4/16/2019 9:43:11 AM	44349
Surr: DNOP	112	70-130		%Rec	1	4/16/2019 9:43:11 AM	44349
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	4/16/2019 8:35:18 AM	G59176
Surr: BFB	138	73.8-119	S	%Rec	5	4/16/2019 8:35:18 AM	G59176
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.10		mg/Kg	5	4/16/2019 8:35:18 AM	B59176
Toluene	ND	0.20		mg/Kg	5	4/16/2019 8:35:18 AM	B59176
Ethylbenzene	ND	0.20		mg/Kg	5	4/16/2019 8:35:18 AM	B59176
Xylenes, Total	ND	0.40		mg/Kg	5	4/16/2019 8:35:18 AM	B59176
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	5	4/16/2019 8:35:18 AM	B59176

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 1 of 12

Surr: 4-Bromofluorobenzene

# Analytical Report Lab Order 1904752

Date Reported: 4/17/2019

4/16/2019 8:59:04 AM

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-15

 Project:
 Blanco Storage
 Collection Date: 4/15/2019 10:05:00 AM

 Lab ID:
 1904752-002
 Matrix: MEOH (SOIL)
 Received Date: 4/16/2019 8:15:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 60 mg/Kg 20 4/16/2019 11:44:06 AM 44358 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) ND 9.0 mg/Kg 4/16/2019 10:27:21 AM 44349 Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 4/16/2019 10:27:21 AM 44349 Surr: DNOP 106 4/16/2019 10:27:21 AM 44349 70-130 %Rec **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 4/16/2019 8:59:04 AM Gasoline Range Organics (GRO) ND G59176 4.1 mg/Kg Surr: BFB 95.7 73.8-119 %Rec 4/16/2019 8:59:04 AM G59176 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 4/16/2019 8:59:04 AM B59176 Benzene 0.021 mg/Kg Toluene ND 0.041 mg/Kg 4/16/2019 8:59:04 AM B59176 Ethylbenzene ND 0.041 mg/Kg 4/16/2019 8:59:04 AM B59176 Xylenes, Total ND 0.083 mg/Kg 4/16/2019 8:59:04 AM B59176

88.8

80-120

%Rec

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

Qualifiers:

Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 2 of 12

B59176

Н

Date Reported: 4/17/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-16

**Project:** Blanco Storage Collection Date: 4/15/2019 10:10:00 AM

**Lab ID:** 1904752-003 **Matrix:** MEOH (SOIL) **Received Date:** 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	4/16/2019 11:56:31 AM	44358
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/16/2019 10:49:41 AM	44349
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/16/2019 10:49:41 AM	44349
Surr: DNOP	101	70-130	%Rec	1	4/16/2019 10:49:41 AM	44349
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.1	mg/Kg	1	4/16/2019 9:22:46 AM	G59176
Surr: BFB	89.8	73.8-119	%Rec	1	4/16/2019 9:22:46 AM	G59176
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.026	mg/Kg	1	4/16/2019 9:22:46 AM	B59176
Toluene	ND	0.051	mg/Kg	1	4/16/2019 9:22:46 AM	B59176
Ethylbenzene	ND	0.051	mg/Kg	1	4/16/2019 9:22:46 AM	B59176
Xylenes, Total	ND	0.10	mg/Kg	1	4/16/2019 9:22:46 AM	B59176
Surr: 4-Bromofluorobenzene	88.3	80-120	%Rec	1	4/16/2019 9:22:46 AM	B59176

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 3 of 12

Date Reported: 4/17/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-17

**Project:** Blanco Storage Collection Date: 4/15/2019 10:15:00 AM

**Lab ID:** 1904752-004 **Matrix:** MEOH (SOIL) **Received Date:** 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	4/16/2019 12:08:56 PM	44358
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	TOM
Diesel Range Organics (DRO)	56	9.3		mg/Kg	1	4/16/2019 11:11:52 AM	44349
Motor Oil Range Organics (MRO)	73	46		mg/Kg	1	4/16/2019 11:11:52 AM	44349
Surr: DNOP	95.8	70-130		%Rec	1	4/16/2019 11:11:52 AM	44349
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	32	4.8		mg/Kg	1	4/16/2019 9:46:29 AM	G59176
Surr: BFB	271	73.8-119	S	%Rec	1	4/16/2019 9:46:29 AM	G59176
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.024		mg/Kg	1	4/16/2019 9:46:29 AM	B59176
Toluene	ND	0.048		mg/Kg	1	4/16/2019 9:46:29 AM	B59176
Ethylbenzene	0.18	0.048		mg/Kg	1	4/16/2019 9:46:29 AM	B59176
Xylenes, Total	1.0	0.095		mg/Kg	1	4/16/2019 9:46:29 AM	B59176
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	4/16/2019 9:46:29 AM	B59176

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 4 of 12

Date Reported: 4/17/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-18

**Project:** Blanco Storage Collection Date: 4/15/2019 10:20:00 AM

**Lab ID:** 1904752-005 **Matrix:** MEOH (SOIL) **Received Date:** 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	4/16/2019 12:46:08 PM	44358
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	TOM
Diesel Range Organics (DRO)	13	9.8		mg/Kg	1	4/16/2019 11:33:50 AM	44349
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/16/2019 11:33:50 AM	44349
Surr: DNOP	101	70-130		%Rec	1	4/16/2019 11:33:50 AM	44349
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	24	4.1		mg/Kg	1	4/16/2019 10:10:12 AM	G59176
Surr: BFB	251	73.8-119	S	%Rec	1	4/16/2019 10:10:12 AM	G59176
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.020		mg/Kg	1	4/16/2019 10:10:12 AM	B59176
Toluene	ND	0.041		mg/Kg	1	4/16/2019 10:10:12 AM	B59176
Ethylbenzene	0.061	0.041		mg/Kg	1	4/16/2019 10:10:12 AM	B59176
Xylenes, Total	0.47	0.082		mg/Kg	1	4/16/2019 10:10:12 AM	B59176
Surr: 4-Bromofluorobenzene	96.2	80-120		%Rec	1	4/16/2019 10:10:12 AM	B59176

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 5 of 12

Date Reported: 4/17/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-19

**Project:** Blanco Storage Collection Date: 4/15/2019 10:25:00 AM

**Lab ID:** 1904752-006 **Matrix:** MEOH (SOIL) **Received Date:** 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	4/16/2019 12:58:33 PM	44358
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/16/2019 11:55:53 AM	44349
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/16/2019 11:55:53 AM	44349
Surr: DNOP	97.2	70-130	%Rec	1	4/16/2019 11:55:53 AM	44349
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/16/2019 10:33:59 AM	G59176
Surr: BFB	93.0	73.8-119	%Rec	1	4/16/2019 10:33:59 AM	G59176
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	0.028	0.024	mg/Kg	1	4/16/2019 10:33:59 AM	B59176
Toluene	0.078	0.049	mg/Kg	1	4/16/2019 10:33:59 AM	B59176
Ethylbenzene	ND	0.049	mg/Kg	1	4/16/2019 10:33:59 AM	B59176
Xylenes, Total	ND	0.097	mg/Kg	1	4/16/2019 10:33:59 AM	B59176
Surr: 4-Bromofluorobenzene	91.3	80-120	%Rec	1	4/16/2019 10:33:59 AM	B59176

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 6 of 12

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904752** 

17-Apr-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-44358 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 44358 RunNo: 59169

Prep Date: 4/16/2019 Analysis Date: 4/16/2019 SeqNo: 1992911 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-44358 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 44358 RunNo: 59169

Prep Date: 4/16/2019 Analysis Date: 4/16/2019 SeqNo: 1992912 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.3 90 110

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 7 of 12

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904752** 

17-Apr-19

Client:	ENSOLUM
Project:	Blanco Storage

Project: Bianco S	torage								
Sample ID: LCS-44349	SampType: L0	cs	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID: 44	349	F	RunNo: <b>5</b> 9	9160				
Prep Date: 4/16/2019	Analysis Date: 4	/16/2019	5	SeqNo: 19	992027	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51 10	50.00	0	101	63.9	124			
Surr: DNOP	4.6	5.000		92.0	70	130			
Sample ID: <b>MB-44349</b>	SampType: <b>M</b>	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 44	349	F	RunNo: <b>5</b> 9	9160				
Prep Date: 4/16/2019	Analysis Date: 4	/16/2019	5	SeqNo: 19	992028	Units: mg/K	g		
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: 1904752-001AMS	SampType: M	S	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: S-14	Batch ID: 44	349	F	RunNo: <b>5</b> 9	9160				
Prep Date: 4/16/2019	Analysis Date: 4	/16/2019	5	SeqNo: 19	992445	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	580 9.5	47.62	444.0	293	53.5	126			S
Surr: DNOP	4.7	4.762		99.2	70	130			
Sample ID: 1904752-001AMS	D SampType: M	SD	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: S-14	Batch ID: 44	349	F	RunNo: <b>5</b> 9	9160				
Prep Date: 4/16/2019	Analysis Date: 4	/16/2019	5	SeqNo: 19	992446	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	440 9.4	46.95	444.0	-17.1	53.5	126	28.9	21.7	RS
Surr: DNOP	4.8	4.695		103	70	130	0	0	
Sample ID: LCS-44342	SampType: <b>L</b> (	cs	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID: 44	342	F	RunNo: <b>5</b> 9	9160				
Prep Date: 4/15/2019	Analysis Date: 4	/16/2019	5	SeqNo: 19	992730	Units: %Red	;		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.2	5.000		63.7	70	130			S
Sample ID: <b>MB-44342</b>	SampType: <b>M</b>	BLK	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 44	342	F	RunNo: <b>5</b> 9	9160				
Prep Date: 4/15/2019	Analysis Date: 4	/16/2019	\$	SeqNo: 19	992731	Units: %Red	:		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
					-	-		-	

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

8 % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 8 of 12

#### Hall Environmental Analysis Laboratory, Inc.

7.8

WO#: **1904752** *17-Apr-19* 

Client: ENSOLUM
Project: Blanco Storage

Surr: DNOP

Sample ID: MB-44342 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 44342 RunNo: 59160

Prep Date: 4/15/2019 Analysis Date: 4/16/2019 SeqNo: 1992731 Units: %Rec

10.00

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

77.8

70

130

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1904752

17-Apr-19

Project:	Blanco Storage
Client:	ENSOLUM

Sample ID: <b>RB</b> Sam	pType: <b>MBLK</b>	TestCode: EPA Method 8015D: Gasoline Range
--------------------------	--------------------	--

Client ID: PBS Batch ID: G59176 RunNo: 59176

Prep Date: Analysis Date: 4/16/2019 SeqNo: 1992736 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
O DED	070		4000		07.4	70.0	440				

Surr: BFB 970 1000 119 97.1 73.8

Sample ID: 2.5UG GRO LCS	ample ID: 2.5UG GRO LCS SampType: LCS					TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch	ID: <b>G</b> 5	9176	R	tunNo: 5	9176					
Prep Date:	Prep Date: Analysis Date: 4/16/2019			S	SeqNo: 1	992737	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	

Analyte	Result	FQL	SFK value	OF N NEI Vai	/orle	LOWLIIIII	HighLimit	/0INF D	KEDLIIIII
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80.1	123		
Surr: BFB	1100		1000		105	73.8	119		

Sample ID: 1904752-001AMS	SampType: MS			Test	е					
Client ID: S-14	Batch	ID: <b>G5</b>	9176	R	tunNo: <b>5</b> 9	9176				
Prep Date:	Analysis D	ate: 4/	16/2019	S	SeqNo: 19	992738	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	120	20	99.60	13.90	105	69.1	142			
Surr: BEB	6100		3984		153	73.8	119			S

Sample ID: 1904752-001AMSD	SampT	ype: <b>MS</b>	SD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е		
Client ID: S-14	Batch	1D: <b>G5</b>	9176	F	RunNo: <b>5</b> 9	9176					
Prep Date:	Analysis D	ate: 4/	16/2019	S	SeqNo: 19	992739	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	130	20	99.60	13.90	115	69.1	142	8.18	20		
Surr: BEB	6000		3984		150	73.8	119	0	0	S	

Sample ID: MB-44339	SampTy	/pe: <b>ME</b>	BLK	Test	tCode: El	PA Method	8015D: Gaso	line Rang	е		
Client ID: PBS	Batch	ID: <b>44</b> 3	339	R	RunNo: 5	9176					
Prep Date: 4/15/2019	Analysis Da	ate: <b>4/</b>	16/2019	S	SeqNo: 1	992759	Units: %Red	;			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB	890		1000		88.9	73.8	119				

Sample ID: LCS-44339	SampT	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е		
Client ID: LCSS	Batch	ID: <b>44</b> :	339	F	RunNo: 5	9176				
Prep Date: 4/15/2019	ep Date: 4/15/2019 Analysis Date: 4/16/2019				SeqNo: 1	992760	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	73.8	119			

Qualifiers:

Page 10 of 12

Holding times for preparation or analysis exceeded

Practical Quanitative Limit

<sup>%</sup> Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1904752

Qual

17-Apr-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: **B59176** RunNo: 59176

Prep Date: Analysis Date: 4/16/2019 SeqNo: 1992776 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result HighLimit Qual Benzene ND 0.025

Toluene ND 0.050 0.050 Ethylbenzene ND Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 0.96 1.000 96.4 80 120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: **B59176** RunNo: 59176

Prep Date:	Analysis [	Date: <b>4/</b>	16/2019	\$	SeqNo: 1	992777	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.90	0.025	1.000	0	90.2	80	120				
Toluene	0.94	0.050	1.000	0	93.8	80	120				
Ethylbenzene	0.95	0.050	1.000	0	94.6	80	120				
Xylenes, Total	2.9	0.10	3.000	0	95.9	80	120				
Surr: 4-Bromofluorobenzene	0.93		1.000		92.5	80	120				

Sample ID: 1904752-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: S-15 Batch ID: **B59176** RunNo: 59176 Prep Date: Analysis Date: 4/16/2019 SeqNo: 1992778 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** 0.8251 0.01007 88.4 0.74 0.021 63.9 127 Benzene Toluene 0.77 0.041 0.8251 0.01163 92.1 69.9 131 71 Ethylbenzene 0.76 0.041 0.8251 0.009323 914 132 Xylenes, Total 2.4 0.083 2.475 0.07104 93.5 71.8 131 Surr: 4-Bromofluorobenzene 0.8251

Sample ID: 1904752-002AMSD TestCode: EPA Method 8021B: Volatiles SampType: MSD

Batch ID: **B59176** RunNo: 59176 Client ID: S-15

0.77

Prep Date:	Analysis Date: 4/16/2019			5	SeqNo: <b>1992779</b> Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.71	0.021	0.8251	0.01007	85.3	63.9	127	3.49	20	
Toluene	0.74	0.041	0.8251	0.01163	88.6	69.9	131	3.82	20	
Ethylbenzene	0.75	0.041	0.8251	0.009323	89.2	71	132	2.41	20	
Xylenes, Total	2.3	0.083	2.475	0.07104	91.8	71.8	131	1.80	20	
Surr: 4-Bromofluorobenzene	0.74		0.8251		90.1	80	120	0	0	

#### Qualifiers:

Holding times for preparation or analysis exceeded

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

93.6

80

120

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904752** 

17-Apr-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-44339 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 44339 RunNo: 59176

Prep Date: 4/15/2019 Analysis Date: 4/16/2019 SeqNo: 1992797 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: 4-Bromofluorobenzene 0.89 1.000 88.6 80 120

Sample ID: LCS-44339 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 44339 RunNo: 59176

Prep Date: 4/15/2019 Analysis Date: 4/16/2019 SeqNo: 1992798 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: 4-Bromofluorobenzene 0.91 1.000 90.7 80 120

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

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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

Clien	t Name: ENSOLU	M AZTEC	Work Order Nur	nber: 1904752		RcptNo:	1
Recei	ved By: Desiree	Dominguez	4/16/2019 8:15:00	) AM	Da		
Comp	oleted By: Erin Me		4/16/2019 8:29:53	3 AM	in MA		
Revie	wed By: Y C	4-16					
Chair	of Custody						
CHAPT 62	Chain of Custody com	plete?		Yes 🗸	No 🗌	Not Present	
	w was the sample del	•		Courier			
1 00	I.e.						
<u>Log</u> 3. Wa	<u>IN</u> is an attempt made to	cool the san	nples?	Yes 🗸	No 🗌	NA $\square$	
4. We	re all samples receive	ed at a tempe	rature of >0° C to 6.0°C	Yes 🗸	No 🗆	na 🗆	
5. Sar	mple(s) in proper cont	ainer(s)?		Yes 🗸	No 🗌		
6. Suff	ficient sample volume	for indicated	test(s)?	Yes 🗸	No 🗆		
7. Are	samples (except VOA	and ONG)	properly preserved?	Yes 🗸	No 🗌		
8. Was	s preservative added	to bottles?		Yes	No 🗸	NA 🗆	
9. VO	A vials have zero head	dspace?		Yes	No 🗌	No VOA Vials	
10. We	re any sample contair	ners received	broken?	Yes	No 🗹	¥	
<b>.</b>						# of preserved bottles checked	
	es paperwork match b te discrepancies on cl		tv)	Yes 🗸	No 📙	for pH:	12 unless noted)
	matrices correctly ide		45/20	Yes 🗸	No 🗆	Adjusted?	12 unicss noteu)
	clear what analyses v			Yes 🗸	No 🗌		
	re all holding times ab o, notify customer for			Yes 🗹	No 🗆	Checked by:	JJC - 4-16-
	al Handling (if ap		,				
	s client notified of all		s with this order?	Yes	No 🗌	NA 🗹	
	Person Notified:		Date	e: [			
	By Whom:		Via:		hone  Fax	In Person	
	Regarding:						
	Client Instructions:					The second of the second of the second	
16. Ad	ditional remarks:						
17. Co	oler Information						
	Cooler No Temp °C	Condition	Seal Intact   Seal No	Seal Date	Signed By		
1	3.3	Good	Yes				
2	3.7	Good	Yes			and	

Received by OCD: 8/15/2023 10:	:45:18 AM	I JAIL T		Page 168 of 384
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HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com kins NE - Albuquerque, NM 87109 45-3975 Fax 505-345-4107 Analysis Request		_		on 12 6
N A B	2011011			Date Time Remarks: $2m-7em$ Long $4/15/19 1152$ Date Time $4/16/19 8:15$ This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report
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HALL ENVIRON ANALYSIS LAB  www.hallenvironmental.com kins NE - Albuquerque, NM 8 45-3975 Fax 505-345-41 Analysis Request	(8310 or 8270 SIMS)	HAA		L J
######################################	(Nethod 504.1)			Ten Thy th
Hawk (05-3)	(Method 418.1)			Jay FE
901 (C)	8015B (GRO / DRO / MF			ks: P
	X + MTBE + TMB's (6as or			Remarks:
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B 7	Service:			Dall
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Turn-Around T  □ Standard  Project Name:  \$\beta \lambda \lam	Kylk Sampler: Container Container	1,3		ad by:
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Chain-of-Custody Record  Ensolum  Address: Lob S Rio Grand  The Antrony  e#:	ackage dard ation AP (Type)	1000	01010	Time: Relinquished by:    152
Chain-o Client: EASS Client: EASS Mailing Address:  \$\sigma + A \ \sigma \tau + A \ \sigma \text{Phone #:} \end{align*}	CA/QC Package:  Carreditation  Carr	1/3		
	♥ □   ♥ □   □	1		7/5/19 Date:
3				1123



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

April 26, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX:

RE: Blanco Storage OrderNo.: 1904B44

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/24/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

# **Analytical Report**Lab Order **1904B44**

Date Reported: 4/26/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-20

 Project:
 Blanco Storage
 Collection Date: 4/23/2019 12:00:00 PM

 Lab ID:
 1904B44-001
 Matrix: MEOH (SOIL)
 Received Date: 4/24/2019 8:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	60	mg/Kg	20	4/24/2019 1:07:31 PM	44510
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/24/2019 9:54:32 AM	44501
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/24/2019 9:54:32 AM	44501
Surr: DNOP	98.7	70-130	%Rec	1	4/24/2019 9:54:32 AM	44501
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/24/2019 12:04:27 PM	G59391
Surr: BFB	89.1	73.8-119	%Rec	1	4/24/2019 12:04:27 PM	G59391
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	4/24/2019 12:04:27 PM	B59391
Toluene	ND	0.048	mg/Kg	1	4/24/2019 12:04:27 PM	B59391
Ethylbenzene	ND	0.048	mg/Kg	1	4/24/2019 12:04:27 PM	B59391
Xylenes, Total	ND	0.097	mg/Kg	1	4/24/2019 12:04:27 PM	B59391
Surr: 4-Bromofluorobenzene	89.2	80-120	%Rec	1	4/24/2019 12:04:27 PM	B59391

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 7

# **Analytical Report**Lab Order **1904B44**

Date Reported: 4/26/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-21

 Project:
 Blanco Storage
 Collection Date: 4/23/2019 12:05:00 PM

 Lab ID:
 1904B44-002
 Matrix: MEOH (SOIL)
 Received Date: 4/24/2019 8:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: smb
Chloride	ND	60	mg/Kg	20	4/24/2019 1:19:55 PM	44510
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: ЈМЕ
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/24/2019 9:53:24 AM	44501
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/24/2019 9:53:24 AM	44501
Surr: DNOP	103	70-130	%Rec	1	4/24/2019 9:53:24 AM	44501
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/24/2019 12:27:55 PM	G59391
Surr: BFB	87.0	73.8-119	%Rec	1	4/24/2019 12:27:55 PM	G59391
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	4/24/2019 12:27:55 PM	B59391
Toluene	ND	0.038	mg/Kg	1	4/24/2019 12:27:55 PM	B59391
Ethylbenzene	ND	0.038	mg/Kg	1	4/24/2019 12:27:55 PM	B59391
Xylenes, Total	ND	0.075	mg/Kg	1	4/24/2019 12:27:55 PM	B59391
Surr: 4-Bromofluorobenzene	86.6	80-120	%Rec	1	4/24/2019 12:27:55 PM	B59391

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 2 of 7

# **Analytical Report**Lab Order **1904B44**

Date Reported: 4/26/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-22

**Project:** Blanco Storage Collection Date: 4/23/2019 12:10:00 PM

**Lab ID:** 1904B44-003 **Matrix:** MEOH (SOIL) **Received Date:** 4/24/2019 8:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	60	mg/Kg	20	4/24/2019 1:32:19 PM	44510
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/24/2019 10:17:19 AM	44501
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/24/2019 10:17:19 AM	44501
Surr: DNOP	104	70-130	%Rec	1	4/24/2019 10:17:19 AM	44501
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	8.2	4.4	mg/Kg	1	4/24/2019 3:35:13 PM	G59391
Surr: BFB	112	73.8-119	%Rec	1	4/24/2019 3:35:13 PM	G59391
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.022	mg/Kg	1	4/24/2019 3:35:13 PM	B59391
Toluene	ND	0.044	mg/Kg	1	4/24/2019 3:35:13 PM	B59391
Ethylbenzene	ND	0.044	mg/Kg	1	4/24/2019 3:35:13 PM	B59391
Xylenes, Total	ND	0.088	mg/Kg	1	4/24/2019 3:35:13 PM	B59391
Surr: 4-Bromofluorobenzene	87.2	80-120	%Rec	1	4/24/2019 3:35:13 PM	B59391

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
- PQL Practical Quanitative Limit

- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904B44** 

26-Apr-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-44510 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 44510 RunNo: 59384

Prep Date: 4/24/2019 Analysis Date: 4/24/2019 SeqNo: 2001543 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-44510 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 44510 RunNo: 59384

Prep Date: 4/24/2019 Analysis Date: 4/24/2019 SeqNo: 2001544 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 94.0 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 4 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1904B44** 

26-Apr-19

Client:	ENSOLUM
Project:	Blanco Storage

Sample ID: <b>MB-44501</b>	SampType: MBLK TestCode: EPA Method				8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch ID: 44501		RunNo: 59378					
Prep Date: 4/24/2019	Analysis Date: 4/24/20	19	SeqNo: 2	2000142	Units: mg/Kg	3		
Analyte	Result PQL SPI	Value SPK Re	Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10							
Motor Oil Range Organics (MRO) Surr: DNOP	ND 50 9.9	10.00	99.1	70	130			
Suit. BNOI	9.9	10.00	33.1	70	130			
Sample ID: LCS-44501	SampType: LCS		TestCode: E	PA Method	8015M/D: Die:	sel Range	Organics	
Client ID: LCSS	Batch ID: 44501		RunNo: 5	9378				
Prep Date: 4/24/2019	Analysis Date: 4/24/20	19	SeqNo: 2	2000143	Units: mg/Kg	3		
Analyte	Result PQL SPI	Value SPK Re	Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46 10	50.00	0 91.3	63.9	124			
Surr: DNOP	4.4	5.000	87.5	70	130			
Sample ID: <b>MB-44490</b>	SampType: MBLK		TestCode: E	PA Method	8015M/D: Die:	sel Range	Organics	
Client ID: PBS	Batch ID: 44490		RunNo: 5	9379				
Prep Date: 4/23/2019	Analysis Date: 4/24/20	19	SeqNo: 2	2000149	Units: %Rec			
Analyte	Result PQL SPI	Value SPK Re	Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10	10.00	105	70	130			
Sample ID: LCS-44490	SampType: LCS		TestCode: E	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID: LCSS	Batch ID: 44490		RunNo: 5	9379				
Prep Date: 4/23/2019	Analysis Date: 4/24/20	19	SeqNo: 2	2000155	Units: %Rec			
Analyte	Result PQL SPI	Value SPK Re	Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6	5.000	91.8	70	130			
Sample ID: <b>MB-44521</b>	SampType: MBLK		TestCode: E	PA Method	8015M/D: Die:	sel Range	e Organics	
Client ID: PBS	Batch ID: 44521		- ·· -	:0270				
The state of the s	Dalcii ID. 4432 I		RunNo: 5	9370				
Prep Date: 4/24/2019	Analysis Date: 4/25/20	19	SeqNo: 2		Units: %Rec			
	Analysis Date: 4/25/20	119 Cvalue SPK Rei	SeqNo: 2		Units: <b>%Rec</b> HighLimit	%RPD	RPDLimit	Qual
Prep Date: 4/24/2019	Analysis Date: 4/25/20		SeqNo: 2	2001614			RPDLimit	Qual
Prep Date: <b>4/24/2019</b> Analyte	Analysis Date: <b>4/25/20</b> Result PQL SPh	( value SPK Re	SeqNo: 2 FVal %REC 95.4	2001614 LowLimit 70	HighLimit	%RPD		Qual
Prep Date: 4/24/2019 Analyte Surr: DNOP	Analysis Date: 4/25/20 Result PQL SPh 9.5	( value SPK Re	SeqNo: 2 FVal %REC 95.4	2001614 LowLimit 70	HighLimit 130	%RPD		Qual
Prep Date: 4/24/2019 Analyte Surr: DNOP Sample ID: LCS-44521	Analysis Date: 4/25/20  Result PQL SPH  9.5  SampType: LCS	(value SPK Rei	SeqNo: 2  F Val %REC  95.4  TestCode: E	2001614 LowLimit 70 PA Method 59378	HighLimit 130	%RPD sel Range		Qual
Prep Date: 4/24/2019 Analyte Surr: DNOP  Sample ID: LCS-44521 Client ID: LCSS	Analysis Date: 4/25/20  Result PQL SPH 9.5  SampType: LCS Batch ID: 44521  Analysis Date: 4/25/20	(value SPK Rei	SeqNo: 2  F Val %REC 95.4  TestCode: E RunNo: 5 SeqNo: 2	2001614 LowLimit 70 PA Method 59378	HighLimit 130 8015M/D: Die	%RPD sel Range		Qual

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904B44 26-Apr-19** 

Client: ENSOLUM

Project: Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G59391 RunNo: 59391

Prep Date: Analysis Date: 4/24/2019 SeqNo: 2000940 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 900 1000 90.0 73.8 119

Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G59391 RunNo: 59391

Prep Date: Analysis Date: 4/24/2019 SeqNo: 2000941 Units: mg/Kg

Qual Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 24 5.0 25.00 0 97.5 80.1 123 Surr: BFB 1000 1000 100 73.8 119

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

0.88

WO#: 1904B44

26-Apr-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Batch ID: **B59391** Client ID: PBS RunNo: 59391

Units: mg/Kg Prep Date: Analysis Date: 4/24/2019 SeqNo: 2000972

PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Benzene ND 0.025

Toluene ND 0.050 ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 0.89 1.000 88.6 80 120

1.000

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B59391** RunNo: 59391 Units: mg/Kg Prep Date: Analysis Date: 4/24/2019 SeqNo: 2000973 Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.88 0.025 1.000 0 88.1 80 120 Benzene Toluene 0.92 0.050 1.000 0 91.9 80 120 0.050 0 91.3 80 120 Ethylbenzene 0.91 1.000 2.8 0.10 3.000 0 92.2 80 120 Xylenes, Total

87.5

80

120

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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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:	ENSOLUM AZTEC	Work Order Numbe	r: <b>1904B44</b>	s :	RcptNo:	1
Received By:	Erin Melendrez	4/24/2019 8:20:00 AM	Л	und und	T	
Completed By:	Erin Melendrez	4/24/2019 8:36:33 AM	1	una	7	
Reviewed By:	AT 04124/19 NM 4/24/10	<del>}</del>				
Chain of Cus	tody					
1. Is Chain of C	ustody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the	sample delivered?		Courier			
Log In						
AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	npt made to cool the sample	s?	Yes 🗸	No 🗌	NA 🗆	
4. Were all samp	oles received at a temperatu	re of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗆	
5. Sample(s) in p	proper container(s)?		Yes 🗸	No 🗌		*
6. Sufficient sam	ple volume for indicated tes	t(s)?	Yes 🗸	No 🗌		
7. Are samples (	except VOA and ONG) prop	erly preserved?	Yes 🗸	No 🗌		
8. Was preserva	tive added to bottles?		Yes	No 🗸	NA 🗌	
9. VOA vials hav	e zero headspace?		Yes	No 🗌	No VOA Vials 🗹	
10. Were any san	nple containers received bro	ken?	Yes	No 🗸	# of preserved	
	ork match bottle labels? ancies on chain of custody)		Yes 🗸	No 🗆	bottles checked	12 unless noted)
12. Are matrices o	correctly identified on Chain	of Custody?	Yes 🗸	No 🗌	Adjusted	
13. Is it clear what	t analyses were requested?		Yes 🗸	No 🗌	M	
	ng times able to be met? ustomer for authorization.)		Yes 🗸	No 🗆	Checked by:	
Special Handli	ing (if applicable)					
	tified of all discrepancies wit	h this order?	Yes	No 🗌	NA 🗹	
Person	Notified:	Date:	2162-034-034-03-03-0-0-0-0-0-0-0-0-0-0-0-0-0	MANUAL MANUAL PROPERTY CONT.		
By Who	om:	Via:	eMail 📗	Phone  Fax	☐ In Person	
Regardi	ng:	a vicinian eta 19 Auropio (Auropio (Auropio Auropio Au		tion to defend the self-one of the section and before	MATERIAL AND STREET, S	
Client In	nstructions:			CONTROL NAME OF THE PERSON OF THE		
16. Additional rer	marks:					
17. Cooler Inform	mation					
Cooler No	Temp °C Condition	Seal Intact   Seal No	Seal Date	Signed By		
1	2.1 Good Y	'es			Palameter	

Received by OCD: 8/15/2023	(N no Y) səldduß nir	4	Page 178 of 384
HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com kins NE - Albuquerque, NM 87109 445-3975 Fax 505-345-4107 Analysis Request			ay)
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901 Fel. 5	PH 8015B (GRO / DRO / MRO)		KS:
4	31EX + WIBE + IME (G92 only)		Remarks:  A  possibility. An
	(VOUD) PILITE I SIGNAT I XIII	17711111111	this po
Turn-Around Time: 100 €  □ Standard ØRush 4-34-79  Project Name:    Standard Sterrs   Project #:  OSTH 1326 043	Project Manager:  ***Summers**  Sampler: **Aponting**  On Ice: **Yes		oy:  With the Date Time Remarks: 2m - Ton 2ng  1/2/15 1432  Ang 5-19 7.3 25 7.9  OS20  Hite accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report
Turn-Around T  ☐ Standard Project Name:	Project Mana    Sampler:  On Ice:  Sample Tem  Container  Type and #	1,01,1	Received by: Received by:
Chain-of-Custody Record  Client: Ensolum  Mailing Address: Loc Shio Grande  Suit A Aztec Nm 87410  Phone #:	Standard  Date Time  Date  Memail or Fax#:    Level 4 (Full Validation)	121/9 1200 S S-30 1 805   S-31 1 810   S-33	Date: Time: Relinquished by:  Date: Time: Time: Relinquished by:  Date: Time: Time: Relinquished by:  Date: Time:



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

April 29, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

**FAX** 

RE: Blanco Storage OrderNo.: 1904C85

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/26/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 1904C85

Date Reported: 4/29/2019

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-23

 Project:
 Blanco Storage
 Collection Date: 4/25/2019 11:00:00 AM

 Lab ID:
 1904C85-001
 Matrix: SOIL
 Received Date: 4/26/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	61		mg/Kg	20	4/26/2019 11:13:05 AM	44561
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: ЈМЕ
Diesel Range Organics (DRO)	520	9.3		mg/Kg	1	4/26/2019 10:11:40 AM	44559
Motor Oil Range Organics (MRO)	210	46		mg/Kg	1	4/26/2019 10:11:40 AM	44559
Surr: DNOP	87.8	70-130		%Rec	1	4/26/2019 10:11:40 AM	44559
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	1300	83		mg/Kg	20	4/26/2019 12:02:33 PM	G59464
Surr: BFB	489	73.8-119	S	%Rec	20	4/26/2019 12:02:33 PM	G59464
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	0.58	0.41		mg/Kg	20	4/26/2019 12:02:33 PM	B59464
Toluene	3.4	0.83		mg/Kg	20	4/26/2019 12:02:33 PM	B59464
Ethylbenzene	8.3	0.83		mg/Kg	20	4/26/2019 12:02:33 PM	B59464
Xylenes, Total	70	1.7		mg/Kg	20	4/26/2019 12:02:33 PM	B59464
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	20	4/26/2019 12:02:33 PM	B59464

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1904C85** 

29-Apr-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-44561 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 44561 RunNo: 59463

Prep Date: 4/26/2019 Analysis Date: 4/26/2019 SeqNo: 2003513 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-44561 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 44561 RunNo: 59463

Prep Date: 4/26/2019 Analysis Date: 4/26/2019 SeqNo: 2003514 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 96.2 90 110

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 2 of 5

## Hall Environmental Analysis Laboratory, Inc.

Result

4.8

WO#: 1904C85

29-Apr-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: <b>MB-44559</b>	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID:	44559	R	unNo: <b>59439</b>				
Prep Date: 4/26/2019	Analysis Date:	4/26/2019	Se	eqNo: <b>2002693</b>	Units: mg/Kg			
Analyte	Result PC	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit %R	RPD RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10						
Motor Oil Range Organics (MRO)	ND	50						
Surr: DNOP	8.1	10.00		80.7 70	130			
Sample ID: LCS-44559	SampType:	LCS	Test	Code: <b>EPA Method</b>	8015M/D: Diesel F	Range Organics		
Client ID: LCSS	Batch ID:	44559	R	unNo: <b>59439</b>				
Prep Date: 4/26/2019	Analysis Date:	4/26/2019	Se	eqNo: <b>2002694</b>	Units: mg/Kg			
Analyte	Result PO	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit %R	RPD RPDLimit	Qual	
Diesel Range Organics (DRO)	43	10 50.00	0	86.7 63.9	124			
Surr: DNOP	3.9	5.000		77.8 70	130			
Sample ID: LCS-44544	SampType:	LCS	Test	Code: <b>EPA Method</b>	8015M/D: Diesel F	Range Organics		
Client ID: LCSS	Batch ID:	44544	R	unNo: <b>59449</b>				
Prep Date: 4/25/2019	Analysis Date:		•	egNo: <b>2002781</b>	Units: %Rec			

Sample ID: MB-44544	SampType: <b>MBLK</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics	
Client ID: PBS	Batch ID: 44544	RunNo: 59449		
Prep Date: 4/25/2019	Analysis Date: 4/26/2019	SeqNo: <b>2002782</b>	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Surr: DNOP	14 10.00	144 70	130	S

SPK value SPK Ref Val %REC

5.000

130

%RPD

**RPDLimit** 

Qual

HighLimit

LowLimit

96.9

70

#### Qualifiers:

Analyte

Surr: DNOP

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 3 of 5

### Hall Environmental Analysis Laboratory, Inc.

t: 1904C85 29-Apr-19

WO#:

Client: ENSOLUM
Project: Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G59464 RunNo: 59464

Prep Date: Analysis Date: 4/26/2019 SeqNo: 2003349 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 87.6 73.8 119

Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G59464 RunNo: 59464

Prep Date: Analysis Date: 4/26/2019 SeqNo: 2003350 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 O 100 80.1 123

Surr: BFB 1000 1000 104 73.8 119

Sample ID: MB-44536 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 44536 RunNo: 59464

Prep Date: 4/25/2019 Analysis Date: 4/26/2019 SeqNo: 2003356 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 870 1000 86.9 73.8 119

Sample ID: LCS-44536 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 44536 RunNo: 59464

Prep Date: 4/25/2019 Analysis Date: 4/26/2019 SeqNo: 2003357 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 1000 1000 103 73.8 119

#### 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
- PQL Practical Quantitative Limit
- 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 Limit

Page 4 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1904C85** 

29-Apr-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: **B59464** RunNo: 59464 Prep Date: Analysis Date: 4/26/2019 SeqNo: 2003385 Units: mq/Kq SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Benzene ND 0.025 Toluene ND 0.050 0.050 Ethylbenzene ND Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.86 1.000 85.7 80 120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B59464** RunNo: 59464 Prep Date: Analysis Date: 4/26/2019 SeqNo: 2003386 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.000 0.96 0.025 0 95.8 80 120 Benzene Toluene 0.98 0.050 1.000 0 98.4 80 120 0 98.2 80 Ethylbenzene 0.98 0.050 1.000 120 0 99.3 Xylenes, Total 3.0 0.10 3.000 80 120 0.95 Surr: 4-Bromofluorobenzene 1.000 95.2 80 120

Sample ID: MB-44536 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 44536 RunNo: 59464 Prep Date: Analysis Date: 4/26/2019 SeqNo: 2003389 Units: %Rec 4/25/2019 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.86 1.000 86.2 Surr: 4-Bromofluorobenzene 80 120

Sample ID: LCS-44536 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 44536 RunNo: 59464 SeqNo: 2003390 Prep Date: 4/25/2019 Analysis Date: 4/26/2019 Units: %Rec POI SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Surr: 4-Bromofluorobenzene 0.89 1.000 89.2 80 120

#### 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
- PQL Practical Quantitative Limit
- 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 Limit

Page 5 of 5



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: ENSOLUM AZTEC	Work Order Numbe	r: 1904C85	<del></del>	RcptNo: 1
Received By: Anne Thorne	4/26/2019 8:15:00 AM	Л	anne Am	_
Completed By: Anne Thorne	4/26/2019 8:27:50 AM	Л	Ame St	
Reviewed By:	04/26/19		and from	
I abolithe'	11/20119			
Chain of Custody	04/2011			
Is Chain of Custody complete?		Yes 🗸	No 🗆	Not Present
2. How was the sample delivered?		Courier		
Log In				
3. Was an attempt made to cool the s	amples?	Yes 🗸	No 🗌	NA 🗌
4. Were all samples received at a tem	perature of >0° C to 6.0°C	Yes 🔽	No 🗆	NA 🗆
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗆	•
6. Sufficient sample volume for indicat	ed test(s)?	Yes 🗸	No 🗌	
7. Are samples (except VOA and ONG	6) properly preserved?	Yes 🗸	No 🗌	
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗆
9. VOA vials have zero headspace?		Yes	No 🗀	No VOA Vials 🗹
0. Were any sample containers receiv	ed broken?	Yes	No 🗹 🗇	# af
Does paperwork match bottle labels     (Note discrepancies on chain of cus		Yes 🔽		# of preserved bottles checked for pH: (<2 or >12 unless noted)
2. Are matrices correctly identified on (	••	Yes 🗹	No 🗀	Adjusted?
3. Is it clear what analyses were reque	· ·	Yes 🗹	No 🗆	<del></del>
<ol> <li>Were all holding times able to be me (If no, notify customer for authorization)</li> </ol>		Yes 🗹	No 🗆	Checked by:
pecial Handling (if applicable	2			
15. Was client notified of all discrepand	ies with this order?	Yes 🗌	No 🗌	NA 🗹
Person Notified:	Date			
By Whom:	Via: [	eMail P	hone 🔲 Fax [	In Person
Regarding:				
Client Instructions:				
6. Additional remarks:	Istudy Seal.	intact	on so	ul Ja- / 1 04/26
7. Cooler Information				,
Gooler No Temp °C Condit		Seal Date	Signed By	
1 1.9 Good 2 3.9 Good	Yes			
2 3.9 Good	Yes	i		

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

May 07, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

**FAX** 

RE: Blanco Storage OrderNo.: 1905227

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/4/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1905227

Date Reported: 5/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-24

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:00:00 AM

 Lab ID:
 1905227-001
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	5/5/2019 11:06:49 AM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: TOM
Diesel Range Organics (DRO)	150	9.8		mg/Kg	1	5/6/2019 10:19:41 AM	44727
Motor Oil Range Organics (MRO)	140	49		mg/Kg	1	5/6/2019 10:19:41 AM	44727
Surr: DNOP	95.9	70-130		%Rec	1	5/6/2019 10:19:41 AM	44727
EPA METHOD 8015D: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	22	21		mg/Kg	5	5/6/2019 9:15:29 AM	G59659
Surr: BFB	129	73.8-119	S	%Rec	5	5/6/2019 9:15:29 AM	G59659
EPA METHOD 8021B: VOLATILES						Analyst	: RAA
Benzene	ND	0.11		mg/Kg	5	5/6/2019 9:15:29 AM	R59659
Toluene	ND	0.21		mg/Kg	5	5/6/2019 9:15:29 AM	R59659
Ethylbenzene	ND	0.21		mg/Kg	5	5/6/2019 9:15:29 AM	R59659
Xylenes, Total	1.6	0.43		mg/Kg	5	5/6/2019 9:15:29 AM	R59659
Surr: 4-Bromofluorobenzene	93.7	80-120		%Rec	5	5/6/2019 9:15:29 AM	R59659

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 14

Lab Order 1905227

Date Reported: 5/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-25

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:05:00 AM

 Lab ID:
 1905227-002
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	5/5/2019 11:19:13 AM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: TOM
Diesel Range Organics (DRO)	48	9.7	mg/Kg	1	5/6/2019 12:10:33 PM	44727
Motor Oil Range Organics (MRO)	55	49	mg/Kg	1	5/6/2019 12:10:33 PM	44727
Surr: DNOP	97.5	70-130	%Rec	1	5/6/2019 12:10:33 PM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	24	mg/Kg	5	5/6/2019 9:39:10 AM	G59659
Surr: BFB	119	73.8-119	%Rec	5	5/6/2019 9:39:10 AM	G59659
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.12	mg/Kg	5	5/6/2019 9:39:10 AM	R59659
Toluene	ND	0.24	mg/Kg	5	5/6/2019 9:39:10 AM	R59659
Ethylbenzene	0.25	0.24	mg/Kg	5	5/6/2019 9:39:10 AM	R59659
Xylenes, Total	0.61	0.47	mg/Kg	5	5/6/2019 9:39:10 AM	R59659
Surr: 4-Bromofluorobenzene	94.1	80-120	%Rec	5	5/6/2019 9:39:10 AM	R59659

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 2 of 14

Lab Order 1905227

Date Reported: 5/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-26

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:10:00 AM

 Lab ID:
 1905227-003
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Result **RL Oual Units DF** Date Analyzed Analyses **Batch EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 60 mg/Kg 20 5/5/2019 11:31:38 AM 44722 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) ND 9.8 mg/Kg 5/6/2019 11:03:47 AM Motor Oil Range Organics (MRO) ND 44727 49 mg/Kg 1 5/6/2019 11:03:47 AM Surr: DNOP 96.4 70-130 %Rec 1 5/6/2019 11:03:47 AM 44727 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) ND 5 5/6/2019 10:02:55 AM G59659 22 mg/Kg Surr: BFB 103 73.8-119 %Rec 5 5/6/2019 10:02:55 AM G59659 **EPA METHOD 8021B: VOLATILES** Analyst: RAA ND 5/6/2019 10:02:55 AM R59659 Benzene 0.11 mg/Kg 5 Toluene ND 0.22 mg/Kg 5/6/2019 10:02:55 AM R59659 Ethylbenzene ND 0.22 mg/Kg 5 5/6/2019 10:02:55 AM R59659 Xylenes, Total ND 0.44 mg/Kg 5/6/2019 10:02:55 AM R59659 Surr: 4-Bromofluorobenzene 80-120 92.3 %Rec 5/6/2019 10:02:55 AM R59659

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 3 of 14

Lab Order 1905227

Date Reported: 5/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-27

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:15:00 AM

 Lab ID:
 1905227-004
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	59	mg/Kg	20	5/5/2019 11:44:02 AM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	5/6/2019 11:25:55 AM	44727
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/6/2019 11:25:55 AM	44727
Surr: DNOP	98.2	70-130	%Rec	1	5/6/2019 11:25:55 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	5/6/2019 10:26:18 AM	G59659
Surr: BFB	98.1	73.8-119	%Rec	1	5/6/2019 10:26:18 AM	G59659
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.020	mg/Kg	1	5/6/2019 10:26:18 AM	R59659
Toluene	ND	0.041	mg/Kg	1	5/6/2019 10:26:18 AM	R59659
Ethylbenzene	ND	0.041	mg/Kg	1	5/6/2019 10:26:18 AM	R59659
Xylenes, Total	ND	0.082	mg/Kg	1	5/6/2019 10:26:18 AM	R59659
Surr: 4-Bromofluorobenzene	90.6	80-120	%Rec	1	5/6/2019 10:26:18 AM	R59659

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
- PQL Practical Quanitative Limit

- 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 Limit

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Lab Order 1905227

Date Reported: 5/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-28

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:20:00 AM

 Lab ID:
 1905227-005
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Result **RL Oual Units DF** Date Analyzed Analyses **Batch EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 60 mg/Kg 20 5/5/2019 11:56:27 AM 44722 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) 10 9.6 mg/Kg 5/6/2019 11:48:11 AM Motor Oil Range Organics (MRO) ND 44727 48 mg/Kg 1 5/6/2019 11:48:11 AM Surr: DNOP 95.9 70-130 %Rec 5/6/2019 11:48:11 AM 44727 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) 5/6/2019 10:49:43 AM G59659 4.8 4.4 mg/Kg Surr: BFB 26.9 73.8-119 S %Rec 5/6/2019 10:49:43 AM G59659 Analyst: RAA **EPA METHOD 8021B: VOLATILES** ND 5/6/2019 10:49:43 AM R59659 Benzene 0.022 mg/Kg Toluene ND 0.044 mg/Kg 5/6/2019 10:49:43 AM R59659 Ethylbenzene ND 0.044 mg/Kg 1 5/6/2019 10:49:43 AM R59659 Xylenes, Total ND 0.088 mg/Kg 5/6/2019 10:49:43 AM R59659 Surr: 4-Bromofluorobenzene 91.7 80-120 %Rec 5/6/2019 10:49:43 AM R59659

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
- PQL Practical Quanitative Limit
- 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 Limit

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Surr: 4-Bromofluorobenzene

R59659

#### **Analytical Report**

Lab Order 1905227

Date Reported: 5/7/2019

5/6/2019 11:13:14 AM

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-29

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:25:00 AM

 Lab ID:
 1905227-006
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses Analyst: MRA **EPA METHOD 300.0: ANIONS** Chloride ND 60 mg/Kg 20 5/5/2019 12:08:51 PM 44722 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) ND 9.7 mg/Kg 5/6/2019 12:29:30 PM Motor Oil Range Organics (MRO) ND 44727 49 mg/Kg 1 5/6/2019 12:29:30 PM Surr: DNOP 98.8 70-130 %Rec 5/6/2019 12:29:30 PM 44727 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) ND 5/6/2019 11:13:14 AM G59659 4.7 mg/Kg Surr: BFB 91.4 73.8-119 %Rec 5/6/2019 11:13:14 AM G59659 **EPA METHOD 8021B: VOLATILES** Analyst: RAA ND 5/6/2019 11:13:14 AM R59659 Benzene 0.023 mg/Kg Toluene ND 0.047 mg/Kg 5/6/2019 11:13:14 AM R59659 Ethylbenzene ND 0.047 mg/Kg 1 5/6/2019 11:13:14 AM R59659 Xylenes, Total ND 0.094 mg/Kg 5/6/2019 11:13:14 AM R59659

89.3

80-120

%Rec

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1905227

Date Reported: 5/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-30

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:30:00 AM

 Lab ID:
 1905227-007
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	5/5/2019 12:21:16 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	5/6/2019 12:05:05 PM	44727
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/6/2019 12:05:05 PM	44727
Surr: DNOP	93.3	70-130	%Rec	1	5/6/2019 12:05:05 PM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	5.1	mg/Kg	1	5/6/2019 11:36:42 AM	G59659
Surr: BFB	90.8	73.8-119	%Rec	1	5/6/2019 11:36:42 AM	G59659
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.026	mg/Kg	1	5/6/2019 11:36:42 AM	R59659
Toluene	ND	0.051	mg/Kg	1	5/6/2019 11:36:42 AM	R59659
Ethylbenzene	ND	0.051	mg/Kg	1	5/6/2019 11:36:42 AM	R59659
Xylenes, Total	ND	0.10	mg/Kg	1	5/6/2019 11:36:42 AM	R59659
Surr: 4-Bromofluorobenzene	88.4	80-120	%Rec	1	5/6/2019 11:36:42 AM	R59659

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
- PQL Practical Quantitative Limit
- 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 Limit

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Lab Order **1905227** 

Date Reported: 5/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-31

 Project:
 Blanco Storage
 Collection Date: 5/3/2019 10:35:00 AM

 Lab ID:
 1905227-008
 Matrix: MEOH (SOIL)
 Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	5/5/2019 12:33:41 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/6/2019 11:40:37 AM	44727
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/6/2019 11:40:37 AM	44727
Surr: DNOP	93.5	70-130	%Rec	1	5/6/2019 11:40:37 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	5/6/2019 12:00:04 PM	G59659
Surr: BFB	91.9	73.8-119	%Rec	1	5/6/2019 12:00:04 PM	G59659
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.018	mg/Kg	1	5/6/2019 12:00:04 PM	R59659
Toluene	ND	0.036	mg/Kg	1	5/6/2019 12:00:04 PM	R59659
Ethylbenzene	ND	0.036	mg/Kg	1	5/6/2019 12:00:04 PM	R59659
Xylenes, Total	ND	0.072	mg/Kg	1	5/6/2019 12:00:04 PM	R59659
Surr: 4-Bromofluorobenzene	89.2	80-120	%Rec	1	5/6/2019 12:00:04 PM	R59659

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
- PQL Practical Quanitative Limit

- 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 Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905227** 

07-May-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-44722 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 44722 RunNo: 59653

Prep Date: 5/5/2019 Analysis Date: 5/5/2019 SeqNo: 2010922 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-44722 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 44722 RunNo: 59653

Prep Date: 5/5/2019 Analysis Date: 5/5/2019 SeqNo: 2010923 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.5 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905227** *07-May-19* 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-44647 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 44647 RunNo: 59643

Prep Date: 5/3/2019 Analysis Date: 5/6/2019 SeqNo: 2010611 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.4 5.000 88.3 70 130

Sample ID: LCS-44727 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 44727 RunNo: 59643

Prep Date: 5/6/2019 Analysis Date: 5/6/2019 SeqNo: 2010612 Units: mg/Kg

%REC Result PQL SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 46 10 50.00 92.9 63.9 124 Surr: DNOP 4.3 5.000 86.8 70 130

Sample ID: MB-44647 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **PBS** Batch ID: **44647** RunNo: **59643** 

Prep Date: 5/3/2019 Analysis Date: 5/6/2019 SeqNo: 2010613 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 10 10.00 103 70 130

Sample ID: MB-44727 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 44727 RunNo: 59643 Prep Date: 5/6/2019 Analysis Date: 5/6/2019 SeqNo: 2010614 Units: mg/Kg %RPD PQL SPK value SPK Ref Val %REC LowLimit HighLimit **RPDLimit** Analyte Result Qual Diesel Range Organics (DRO) ND 10

Motor Oil Range Organics (MRO) ND 50
Surr: DNOP 9.5

 Surr: DNOP
 9.5
 10.00
 95.3
 70
 130

Sample ID: LCS-44646 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS Batch ID: 44646 RunNo: 59644

Prep Date: 5/3/2019 Analysis Date: 5/6/2019 SeqNo: 2010648 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.3 5.000 85.9 70 130

Sample ID: MB-44646 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 44646 RunNo: 59644

Prep Date: 5/3/2019 Analysis Date: 5/6/2019 SeqNo: 2010649 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 9.2 10.00 92.3 70 130

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905227** *07-May-19* 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: 1905227-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **S-24** Batch ID: **44727** RunNo: **59644** 

Prep Date: 5/6/2019 Analysis Date: 5/6/2019 SeqNo: 2011113 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual Diesel Range Organics (DRO) S 180 9.7 48.69 154.4 43.0 53.5 126 Surr: DNOP 4.3 4.869 88.0 130

Sample ID: 1905227-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **\$-24** Batch ID: **44727** RunNo: **59644** 

Prep Date: 5/6/2019 Analysis Date: 5/6/2019 SeqNo: 2011114 Units: mg/Kg

**RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual Diesel Range Organics (DRO) 170 9.8 48.88 154.4 24.2 53.5 126 5.35 21.7 S Surr: DNOP 4.1 4.888 83.8 70 130 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
- PQL Practical Quanitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1905227 07-May-19

Client: **ENSOLUM Project:** Blanco Storage

Sample ID: 1905227-001A MS TestCode: EPA Method 8015D: Gasoline Range SampType: MS

Client ID: S-24 Batch ID: **G59659** RunNo: 59659

Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011194 Units: mq/Kq

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 130 21 107.2 22.13 96.4 69.1 142 Surr: BFB 6100 4288 143 73.8 119 S

Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G59659 RunNo: 59659

Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011208 Units: mg/Kg

HighLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 5.0 25.00 O 94.7 80.1 123 Surr: BFB 1100 1000 108 73.8 119

Sample ID: RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: Batch ID: G59659 RunNo: 59659

Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011209 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result PQL HighLimit Qual Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 940 1000 94.5 73.8 119

Sample ID: LCS-44705 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 44705 RunNo: 59659

Prep Date: 5/3/2019 Analysis Date: 5/7/2019 SeqNo: 2011491 Units: %Rec

SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Surr: BFB 1100 1000 105 73.8 119

Sample ID: MB-44705 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 44705 RunNo: 59659

Analysis Date: 5/7/2019 SeqNo: 2011493 Prep Date: 5/3/2019 Units: %Rec

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual

Surr: BFB 910 1000 91 1 73.8 119

Sample ID: 1905227-001A MSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: S-24 Batch ID: G59659 RunNo: 59659

Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011494 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 22.13 120 21 107.2 95.1 69.1 142 1.13 20

Surr: BFB 5800 4288 135 73.8 119 0 0 S

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

ND

ND

ND

ND

0.025

0.050

0.050

0.10

WO#: 1905227

07-May-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: 100NG BTEX LCS	SampT	SampType: LCS TestCode: EPA Method 8021B: Volatiles										
Client ID: LCSS	Batch	Batch ID: <b>R59659</b> RunNo: <b>59659</b>										
Prep Date:	Analysis D	Date: <b>5/</b>	6/2019	S	SeqNo: 2	011244	Units: mg/k	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.90	0.025	1.000	0	89.7	80	120					
Toluene	0.92	0.050	1.000	0	91.7	80	120					
Ethylbenzene	0.91	0.050	1.000	0	91.4	80	120					
Xylenes, Total	2.8	0.10	3.000	0	91.7	80	120					
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	80	120					
Sample ID: RB	SampT	уре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles				
Client ID: PBS	Batch	n ID: <b>R5</b>	9659	F	tunNo: 5	9659						
Prep Date:	Analysis D	Date: <b>5/</b>	6/2019	S	SeqNo: 2	011255	Units: mg/k	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		

Surr: 4-Bromofluorobenzene	0.92	1.000		92.0	80	120			
Sample ID: LCS-44705	SampType	: LCS	Test	tCode: El	PA Method	8021B: Vola	iles		
Client ID: LCSS	Batch ID:	44705	R	tunNo: <b>5</b> 9	9659				
Prep Date: 5/3/2019	Analysis Date:	5/7/2019	S	SeqNo: 20	011515	Units: %Re	С		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91	1.000		91.2	80	120			

Sample ID: MB-44705	SampTy	pe: MBI	LK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	ID: <b>447</b> 0	05	F	RunNo: <b>5</b>	9659				
Prep Date: 5/3/2019	Analysis Da	ite: <b>5/7</b>	/2019	S	SeqNo: 2	011516	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.90		1 000		89.5	80	120		_	

Sample ID: 1905227-002A MS	SampT	SampType: MS			TestCode: EPA Method 8021B: Volatiles					
Client ID: S-25	Batch	Batch ID: <b>R59659</b>			RunNo: <b>59659</b>					
Prep Date:	Analysis D	ate: <b>5/</b>	6/2019	9	SeqNo: 20	012538	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.0	0.12	4.717	0.05708	83.5	63.9	127			
Toluene	4.1	0.24	4.717	0.05094	85.8	69.9	131			
Ethylbenzene	4.3	0.24	4.717	0.2505	86.5	71	132			
Xylenes, Total	13	0.47	14.15	0.6075	87.4	71.8	131			

#### Qualifiers:

Benzene Toluene

Ethylbenzene Xylenes, Total

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

4.4

WO#: 1905227

07-May-19

**Client: ENSOLUM Project:** Blanco Storage

Surr: 4-Bromofluorobenzene

Sample ID: 1905227-002A MS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: S-25 RunNo: 59659 Batch ID: **R59659** 

Units: mg/Kg Prep Date: Analysis Date: 5/6/2019 SeqNo: 2012538

Analyte SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit

94.2

80

120

Sample ID: 1905227-002A MSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

4.717

Client ID: S-25 Batch ID: **R59659** RunNo: 59659

Prep Date: Analysis Date: 5/6/2019 SeqNo: 2012539 Units: mg/Kg

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result PQL LowLimit Qual Benzene 3.9 0.12 4.717 0.05708 81.7 63.9 127 2.16 20 Toluene 4.0 0.24 4.717 0.05094 83.5 69.9 131 2.60 20 Ethylbenzene 0.24 0.2505 84.2 71 132 2.56 20 4.2 4.717 Xylenes, Total 13 0.47 14.15 0.6075 85.8 71.8 131 1.72 20 0 4.4 4.717 93.0 80 120 0 Surr: 4-Bromofluorobenzene

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **ENSOLUM AZTEC** Work Order Number: 1905227 RcptNo: 1 INON Received By: Isaiah Ortiz 5/4/2019 8:50:00 AM IJOX Completed By: Isaiah Ortiz 5/4/2019 9:41:21 AM of ma 5/5/19 Reviewed By: Chain of Custody 1. Is Chain of Custody complete? Yes 🗸 No Not Present 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? Yes 🗸 No -NA 4. Were all samples received at a temperature of >0° C to 6.0°C No \_ NA 🗌 5. Sample(s) in proper container(s)? Yes 🗸 No \_ 6. Sufficient sample volume for indicated test(s)? Yes 🗸 7. Are samples (except VOA and ONG) properly preserved? Yes 8. Was preservative added to bottles? Yes No 🗸 NA 9. VOA vials have zero headspace? Yes No No VOA Vials V 10. Were any sample containers received broken? Yes No 🗸 # of preserved bottles checked 11. Does paperwork match bottle labels? for pH: No (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? 12. Are matrices correctly identified on Chain of Custody? **V** No Yes 13. Is it clear what analyses were requested? **V** No 14. Were all holding times able to be met? No 🗌 Yes 🗸 Checked by: (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes \_\_ No NA V Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: Additional remarks: 17. Cooler Information

Cooler No

Temp °C

2.4

Condition

Good

Seal Intact

Yes

Seal No

Seal Date

Signed By

Received by OCD: 8/15/2023	10:45:18 AM				Page 203 of 384
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Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



May 14, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 1905367

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/8/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 1905367

Date Reported: 5/14/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-32

 Project:
 Blanco Storage
 Collection Date: 5/7/2019 10:00:00 AM

 Lab ID:
 1905367-001
 Matrix: SOIL
 Received Date: 5/8/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	60		mg/Kg	20	5/8/2019 6:24:19 PM	44802
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: ЈМЕ
Diesel Range Organics (DRO)	15	9.5		mg/Kg	1	5/9/2019 9:14:52 AM	44799
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/9/2019 9:14:52 AM	44799
Surr: DNOP	127	70-130		%Rec	1	5/9/2019 9:14:52 AM	44799
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	9.0	4.7		mg/Kg	1	5/8/2019 3:43:42 PM	G59737
Surr: BFB	173	73.8-119	S	%Rec	1	5/8/2019 3:43:42 PM	G59737
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024		mg/Kg	1	5/8/2019 3:43:42 PM	B59737
Toluene	ND	0.047		mg/Kg	1	5/8/2019 3:43:42 PM	B59737
Ethylbenzene	0.095	0.047		mg/Kg	1	5/8/2019 3:43:42 PM	B59737
Xylenes, Total	ND	0.095		mg/Kg	1	5/8/2019 3:43:42 PM	B59737
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	5/8/2019 3:43:42 PM	B59737

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 1 of 7

# Analytical Report Lab Order 1905367

Date Reported: 5/14/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-33

 Project:
 Blanco Storage
 Collection Date: 5/7/2019 10:05:00 AM

 Lab ID:
 1905367-002
 Matrix: SOIL
 Received Date: 5/8/2019 7:40:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	61	mg/Kg	20	5/8/2019 6:36:44 PM	44802
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/9/2019 9:38:09 AM	44799
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/9/2019 9:38:09 AM	44799
Surr: DNOP	115	70-130	%Rec	1	5/9/2019 9:38:09 AM	44799
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	5/8/2019 4:06:19 PM	G59737
Surr: BFB	116	73.8-119	%Rec	1	5/8/2019 4:06:19 PM	G59737
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.022	mg/Kg	1	5/8/2019 4:06:19 PM	B59737
Toluene	ND	0.043	mg/Kg	1	5/8/2019 4:06:19 PM	B59737
Ethylbenzene	ND	0.043	mg/Kg	1	5/8/2019 4:06:19 PM	B59737
Xylenes, Total	ND	0.087	mg/Kg	1	5/8/2019 4:06:19 PM	B59737
Surr: 4-Bromofluorobenzene	90.5	80-120	%Rec	1	5/8/2019 4:06:19 PM	B59737

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
- PQL Practical Quanitative Limit
- 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 Limit

pple pH Not In Range Page 2 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905367** 

14-May-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-44802 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 44802 RunNo: 59749

Prep Date: 5/8/2019 Analysis Date: 5/8/2019 SeqNo: 2014969 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-44802 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 44802 RunNo: 59749

Prep Date: 5/8/2019 Analysis Date: 5/8/2019 SeqNo: 2014970 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 15 1.5 15.00 0 99.1 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 3 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905367** 

14-May-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: <b>MB-44799</b>	SampT	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 44799			RunNo: <b>59748</b>						
Prep Date: 5/8/2019	Analysis D	ate: <b>5/</b> 9	9/2019	9	SeqNo: 20	015084	Units: mg/K	ίg		
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	11		10.00		109	70	130			

Sample ID: LCS-44799	SampT	SampType: <b>LCS</b>			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 44799			RunNo: 59748							
Prep Date: 5/8/2019	Analysis D	ate: 5/	9/2019	S	eqNo: 2	015085	Units: mg/K	ίg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	57	10	50.00	0	115	63.9	124				
Surr: DNOP	4.9		5.000		99.0	70	130				

#### 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
- PQL Practical Quanitative Limit

- 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 Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905367** 

14-May-19

Client:	ENSOLUM
Project:	Blanco Storage

Sample ID: RB	SampT	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: <b>G59737</b>			RunNo: <b>59737</b>							
Prep Date:	Analysis D	Date: <b>5/</b>	8/2019	S	SeqNo: 20	014601	Units: mg/K	ίg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	890		1000		88.6	73.8	119				
Sample ID: 2.5UG GRO LCS2	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range										

Client ID: LCSS	Batcl	n ID: <b>G5</b>	9737	F	RunNo: <b>5</b> 9	9737				
Prep Date:	Analysis D	Date: <b>5/</b>	8/2019	8	SeqNo: 20	014602	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.7	80.1	123			
Surr: BFB	1100		1000		107	73.8	119			

Sample ID: 1905367-001A MS	Samp1	уре: <b>М</b>	3	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: S-32	Batc	h ID: <b>G</b> 5	9737	F	RunNo: 5	9737				
Prep Date:	Analysis D	Date: 5/	/8/2019	S	SeqNo: 2	014606	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.7	23.65	8.988	88.9	69.1	142			
Surr: BFB	1800		946.1		194	73.8	119			S

Sample ID: 1905367-001A MS	<b>D</b> SampTy	ре: М\$	SD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е		
Client ID: S-32	Batch	ID: <b>G</b> 5	9737	F	RunNo: 5	9737					
Prep Date:	Analysis Da	ite: <b>5/</b>	8/2019	8	SeqNo: 2	014607	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	29	4.7	23.65	8.988	86.2	69.1	142	2.17	20		
Surr: BFB	1800		946.1		189	73.8	119	0	0	S	

Sample ID: MB-44697	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range
Client ID: PBS	Batch ID: 44697	RunNo: 59737
Prep Date: 5/2/2019	Analysis Date: 5/8/2019	SeqNo: <b>2014611</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK value	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: BEB	910 100	0 91.2 73.8 119

Sample ID: LCS-44697	TestCode: EPA Method 8015D: Gasoline Range										
Client ID: LCSS	Batch	697	F	tunNo: 5	9737						
Prep Date: 5/2/2019 Analysis Date: 5/8/2019					SeqNo: 2	014612	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB	1000		1000		104	73.8	119				

#### Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1905367

14-May-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: **B59737** RunNo: 59737

Prep Date: Analysis Date: 5/8/2019 SeqNo: 2014716 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual

Benzene ND 0.025 Toluene ND 0.050 0.050 Ethylbenzene ND Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 0.87 1.000 87.1 80 120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: **B59737** RunNo: 59737

Prep Date:	Analysis [	Date: <b>5/</b>	8/2019	\$	SeqNo: 2	014717	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	106	80	120			
Toluene	0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.5	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.7	80	120			

Sample ID: 1905367-002A MS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: S-33 Batch ID: **B59737** RunNo: 59737

Prep Date:	Analysis [	Date: <b>5/</b>	8/2019	8	SeqNo: 2	014722	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.022	0.8673	0	109	63.9	127			
Toluene	0.80	0.043	0.8673	0	92.7	69.9	131			
Ethylbenzene	0.84	0.043	0.8673	0.03844	92.9	71	132			
Xylenes, Total	2.4	0.087	2.602	0.07224	91.1	71.8	131			
Surr: 4-Bromofluorobenzene	0.85		0.8673		97.7	80	120			

Sample ID: 1905367-002A MSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: S-33 Batch ID: **B59737** RunNo: 59737

Prep Date:	Analysis D	8/2019	5	SeqNo: 20	014723	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.71	0.022	0.8673	0	82.2	63.9	127	28.2	20	R
Toluene	0.80	0.043	0.8673	0	92.4	69.9	131	0.333	20	
Ethylbenzene	0.82	0.043	0.8673	0.03844	90.7	71	132	2.28	20	
Xylenes, Total	2.4	0.087	2.602	0.07224	89.0	71.8	131	2.29	20	
Surr: 4-Bromofluorobenzene	0.85		0.8673		97.9	80	120	0	0	

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905367** 

14-May-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-44697 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 44697 RunNo: 59737

Prep Date: 5/2/2019 Analysis Date: 5/8/2019 SeqNo: 2014726 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: 4-Bromofluorobenzene 0.87 1.000 87.3 80 120

Sample ID: LCS-44697 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 44697 RunNo: 59737

Prep Date: 5/2/2019 Analysis Date: 5/8/2019 SeqNo: 2014727 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: 4-Bromofluorobenzene 0.94 1.000 94.2 80 120

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

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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 Na	me: ENSOLUM	M AZTEC	Work	Order Numb	per: 190	5367			RcptN	o: 1
Received	By: <b>Yazmine</b>	Garduno	5/8/201	9 7:40:00 AI	М		Mayo	in lighten	ž	
Completed Reviewed	By: B	Garduno	5/8/201	9 8:16:19 AI   9	М		Nape	inu léfinduni	Į.	
UN. ~		011								
÷	Custody	0								
	n of Custody com				Yes		No	) <u> </u>	Not Present	
2. How wa	as the sample deli	vered?			Cou	<u>rier</u>				
Log In 3. Was an	attempt made to	cool the samp	les?		Yes	<b>✓</b>	No		NA 🗆	
4. Were al	l samples receive	d at a tempera	ture of >0° C t	to 6.0°C	Yes	<b>✓</b>	No		NA 🗆	
5. Sample	(s) in proper conta	ainer(s)?			Yes	<b>✓</b>	No			
6. Sufficier	nt sample volume	for indicated te	est(s)?		Yes	<b>V</b>	No			
7. Are sam	ples (except VOA	and ONG) pro	perly preserve	ed?	Yes	<b>V</b>	No			
8. Was pre	eservative added t	o bottles?			Yes		No	<b>✓</b>	NA $\square$	
9. VOA via	ls have zero head	Ispace?			Yes		No		No VOA Vials	
10. Were ar	ny sample contain	ers received b	roken?		Yes		No	<b>✓</b>		
The state of the s	perwork match bo		ř		Yes	<b>✓</b>	No		# of preserved bottles checked for pH:	or >12 unless noted)
12. Are matr	rices correctly idea	ntified on Chair	of Custody?		Yes	<b>V</b>	No		Adjusted?	
13. Is it clea	r what analyses w	ere requested	?		Yes	<b>V</b>	No			
	holding times abl				Yes	✓	No		Checked by:	DAD 5/8/19
Special H	andling (if ap	plicable)								
	ent notified of all o	* A S	vith this order?		Yes		No		NA 🗸	
Pe	erson Notified:			Date:	Г	-				
Ву	y Whom:			Via:	☐ еМа	ail 🗌	Phone [	Fax	☐ In Person	
Re	egarding:							***************************************	The second of the second of the second	
CI	ient Instructions:									
16. Addition	nal remarks:						31			
17. Cooler	Information									
	er No Temp °C	Condition	Seal Intact	Seal No	Seal D	ate	Signed	Ву		
1	2.4	Good	Yes							
2	1.4	Good	Yes							

Recei	ved b	y <b>O</b> (	C <b>D</b> : 8	8/15/	/2 <i>02</i> .	3 10	:45:18	AM													Page 213 of
	HALL ENVIKONMENTAL ANALYSIS LABORATORY		www.imenvinolinientar.com 4901 Hawkins NE - Albuquerque, NM 87109	10	Analysis		PO4, S0	NO <sub>2</sub> , I	lo ( sl ,ε(	831( Meta, NC (A(	PAHs by RCRA 8 CI, F, Br 8260 (VC 8270 (Se Total Col		***							- 70m Long	17/4   1358   Para Kry 1/235717   Date Time   AFE # WU1343   5/8/11 7.40
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Time: Nex+ Day	Rush 5-9	.:o	nco Storage		-A 1336043	ager:	Sumas	C DAparts	✓ Yes □ No	O(including CF): 7-UC 1.UC	Preservative HEAL No.	100- 1001	1 -001							Via: Date Time	
Turn-Around Time:	☐ Standard	Project Name:	Blar	Project #:	150	Project Manager:	Ň	1:	On Ice:	# of Coolers: Cooler Temp(including CF):	Container Type and #		_							Received by:	Received by:
Chain-of-Custody Record	7		S Ric Grande	the Non			☐ Level 4 (Full Validation)	npliance			Sample Name	532	5-33							d by:	Time: Relinquished by:  Net   Who   Man   Connection   Co
of-Cu	Ensolun		900	1 Az				☐ Az Compliance			Matrix	V	7							Relinquished by:	Relinquished by
hain-	En		Mailing Address:	4		Fax#:	QA/QC Package:		-	EDD (1ype)	Time	000/	1085								1.354 Time: R
O	Client:		Mailing	50.	Phone #:	email or Fax#:	QA/QC Packa	Accreditation:			Date	61/1/	Phly							Date: 7	2



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

June 13, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 1906575

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 12 sample(s) on 6/12/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-34

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:00:00 AM

 Lab ID:
 1906575-001
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 10:52:15 AM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/12/2019 10:12:05 AM	45525
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/12/2019 10:12:05 AM	45525
Surr: DNOP	84.1	70-130	%Rec	1	6/12/2019 10:12:05 AM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	6/12/2019 9:29:04 AM	45518
Surr: BFB	102	73.8-119	%Rec	1	6/12/2019 9:29:04 AM	45518
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.018	mg/Kg	1	6/12/2019 9:29:04 AM	45518
Toluene	ND	0.036	mg/Kg	1	6/12/2019 9:29:04 AM	45518
Ethylbenzene	ND	0.036	mg/Kg	1	6/12/2019 9:29:04 AM	45518
Xylenes, Total	ND	0.073	mg/Kg	1	6/12/2019 9:29:04 AM	45518
Surr: 4-Bromofluorobenzene	94.6	80-120	%Rec	1	6/12/2019 9:29:04 AM	45518

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
- PQL Practical Quanitative Limit

- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-35

**Project:** Blanco Storage
 Collection Date: 6/11/2019 9:05:00 AM

 **Lab ID:** 1906575-002
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 11:04:40 AM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	6/12/2019 10:36:32 AM	45525
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/12/2019 10:36:32 AM	45525
Surr: DNOP	82.2	70-130	%Rec	1	6/12/2019 10:36:32 AM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	6/12/2019 9:51:45 AM	45518
Surr: BFB	101	73.8-119	%Rec	1	6/12/2019 9:51:45 AM	45518
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	6/12/2019 9:51:45 AM	45518
Toluene	ND	0.046	mg/Kg	1	6/12/2019 9:51:45 AM	45518
Ethylbenzene	ND	0.046	mg/Kg	1	6/12/2019 9:51:45 AM	45518
Xylenes, Total	ND	0.092	mg/Kg	1	6/12/2019 9:51:45 AM	45518
Surr: 4-Bromofluorobenzene	94.1	80-120	%Rec	1	6/12/2019 9:51:45 AM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-36

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:10:00 AM

 Lab ID:
 1906575-003
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 11:17:05 AM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/12/2019 11:01:06 AM	45525
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/12/2019 11:01:06 AM	45525
Surr: DNOP	82.8	70-130	%Rec	1	6/12/2019 11:01:06 AM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	6/12/2019 10:14:25 AM	45518
Surr: BFB	105	73.8-119	%Rec	1	6/12/2019 10:14:25 AM	45518
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.021	mg/Kg	1	6/12/2019 10:14:25 AM	45518
Toluene	ND	0.043	mg/Kg	1	6/12/2019 10:14:25 AM	45518
Ethylbenzene	ND	0.043	mg/Kg	1	6/12/2019 10:14:25 AM	45518
Xylenes, Total	ND	0.086	mg/Kg	1	6/12/2019 10:14:25 AM	45518
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	6/12/2019 10:14:25 AM	45518

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
- PQL Practical Quanitative Limit

- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-37

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:15:00 AM

 Lab ID:
 1906575-004
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 11:29:30 AM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	6/12/2019 11:25:33 AM	45525
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	6/12/2019 11:25:33 AM	45525
Surr: DNOP	101	70-130	%Rec	1	6/12/2019 11:25:33 AM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	6/12/2019 10:37:04 AM	45518
Surr: BFB	105	73.8-119	%Rec	1	6/12/2019 10:37:04 AM	45518
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.022	mg/Kg	1	6/12/2019 10:37:04 AM	45518
Toluene	ND	0.045	mg/Kg	1	6/12/2019 10:37:04 AM	45518
Ethylbenzene	ND	0.045	mg/Kg	1	6/12/2019 10:37:04 AM	45518
Xylenes, Total	ND	0.090	mg/Kg	1	6/12/2019 10:37:04 AM	45518
Surr: 4-Bromofluorobenzene	98.3	80-120	%Rec	1	6/12/2019 10:37:04 AM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-38

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:20:00 AM

 Lab ID:
 1906575-005
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	60		mg/Kg	20	6/12/2019 11:41:55 AM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	TOM
Diesel Range Organics (DRO)	96	9.6		mg/Kg	1	6/12/2019 11:50:09 AM	45525
Motor Oil Range Organics (MRO)	74	48		mg/Kg	1	6/12/2019 11:50:09 AM	45525
Surr: DNOP	92.1	70-130		%Rec	1	6/12/2019 11:50:09 AM	45525
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	21	21		mg/Kg	5	6/12/2019 10:59:47 AM	45518
Surr: BFB	165	73.8-119	S	%Rec	5	6/12/2019 10:59:47 AM	45518
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.10		mg/Kg	5	6/12/2019 10:59:47 AM	45518
Toluene	ND	0.21		mg/Kg	5	6/12/2019 10:59:47 AM	45518
Ethylbenzene	ND	0.21		mg/Kg	5	6/12/2019 10:59:47 AM	45518
Xylenes, Total	ND	0.41		mg/Kg	5	6/12/2019 10:59:47 AM	45518
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	5	6/12/2019 10:59:47 AM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order **1906575** 

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-39

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:25:00 AM

 Lab ID:
 1906575-006
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	6/12/2019 11:54:19 AM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	TOM
Diesel Range Organics (DRO)	42	9.9		mg/Kg	1	6/12/2019 1:27:26 PM	45525
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/12/2019 1:27:26 PM	45525
Surr: DNOP	95.8	70-130		%Rec	1	6/12/2019 1:27:26 PM	45525
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	6/12/2019 11:22:30 AM	45518
Surr: BFB	127	73.8-119	S	%Rec	5	6/12/2019 11:22:30 AM	45518
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.12		mg/Kg	5	6/12/2019 11:22:30 AM	45518
Toluene	ND	0.23		mg/Kg	5	6/12/2019 11:22:30 AM	45518
Ethylbenzene	ND	0.23		mg/Kg	5	6/12/2019 11:22:30 AM	45518
Xylenes, Total	ND	0.46		mg/Kg	5	6/12/2019 11:22:30 AM	45518
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	5	6/12/2019 11:22:30 AM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-40

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:30:00 AM

 Lab ID:
 1906575-007
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	59	mg/Kg	20	6/12/2019 12:06:44 PM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	6/12/2019 1:03:08 PM	45525
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/12/2019 1:03:08 PM	45525
Surr: DNOP	91.7	70-130	%Rec	1	6/12/2019 1:03:08 PM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	6/12/2019 11:45:10 AM	45518
Surr: BFB	106	73.8-119	%Rec	1	6/12/2019 11:45:10 AM	45518
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	6/12/2019 11:45:10 AM	45518
Toluene	ND	0.040	mg/Kg	1	6/12/2019 11:45:10 AM	45518
Ethylbenzene	ND	0.040	mg/Kg	1	6/12/2019 11:45:10 AM	45518
Xylenes, Total	ND	0.080	mg/Kg	1	6/12/2019 11:45:10 AM	45518
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	1	6/12/2019 11:45:10 AM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-41

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:35:00 AM

 Lab ID:
 1906575-008
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 12:43:58 PM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	14	9.6	mg/Kg	1	6/12/2019 12:38:52 PM	45525
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/12/2019 12:38:52 PM	45525
Surr: DNOP	91.7	70-130	%Rec	1	6/12/2019 12:38:52 PM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	6/12/2019 12:07:56 PM	45518
Surr: BFB	112	73.8-119	%Rec	1	6/12/2019 12:07:56 PM	45518
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	6/12/2019 12:07:56 PM	45518
Toluene	ND	0.041	mg/Kg	1	6/12/2019 12:07:56 PM	45518
Ethylbenzene	ND	0.041	mg/Kg	1	6/12/2019 12:07:56 PM	45518
Xylenes, Total	0.14	0.082	mg/Kg	1	6/12/2019 12:07:56 PM	45518
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	6/12/2019 12:07:56 PM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-42

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:40:00 AM

 Lab ID:
 1906575-009
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 12:56:22 PM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	TOM
Diesel Range Organics (DRO)	10	9.4	mg/Kg	1	6/12/2019 12:14:38 PM	45525
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/12/2019 12:14:38 PM	45525
Surr: DNOP	89.3	70-130	%Rec	1	6/12/2019 12:14:38 PM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	6/12/2019 12:30:42 PM	45518
Surr: BFB	109	73.8-119	%Rec	1	6/12/2019 12:30:42 PM	45518
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.022	mg/Kg	1	6/12/2019 12:30:42 PM	45518
Toluene	ND	0.045	mg/Kg	1	6/12/2019 12:30:42 PM	45518
Ethylbenzene	ND	0.045	mg/Kg	1	6/12/2019 12:30:42 PM	45518
Xylenes, Total	ND	0.089	mg/Kg	1	6/12/2019 12:30:42 PM	45518
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	6/12/2019 12:30:42 PM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-43

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:45:00 AM

 Lab ID:
 1906575-010
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 1:08:47 PM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/12/2019 11:23:37 AM	45525
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/12/2019 11:23:37 AM	45525
Surr: DNOP	92.8	70-130	%Rec	1	6/12/2019 11:23:37 AM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/12/2019 12:53:29 PM	45518
Surr: BFB	109	73.8-119	%Rec	1	6/12/2019 12:53:29 PM	45518
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	6/12/2019 12:53:29 PM	45518
Toluene	ND	0.050	mg/Kg	1	6/12/2019 12:53:29 PM	45518
Ethylbenzene	ND	0.050	mg/Kg	1	6/12/2019 12:53:29 PM	45518
Xylenes, Total	ND	0.10	mg/Kg	1	6/12/2019 12:53:29 PM	45518
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	6/12/2019 12:53:29 PM	45518

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 1906575

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-44

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:50:00 AM

 Lab ID:
 1906575-011
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	6/12/2019 1:21:12 PM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/12/2019 10:59:35 AM	45525
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/12/2019 10:59:35 AM	45525
Surr: DNOP	90.9	70-130	%Rec	1	6/12/2019 10:59:35 AM	45525
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	6/12/2019 9:34:03 AM	G60589
Surr: BFB	94.1	73.8-119	%Rec	1	6/12/2019 9:34:03 AM	G60589
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1	6/12/2019 9:34:03 AM	B60589
Toluene	ND	0.042	mg/Kg	1	6/12/2019 9:34:03 AM	B60589
Ethylbenzene	ND	0.042	mg/Kg	1	6/12/2019 9:34:03 AM	B60589
Xylenes, Total	ND	0.083	mg/Kg	1	6/12/2019 9:34:03 AM	B60589
Surr: 4-Bromofluorobenzene	98.8	80-120	%Rec	1	6/12/2019 9:34:03 AM	B60589

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
- PQL Practical Quanitative Limit

- 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 Limit

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Lab Order **1906575** 

Date Reported: 6/13/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-45

 Project:
 Blanco Storage
 Collection Date: 6/11/2019 9:55:00 AM

 Lab ID:
 1906575-012
 Matrix: SOIL
 Received Date: 6/12/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	60		mg/Kg	20	6/12/2019 1:33:37 PM	45527
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: TOM
Diesel Range Organics (DRO)	19	9.9		mg/Kg	1	6/12/2019 10:35:30 AM	45525
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/12/2019 10:35:30 AM	45525
Surr: DNOP	93.7	70-130		%Rec	1	6/12/2019 10:35:30 AM	45525
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	22	21		mg/Kg	5	6/12/2019 9:57:28 AM	G60589
Surr: BFB	121	73.8-119	S	%Rec	5	6/12/2019 9:57:28 AM	G60589
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.10		mg/Kg	5	6/12/2019 9:57:28 AM	B60589
Toluene	ND	0.21		mg/Kg	5	6/12/2019 9:57:28 AM	B60589
Ethylbenzene	ND	0.21		mg/Kg	5	6/12/2019 9:57:28 AM	B60589
Xylenes, Total	0.57	0.41		mg/Kg	5	6/12/2019 9:57:28 AM	B60589
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	5	6/12/2019 9:57:28 AM	B60589

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
- PQL Practical Quanitative Limit

- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906575** 

13-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-45527 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 45527 RunNo: 60594

Prep Date: 6/12/2019 Analysis Date: 6/12/2019 SeqNo: 2051124 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-45527 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 45527 RunNo: 60594

Prep Date: 6/12/2019 Analysis Date: 6/12/2019 SeqNo: 2051125 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.8 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1906575** 

13-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-45525	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: PBS	Batch	ID: <b>45</b>	525	R	unNo: 6	0571				
Prep Date: 6/12/2019	Analysis Da	ate: <b>6/</b>	12/2019	S	eqNo: 2	049384	Units: mg/k	(g		
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	8.0		10.00		80.0	70	130			
Sample ID: LCS-45525	SampTy	/pe: <b>LC</b>	s	Tes	Code: El	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: LCSS	Batch	ID: <b>45</b>	525	R	tunNo: 6	0571				
Prep Date: 6/12/2019	Analysis Da	ate: <b>6/</b>	12/2019	S	eqNo: 2	049809	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	63.9	124			
Surr: DNOP	3.6		5.000		72.1	70	130			
Sample ID: MB-45534	SampTy	pe: ME	BLK	Tes	Code: El	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: PBS	Batch	ID: <b>45</b>	534	R	unNo: 6	0580				
		oto: Ci	12/2019	S	eqNo: 2	049863	Units: %Re	С		
Prep Date: 6/12/2019	Analysis Da	ale. <b>6</b> /								
Prep Date: <b>6/12/2019</b> Analyte	Analysis Da	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
					%REC 96.8	LowLimit 70	HighLimit	%RPD	RPDLimit	Qual
Analyte	Result	PQL	SPK value 10.00	SPK Ref Val	96.8	70				Qual
Analyte Surr: DNOP	Result 9.7 SampTy	PQL	SPK value 10.00	SPK Ref Val	96.8	70 PA Method	130			Qual
Analyte Surr: DNOP Sample ID: LCS-45534	Result 9.7 SampTy	PQL ype: LC	SPK value 10.00	SPK Ref Val Test	96.8 :Code: <b>El</b>	70 PA Method 0580	130	esel Rango		Qual
Analyte Surr: DNOP  Sample ID: LCS-45534 Client ID: LCSS	Result 9.7 SampTy Batch	PQL ype: LC	SPK value 10.00 SS 534 12/2019	SPK Ref Val Test	96.8 Code: <b>El</b> LunNo: <b>6</b> SeqNo: <b>2</b>	70 PA Method 0580	130 <b>8015M/D: Di</b>	esel Rango		Qual
Analyte Surr: DNOP  Sample ID: LCS-45534 Client ID: LCSS Prep Date: 6/12/2019	Result 9.7  SampTy Batch Analysis Da	PQL ype: LC ID: 45: ate: 6/	SPK value 10.00 SS 534 12/2019	SPK Ref Val  Test	96.8 Code: <b>El</b> LunNo: <b>6</b> SeqNo: <b>2</b>	70 PA Method 0580 049866	130 <b>8015M/D: Di</b> Units: <b>%Re</b>	esel Rango	e Organics	
Analyte Surr: DNOP  Sample ID: LCS-45534 Client ID: LCSS Prep Date: 6/12/2019 Analyte	Result 9.7  SampTy Batch Analysis Da Result 4.4	PQL  ype: LC  ID: 45: ate: 6/	SPK value 10.00 SS 534 12/2019 SPK value 5.000	SPK Ref Val  Tesi R S SPK Ref Val	96.8 Code: El LunNo: 6 SeqNo: 2 %REC 87.9	70 PA Method 0580 049866 LowLimit 70	130  8015M/D: Die  Units: %Ree  HighLimit	esel Rango c %RPD	e Organics RPDLimit	

Prep Date: 6/12/2019	Analysis D	ate: 6/	12/2019	S	SeqNo: 2	050485	Units: mg/k	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	43	9.5	47.26	0	91.7	57	142				
Surr: DNOP	3.9		4.726		82.5	70	130				
Sample ID: 1906575-001AMSE	SampT	уре: <b>М</b> S	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics		

Sample ID: 1906575-001AMSI	<b>S</b> ampT	ype: MS	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: S-34	Batch	ID: <b>45</b>	525	F	RunNo: 60	0571				
Prep Date: 6/12/2019	Analysis D	ate: 6/	12/2019	8	SeqNo: 20	050486	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.7	48.64	0	96.0	57	142	7.52	20	

#### 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
- PQL Practical Quanitative Limit

- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906575** 

13-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: 1906575-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **\$-34** Batch ID: **45525** RunNo: **60571** 

Prep Date: 6/12/2019 Analysis Date: 6/12/2019 SeqNo: 2050486 Units: mg/Kg

Analyte SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit Surr: DNOP 4.1 4.864 85.0 70 130 0 0

Sample ID: LCS-45479 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 45479 RunNo: 60580

Prep Date: 6/10/2019 Analysis Date: 6/12/2019 SeqNo: 2050992 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.9 5.000 98.8 70 130

#### 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

PQL Practical Quanitative Limit

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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1906575 13-Jun-19

Client: **ENSOLUM Project:** Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G60589 RunNo: 60589

Prep Date: Analysis Date: 6/12/2019 SeqNo: 2050516 Units: mq/Kq

SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 970 1000 97.5 73.8 119

Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G60589 RunNo: 60589

Prep Date: Analysis Date: 6/12/2019 SeqNo: 2050519 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 O 96.9 80.1 123 Surr: BFB

115

73.8

119

1000 Sample ID: 1906575-011AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: S-44 Batch ID: G60589 RunNo: 60589

1200

Prep Date: Analysis Date: 6/12/2019 SeqNo: 2050520 Units: mg/Kg

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual Gasoline Range Organics (GRO) 20 4.2 20.80 0 95.7 69.1 142 Surr: BFB 950 832.0 114 73.8 119

Sample ID: 1906575-011AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: S-44 Batch ID: G60589 RunNo: 60589

Prep Date: Analysis Date: 6/12/2019 SeqNo: 2050521 Units: mg/Kg

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual Gasoline Range Organics (GRO) 20 4.2 20.80 94.8 0.966 20 69.1 142 Surr: BFB 930 832.0 112 73.8 119 0

Sample ID: MB-45518 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PRS Batch ID: 45518 RunNo: 60590

Prep Date: 6/11/2019 Analysis Date: 6/12/2019 SeqNo: 2050617 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 ND 119

Surr: BFB 1000 1000 101 73.8

Sample ID: LCS-45518 TestCode: EPA Method 8015D: Gasoline Range SampType: LCS

Client ID: LCSS Batch ID: 45518 RunNo: 60590

Prep Date: 6/11/2019 Units: mg/Kg Analysis Date: 6/12/2019 SeqNo: 2050618

PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906575** 

13-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-45518 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 45518 RunNo: 60590

Prep Date: 6/11/2019 Analysis Date: 6/12/2019 SeqNo: 2050618 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
 90.1
 80.1
 123

 Surr: BFB
 1200
 1000
 119
 73.8
 119

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906575** 

13-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: B60589 RunNo: 60589

Prep Date: Analysis Date: 6/12/2019 SeqNo: 2050552 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
 101
 80
 120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles

4.105

Client ID: LCSS Batch ID: B60589 RunNo: 60589

4.4

Prep Date:	Date: Analysis Date: 6/12/2019			5	SeqNo: 2050553 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.5	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID: 1906575-012AMS	SampT	ype: <b>M</b> \$	3	Tes						
Client ID: S-45	Batch	n ID: <b>B6</b>	0589	F	RunNo: 6					
Prep Date:	Analysis D	Date: 6/	12/2019	9	SeqNo: 2	050554	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.3	0.10	4.105	0.05542	104	63.9	127			
Toluene	4.4	0.21	4.105	0	107	69.9	131			
Ethylbenzene	4.5	0.21	4.105	0.1211	107	71	132			
Xylenes, Total	14	0.41	12.32	0.5735	109	71.8	131			

Sample ID: 1906575-012AM	SD SampT	ype: <b>MS</b>	SD	Tes						
Client ID: S-45	Batch	ID: <b>B6</b>	0589	F	RunNo: 6					
Prep Date:	Analysis D	ate: 6/	12/2019	8	SeqNo: 2	050555	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.3	0.10	4.105	0.05542	103	63.9	127	1.27	20	
Toluene	4.3	0.21	4.105	0	106	69.9	131	1.32	20	
Ethylbenzene	4.4	0.21	4.105	0.1211	104	71	132	3.13	20	
Xylenes, Total	14	0.41	12.32	0.5735	106	71.8	131	2.60	20	
Surr: 4-Bromofluorobenzene	4.3		4.105		106	80	120	0	0	

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

108

80

120

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906575** 

13-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-45518 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 45518 RunNo: 60590

Prep Date: 6/11/2019 Analysis Date: 6/12/2019 SeqNo: 2050664 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 0.94 1.000 94.5 80 120

Sample ID: LCS-45518 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 45518 RunNo: 60590 Analysis Date: 6/12/2019 SeqNo: 2050665 Prep Date: 6/11/2019 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.000 O 103 1.0 0.025 80 120 Benzene Toluene 1.0 0.050 1.000 0 101 80 120

0 101 80 0.050 1.000 120 Ethylbenzene 1.0 0 98.4 Xylenes, Total 3.0 0.10 3.000 80 120 Surr: 4-Bromofluorobenzene 1.1 1.000 108 80 120 Sample ID: 1906575-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: S-34 Batch ID: 45518 RunNo: 60590 Prep Date: Analysis Date: 6/12/2019 SeqNo: 2050667 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 104 0.75 0.018 0.7278 63.9 127 Benzene O 0.74 0.036 0.7278 0 102 69.9 131 Toluene

0.7278 0 100 71 Ethylbenzene 0.73 0.036 132 Xylenes, Total 2.1 0.073 2.183 0 97 7 71.8 131 Surr: 4-Bromofluorobenzene 0.78 0.7278 108 80 120 TestCode: EPA Method 8021B: Volatiles Sample ID: 1906575-001AMSD SampType: MSD Client ID: S-34 RunNo: 60590

Batch ID: 45518 Prep Date: Analysis Date: 6/12/2019 SeqNo: 2050671 Units: mg/Kg SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual 0.72 0.018 0.7278 0 99.3 63.9 127 4.24 20 Benzene Toluene 0.71 0.036 0.7278 0 97.8 69.9 131 4.25 20 Ethylbenzene 0.70 0.036 0.7278 0 95.9 71 132 4.68 20 Xylenes, Total 2.0 0.073 2.183 0 93.5 71.8 131 4.40 20 Surr: 4-Bromofluorobenzene 0.79 0.7278 109 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
- PQL Practical Quanitative Limit
- 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 Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

Website: www.hallenvironmental.com

Client Name: ENSOLUM AZTEC	Work Order Number: 1906575	·	RcptNo: 1
Received By: Desiree Dominguez 6/	12/2019 8:00:00 AM	The	
Completed By: Anne Thorne 6/	12/2019 8:15:04 AM	ame A.	,
Reviewed By: DAD 6/12/19		Cara Ji Ca	
Chain of Custody			
1. Is Chain of Custody complete?	Yes 🗹	No 🗌	Not Present
2. How was the sample delivered?	Courier		
<u>Log In</u>			
Was an attempt made to cool the samples?	Yes 🗹	No 🗌	NA 🗌
4. Were all samples received at a temperature of >	0° C to 6.0°C Yes ✓	No 🗆	na 🗆
5. Sample(s) in proper container(s)?	Yes 🗹	No 🗆	
6. Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗌	
7. Are samples (except VOA and ONG) properly pre	served? Yes	No 🗌	
B. Was preservative added to bottles?	Yes	No 🗹	NA 🗌
9. VOA vials have zero headspace?	· Yes 🗌	No 🗆 N	No VOA Vials 🗹
0. Were any sample containers received broken?	Yes 🗆	No 🗹 🦼	f of preserved
Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	_   b	oottles checked or pH: 22 or >12 unless noted)
2. Are matrices correctly identified on Chain of Custo	ody? Yes ✔	No 🗆	Adjusted?
3. Is it clear what analyses were requested?	Yes 🗸	No 🗆	
4. Were all holding times able to be met?  (If no, notify customer for authorization.)	Yes 🗹	No 🗆	Checked by:
pecial Handling (if applicable)		•	
5. Was client notified of all discrepancies with this o	rder? Yes	No 🗌	NA 🗹
Person Notified:  By Whom:  Regarding:  Client Instructions:	Date Via: eMail F	Phone Fax	In Person
6. Additional remarks: Custadu Sea	le ( ) 1 1 40=	Sul Ja.	
7. Cooler Information Cooler No Temp °C Condition Seal Ini 1 1.6 Good Yes		Signed By	SI A Ololizi19

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

June 26, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX:

RE: Blanco Storage OrderNo.: 1906D10

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/25/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

**CLIENT: ENSOLUM** 

# **Analytical Report**Lab Order **1906D10**

Date Reported: 6/26/2019

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: S-46

**Project:** Blanco Storage **Collection Date:** 6/24/2019 11:00:00 AM

**Lab ID:** 1906D10-001 **Matrix:** MEOH (SOIL) **Received Date:** 6/25/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/25/2019 12:54:41 PM	45798
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/25/2019 11:13:55 AM	45791
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/25/2019 11:13:55 AM	45791
Surr: DNOP	88.9	70-130	%Rec	1	6/25/2019 11:13:55 AM	45791
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	6/25/2019 11:49:55 AM	G60920
Surr: BFB	85.3	73.8-119	%Rec	1	6/25/2019 11:49:55 AM	G60920
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.019	mg/Kg	1	6/25/2019 11:49:55 AM	B60920
Toluene	ND	0.038	mg/Kg	1	6/25/2019 11:49:55 AM	B60920
Ethylbenzene	ND	0.038	mg/Kg	1	6/25/2019 11:49:55 AM	B60920
Xylenes, Total	ND	0.077	mg/Kg	1	6/25/2019 11:49:55 AM	B60920
Surr: 4-Bromofluorobenzene	89.4	80-120	%Rec	1	6/25/2019 11:49:55 AM	B60920

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
- PQL Practical Quanitative Limit
- 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 Limit

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Date Reported: 6/26/2019

6/25/2019 12:13:26 PM B60920

6/25/2019 12:13:26 PM B60920

6/25/2019 12:13:26 PM B60920

6/25/2019 12:13:26 PM B60920

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-47

 Project:
 Blanco Storage
 Collection Date: 6/24/2019 11:05:00 AM

 Lab ID:
 1906D10-002
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2019 8:15:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch Analyses** Analyst: MRA **EPA METHOD 300.0: ANIONS** Chloride ND 61 mg/Kg 20 6/25/2019 1:07:06 PM 45798 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.8 mg/Kg 6/25/2019 11:38:20 AM 45791 ND Motor Oil Range Organics (MRO) 49 mg/Kg 1 6/25/2019 11:38:20 AM 45791 Surr: DNOP 79.8 70-130 %Rec 6/25/2019 11:38:20 AM 45791 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 6/25/2019 12:13:26 PM G60920 Gasoline Range Organics (GRO) ND 3.9 mg/Kg Surr: BFB 84.0 73.8-119 %Rec 6/25/2019 12:13:26 PM G60920 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND mg/Kg 6/25/2019 12:13:26 PM B60920 Benzene 0.020

ND

ND

ND

89.0

0.039

0.039

0.079

80-120

mg/Kg

mg/Kg

mg/Kg

%Rec

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

Qualifiers:

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

- 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
- PQL Practical Quanitative Limit
- 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 Limit

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# Hall Environmental Analysis Laboratory, Inc. Date Reported: 6/26/2019

CLIENT: ENSOLUM Client Sample ID: S-48

**Project:** Blanco Storage Collection Date: 6/24/2019 11:10:00 AM

**Lab ID:** 1906D10-003 **Matrix:** MEOH (SOIL) **Received Date:** 6/25/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	6/25/2019 1:19:31 PM	45798
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/25/2019 12:52:31 PM	45791
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/25/2019 12:52:31 PM	45791
Surr: DNOP	93.1	70-130	%Rec	1	6/25/2019 12:52:31 PM	45791
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	6/25/2019 12:36:51 PM	G60920
Surr: BFB	84.8	73.8-119	%Rec	1	6/25/2019 12:36:51 PM	G60920
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	6/25/2019 12:36:51 PM	B60920
Toluene	ND	0.039	mg/Kg	1	6/25/2019 12:36:51 PM	B60920
Ethylbenzene	ND	0.039	mg/Kg	1	6/25/2019 12:36:51 PM	B60920
Xylenes, Total	ND	0.079	mg/Kg	1	6/25/2019 12:36:51 PM	B60920
Surr: 4-Bromofluorobenzene	88.3	80-120	%Rec	1	6/25/2019 12:36:51 PM	B60920

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
- PQL Practical Quanitative Limit
- 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 Limit

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Date Reported: 6/26/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-49

**Project:** Blanco Storage Collection Date: 6/24/2019 11:15:00 AM

**Lab ID:** 1906D10-004 **Matrix:** MEOH (SOIL) **Received Date:** 6/25/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	6/25/2019 1:56:45 PM	45798
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	95	9.6	mg/Kg	1	6/25/2019 1:16:57 PM	45791
Motor Oil Range Organics (MRO)	70	48	mg/Kg	1	6/25/2019 1:16:57 PM	45791
Surr: DNOP	93.8	70-130	%Rec	1	6/25/2019 1:16:57 PM	45791
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	6/25/2019 1:00:17 PM	G60920
Surr: BFB	88.6	73.8-119	%Rec	1	6/25/2019 1:00:17 PM	G60920
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	6/25/2019 1:00:17 PM	B60920
Toluene	ND	0.038	mg/Kg	1	6/25/2019 1:00:17 PM	B60920
Ethylbenzene	ND	0.038	mg/Kg	1	6/25/2019 1:00:17 PM	B60920
Xylenes, Total	ND	0.076	mg/Kg	1	6/25/2019 1:00:17 PM	B60920
Surr: 4-Bromofluorobenzene	91.7	80-120	%Rec	1	6/25/2019 1:00:17 PM	B60920

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
- PQL Practical Quanitative Limit

- 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 Limit

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Date Reported: 6/26/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-50

**Project:** Blanco Storage **Collection Date:** 6/24/2019 11:20:00 AM

**Lab ID:** 1906D10-005 **Matrix:** MEOH (SOIL) **Received Date:** 6/25/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	6/25/2019 2:09:09 PM	45798
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	64	9.7	mg/Kg	1	6/25/2019 1:41:37 PM	45791
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/25/2019 1:41:37 PM	45791
Surr: DNOP	94.3	70-130	%Rec	1	6/25/2019 1:41:37 PM	45791
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	6/25/2019 1:23:42 PM	G60920
Surr: BFB	99.0	73.8-119	%Rec	1	6/25/2019 1:23:42 PM	G60920
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.022	mg/Kg	1	6/25/2019 1:23:42 PM	B60920
Toluene	ND	0.044	mg/Kg	1	6/25/2019 1:23:42 PM	B60920
Ethylbenzene	ND	0.044	mg/Kg	1	6/25/2019 1:23:42 PM	B60920
Xylenes, Total	ND	0.089	mg/Kg	1	6/25/2019 1:23:42 PM	B60920
Surr: 4-Bromofluorobenzene	91.9	80-120	%Rec	1	6/25/2019 1:23:42 PM	B60920

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
- PQL Practical Quanitative Limit

- 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 Limit

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/26/2019

CLIENT: ENSOLUM Client Sample ID: S-51

 Project:
 Blanco Storage
 Collection Date: 6/24/2019 11:25:00 AM

 Lab ID:
 1906D10-006
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	6/25/2019 2:21:33 PM	45798
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: ЈМЕ
Diesel Range Organics (DRO)	11	9.7	mg/Kg	1	6/25/2019 2:06:07 PM	45791
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/25/2019 2:06:07 PM	45791
Surr: DNOP	84.4	70-130	%Rec	1	6/25/2019 2:06:07 PM	45791
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	6/25/2019 1:47:11 PM	G60920
Surr: BFB	92.3	73.8-119	%Rec	1	6/25/2019 1:47:11 PM	G60920
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.022	mg/Kg	1	6/25/2019 1:47:11 PM	B60920
Toluene	ND	0.044	mg/Kg	1	6/25/2019 1:47:11 PM	B60920
Ethylbenzene	ND	0.044	mg/Kg	1	6/25/2019 1:47:11 PM	B60920
Xylenes, Total	ND	0.087	mg/Kg	1	6/25/2019 1:47:11 PM	B60920
Surr: 4-Bromofluorobenzene	99.3	80-120	%Rec	1	6/25/2019 1:47:11 PM	B60920

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
- PQL Practical Quanitative Limit

- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906D10** 

26-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-45798 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 45798 RunNo: 60944

Prep Date: 6/25/2019 Analysis Date: 6/25/2019 SeqNo: 2063167 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-45798 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 45798 RunNo: 60944

Prep Date: 6/25/2019 Analysis Date: 6/25/2019 SeqNo: 2063168 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.9 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

9.7

WO#: **1906D10** 

26-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Surr: DNOP

Sample ID: LCS-45792 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 60884 Client ID: LCSS Batch ID: 45792 Prep Date: 6/25/2019 Analysis Date: 6/25/2019 SeqNo: 2061792 Units: %Rec SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual

 Surr: DNOP
 5.0
 5.000
 99.7
 70
 130

10.00

Sample ID: MB-45792 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 45792 RunNo: 60884 Prep Date: 6/25/2019 Analysis Date: 6/25/2019 SeqNo: 2061793 Units: %Rec SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual

96.8

130

Sample ID: MB-45791 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 45791 Prep Date: 6/25/2019 Analysis Date: 6/25/2019 SeqNo: 2061800 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 9.2 10.00 91.7 70 130

Sample ID: LCS-45791 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 45791 RunNo: 60876 Prep Date: 6/25/2019 Analysis Date: 6/25/2019 SeqNo: 2061801 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 46 50.00 0 92.6 63.9 124 Surr: DNOP 5.000 70 4.3 85.9 130

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 8 of 10

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906D10** 

26-Jun-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G60920 RunNo: 60920

Prep Date: Analysis Date: 6/25/2019 SeqNo: 2062557 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 73.8 119

Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G60920 RunNo: 60920

Prep Date: Analysis Date: 6/25/2019 SeqNo: 2062558 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 0 93.1 80.1 123

Surr: BFB 1000 1000 101 73.8 119

Sample ID: MB-45787 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: **45787** RunNo: **60920** 

Prep Date: 6/24/2019 Analysis Date: 6/25/2019 SeqNo: 2062565 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 920 1000 92.0 73.8 119

Sample ID: LCS-45787 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 45787 RunNo: 60920

Prep Date: 6/24/2019 Analysis Date: 6/25/2019 SeqNo: 2062566 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 980 1000 98.0 73.8 119

#### 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
- PQL Practical Quantitative Limit
- 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 Limit

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# Hall Environmental Analysis Laboratory, Inc.

1906D10

WO#:

26-Jun-19

Client:	ENSOLUM
Project:	Blanco Storage

Sample ID: RB	SampT	уре: МЕ	BLK	Tes	tCode: El					
Client ID: PBS	Batch	n ID: <b>B6</b>	0920	R	RunNo: 60	0920				
Prep Date:	Analysis D	ate: <b>6/</b> 2	25/2019	S	SeqNo: 20	062587	Units: mg/K	g		
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		113	80	120			

Sample ID: 100NG BTEX LCS	Samp	ype: <b>LC</b>	S	TestCode: EPA Method 8021B: Volatiles											
Client ID: LCSS	Batc	h ID: <b>B6</b>	0920	R	tunNo: 60										
Prep Date:	Analysis [	Date: <b>6/</b> 2	25/2019	S	SeqNo: 20	062588	Units: mg/K	(g							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene	0.97	0.025	1.000	0	96.5	80	120								
Toluene	1.0	0.050	1.000	0	99.9	80	120								
Ethylbenzene	1.0	0.050	1.000	0	100	80	120								
Xylenes, Total	3.0 0.10 3.000		0	0 99.5 80		120									
Surr: 4-Bromofluorobenzene	0.92		1.000		91.9	80	120								

Sample ID: MB-45787	SampTy	/pe: <b>ME</b>	BLK	TestCode: EPA Method 8021B: Volatiles									
Client ID: PBS	Batch	ID: <b>45</b>	787	F	RunNo: 60								
Prep Date: 6/24/2019	Analysis Da	ate: <b>6/</b>	25/2019	S	SeqNo: 20	062591	Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.4	80	120						

Sample ID: LCS-45787	SampTy	/pe: LC	s	Tes								
Client ID: LCSS	Batch	ID: <b>45</b>	787	F	RunNo: 60							
Prep Date: 6/24/2019	Analysis Da	ate: <b>6/</b>	25/2019	S	SeqNo: 20	062592	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: 4-Bromofluorohenzene	N 94		1 000		93.8	80	120					

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

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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

Clien	it Name:	ENSOLUM	AZTEC	Work	Order Numbe	r: <b>19</b> 0	6D10			RcptNo: 1				
Recei	ived By:	Desiree D	ominguez	6/25/20	19 8:15:00 AN	И		TD.	2					
Comp	oleted By:	Erin Mele	ndrez	6/25/20	19 8:59:33 AN	1		un	M					
Revie	wed By:	ENH		6125	5/19			<b>\</b>						
<u>Chair</u>	n of Cus	stody												
1. Is	Chain of C	ustody comp	lete?			Yes	<b>V</b>	No		Not Present				
2. Ho	w was the	sample deliv	rered?			Cou	ırier							
Log	In													
		npt made to	cool the samp	oles?		Yes	<b>✓</b>	No		NA 🗆				
4. We	re all sam	ples received	at a tempera	ature of >0° C t	to 6.0°C	Yes	<b>✓</b>	No		NA 🗆				
5. Sai	mple(s) in	proper conta	iner(s)?			Yes	<b>V</b>	No						
6. Suf	ficient sam	nple volume f	or indicated t	est(s)?		Yes	<b>V</b>	No						
				operly preserve	ed?	Yes	<b>V</b>	No						
		tive added to				Yes		No	<b>✓</b>	NA 🗌				
9. vo	A vials hav	e zero heads	space?			Yes		No		No VOA Vials 🗹	70			
10. We	ere any sar	mple containe	ers received I	oroken?		Yes		No	<b>V</b>		10			
										# of preserved bottles checked	10/25/19			
		ork match bot ancies on cha		۸		Yes	<b>✓</b>	No		for pH:	>12 unless noted)			
				in of Custody?		Yes	<b>✓</b>	No		Adjusted?	>12 unless noted)			
		t analyses we				Yes	<b>V</b>	No						
14. We	re all holdi	ng times able	to be met?			Yes	<b>✓</b>	No		Checked by:				
		ing (if app	terior de retracti dos esculos de servicios de la como terior de la como de l	,										
G.				with this order?		Yes		No		NA 🗸				
	Person	Notified:	PARTICIPATE OF THE PARTICIPATE O	ATTENTION OF THE PROPERTY OF T	Date:	SOFT PRINTED		A Charles Service Services	Manned.					
	By Who	om:			Via:	eM	ail 🗌	Phone	Fax	☐ In Person				
	Regard	ing:				- COMPANIES CONTRACTOR	AND AND AND ASSESSMEN		National accounts of	EN ARRONNA SOURCE ASSAULT MANUEL MANU				
	Client I	nstructions:							III- NA SANION					
16. Ad	lditional re	marks:												
17. Co	oler Infor	mation												
	Cooler No	and the second s	Condition	Seal Intact	Seal No	Seal D	ate	Signed E	Зу					
1	3000000 <b>2 200</b> 000000	1.4	Good	Yes						Promisionopality				
2		5.8	Good	Yes						1				

Received	by O	C <b>D</b> : 8	2/15/2	2025	10.	:45:18	AM				Τ									Page	248 0	f 384
HALL ENVIRONMENTAL	ANALYSIS LABORATORY	4901 Hawkins NE - Albuquerque, NM 87109		Analysis	†O	PO₄, S SIMS PCB's	0 / DRG / O / DRG / O / DRG / O / O / O / O / O / O / O / O / O /	(GR 5 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d	asticological desired of the structure o	TPH:80 8081 P6 8081 P6 PAHs b RCRA 8 (I, F, E 8270 (S Total Co	×									Remarks: for you long Pay Kay TCD5719	10 10 10 10 10 10 10 10 10 10 10 10 10 1	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.
					()		HAT /	T BE	1 71	X3T8	Y	_			$\widehat{}$					<u>~</u>		this pos
Time:	□ Standard □ Rush ○ □ Standard □ Project Name:	Blamo Stonege	Project #:	6400661 A 20	Project Manager:	K. Summers	Sampler: O D A Dont;	olers: 2	Cooler Temp(including CF):0,9+0.5-1,4°2,5.3+0.5-5.8°2	Container Preservative Container Type Container Type	1000	200-	200-	h00-	-0.5	1 -00%			The state of the s	Received by: Via: Date Time Received by: Via: Date Time	Durier 6/25/19 8:15	contracted to other accredited laboratories. This serves as notice of t
	1= 050 lvm	Mailing Address: Lob SRio Grande	Suit A Aztec Nm	Phone #:	email or Fax#:	QA/QC Package:    California		ype)		Date Time Matrix Sample Name	50	1 1105 1 5-47	1110	1115 5-49	5-50	11.25   5-51				Date: Time: Relinquished by:  Sulfa (30)  Date: Time: Relinquished by:	[e 1900	If necessary, samples submitted to Hall Environmental may be subc



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

July 01, 2019

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 1906F83

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/28/2019 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indest

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/1/2019

6/28/2019 11:16:30 AM R61018

6/28/2019 11:16:30 AM R61018

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-52

 Project:
 Blanco Storage
 Collection Date: 6/27/2019 9:00:00 AM

 Lab ID:
 1906F83-001
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2019 8:30:00 AM

Result **RL Qual Units DF** Date Analyzed Batch Analyses **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 60 mg/Kg 6/28/2019 2:14:55 PM 45893 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) ND 9.7 mg/Kg 6/28/2019 10:56:56 AM Motor Oil Range Organics (MRO) ND mg/Kg 49 1 6/28/2019 10:56:56 AM Surr: DNOP 91.9 70-130 %Rec 6/28/2019 10:56:56 AM 45889 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) ND 6/28/2019 11:16:30 AM G61018 3.9 mg/Kg 1 Surr: BFB 101 6/28/2019 11:16:30 AM G61018 73.8-119 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: RAA ND 6/28/2019 11:16:30 AM R61018 Benzene 0.019 mg/Kg Toluene ND 0.039 mg/Kg 6/28/2019 11:16:30 AM R61018 1 Ethylbenzene ND 0.039 mg/Kg 6/28/2019 11:16:30 AM R61018 1

ND

94.3

0.078

80-120

mg/Kg

%Rec

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

Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

- \* 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1906F83

01-Jul-19

**Client: ENSOLUM Project:** Blanco Storage

Sample ID MB-45893 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 45893 RunNo: 61037

Prep Date: 6/28/2019 Analysis Date: 6/28/2019 SeqNo: 2067458 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Chloride ND 1.5

Sample ID LCS-45893 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 45893 RunNo: 61037

1.5

14

Prep Date: 6/28/2019 Analysis Date: 6/28/2019 SeqNo: 2067459 Units: mg/Kg

15.00

%RPD SPK value SPK Ref Val %REC LowLimit **RPDLimit** Analyte Result HighLimit Qual 0

95.2

110

Qualifiers:

Chloride

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 2 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906F83** 

01-Jul-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID LCS-45845 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 45845 RunNo: 61002

Prep Date: 6/26/2019 Analysis Date: 6/28/2019 SeqNo: 2065564 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 6.3 5.000 127 70 130

TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID MB-45889 SampType: MBLK Client ID: **PBS** Batch ID: 45889 RunNo: 61002 Prep Date: 6/28/2019 Analysis Date: 6/28/2019 SeqNo: 2065968 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 8.5 10.00 85.4 70 130

Sample ID LCS-45889 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 45889 RunNo: 61002

Prep Date: 6/28/2019 Analysis Date: 6/28/2019 SeqNo: 2065969 Units: mg/Kg

PQL %RPD Result Analyte SPK value SPK Ref Val %REC LowLimit HighLimit **RPDLimit** Qual Diesel Range Organics (DRO) 44 50.00 87.4 63.9 124 Surr: DNOP 4.2 5.000 83.1 70 130

Sample ID 1906F83-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: S-52 Batch ID: 45889 RunNo: 61002

Prep Date: 6/28/2019 Analysis Date: 6/28/2019 SeqNo: 2066392 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 46 48.36 5.766 83.4 57 97 142

Surr: DNOP 4.5 4.836 92.7 70 130

Sample ID 1906F83-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **\$-52** Batch ID: **45889** RunNo: **61002** 

Prep Date: 6/28/2019 Analysis Date: 6/28/2019 SeqNo: 2066393 Units: mg/Kg

%REC %RPD Result **PQL** SPK value SPK Ref Val LowLimit HighLimit **RPDLimit** Qual Diesel Range Organics (DRO) 48 9.9 5.766 57 4.72 20 49.46 86.1 142 Surr: DNOP 4.5 4.946 91.2 70 130 0 0

Sample ID MB-45871 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 45871 RunNo: 61002

Prep Date: 6/27/2019 Analysis Date: 6/29/2019 SeqNo: 2066567 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 3 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906F83** 

01-Jul-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID MB-45871 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 45871 RunNo: 61002

Prep Date: 6/27/2019 Analysis Date: 6/29/2019 SeqNo: 2066567 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 8.6 10.00 85.9 70 130

Sample ID LCS-45871 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 45871 RunNo: 61002

Prep Date: 6/27/2019 Analysis Date: 6/29/2019 SeqNo: 2066568 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.6 5.000 92.5 70 130

### 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

PQL Practical Quanitative Limit

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 Limit

Page 4 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906F83** 

01-Jul-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G61018 RunNo: 61018

Prep Date: Analysis Date: 6/28/2019 SeqNo: 2065999 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 98.9 80.1 123

Surr: BFB 1100 1000 114 73.8 119

Sample ID RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G61018 RunNo: 61018

Prep Date: Analysis Date: 6/28/2019 SeqNo: 2066000 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 103 73.8 119

### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 6

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1906F83** 

01-Jul-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID 100NG BTEX LCS	Samp1	Type: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: <b>R6</b>	1018	F	RunNo: 6	1018				
Prep Date:	Analysis D	Date: <b>6/</b>	28/2019	9	SeqNo: 2	066002	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.5	80	120			
Toluene	0.93	0.050	1.000	0	93.3	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	91.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID RB	Samp	Гуре: М	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batc	h ID: <b>R6</b>	1018	F	RunNo: 6	1018				
Prep Date:	Analysis [	Date: 6/	28/2019	9	SeqNo: 2	066007	Units: mg/k	(g		
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	0.98		1.000		97.5	80	120			

### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 6 of 6



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 305-345-3975 FAX: 505-345-4107 Website: www.hailenvironmental.com

## Sample Log-In Check List

Client Name:	ENSOLUN	AZTEC	Work	Order Num	nber: 190	6F83			RoptNo	: 1
Received By:	Thom Ma	ybee	6/28/20	19 8:30:00	АМ					
Completed By:	Erin Mele	endrez	6/28/20	19 8:57:42	AM		und	6		
Reviewed By:	YC (	e128110	1				overno-0+0 <b>₹</b> 0 (10°)			
Chain of Cust	tody									
1, Is Chain of Cu	stody comp	olete?			Yes	~	No [	No	t Present	
2. How was the s	sample deliv	vered?			Cou	rier				
Log In 3. Was an attemp	of made to	cool the same	nlae?		Vac	V	No 🗆		NA 🗆	
1120 211 2110	primaso to	ocor are sairi,	Jies i		165		140		NA L	
4, Were all samp	les received	d at a tempera	ature of >0° C	to 6.0°C	Yes	V	No 🗆	Ī	NA 🗆	
5. Sample(s) in p	roper conta	iner(s)?			Yes	V	No 🗆			
6. Sufficient samp	ole volume f	for indicated t	aet/e\2		Yes	V	No 🗆			
7. Are samples (e			1000	nd2	Yes	~	No 🗆			
8. Was preservati			Shorth bieselve		Yes		No ☑		NA 🗆	
9. VOA vials have	zero head	snare?			Yes		No 🗆	No.16	OA Vials 🗹	
10, Were any sam		97.000.00010	proken?		Yes		No ₩		OA VIAIS E	ID
(U, vveic any sam	pie contant	ers received t	oroken?		res		140 🗷	# of p	reserved	6/26/19
11. Does paperwor	rk match bo	ttle labels?			Yes	~	No 🗆		s checked f:	6/01
(Note discrepar	ncies on ch	ain of custody	/)					. 1		>12 unless noted)
12. Are matrices co					Yes	~	No 🗆		Adjusted?	
13, is it clear what			1?		Yes		No 🗆		Ob a street but	
<ol> <li>Were all holdin (If no, notify cur</li> </ol>			)		Yes	<b>V</b>	No 🗌		Checked by:	
Special Handli	ng (if app	olicable)								
15. Was client not	ified of all d	iscrepancies	with this order	•	Yes		No 🗆	]	NA 🗸	
Person N	Notified:	Γ		Date				-		
By Whor	m:			Via:	☐ eM	ail 🔲	Phone 🗌 Fa	ax 🗍 In F	Person	
Regardir										
Client In:	structions:									
16. Additional rem	narks:									
17. Cooler Inform	nation									
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal D	ate	Signed By			
1	1.8	Good	Yes							
2	3.6	Good	Yes							

Page | of 1

Client: E	Ensolu	t Ensolum	□ Standard	1 WRush	6-38-19		V	ANAL	ILYS	SIS	ANALYSIS LABORATORY	ME S
			Project Name:	.ei				www.	hallenvi	ronme	www.hallenvironmental.com	
Mailing Address:	1	06 5 R.O Grande	Blanco	so Store	6.91	4	301 Hav	4901 Hawkins NE		ndnerd	Albuquerque, NM 87109	17109
Mr	tec	Lm	Project #:	35	0		el. 505-	Tel. 505-345-3975		ax 50	Fax 505-345-4107	20
Phone #:			0.5	65A 1336 0413	2100				Inal	Analysis Request	quest	
email or Fax#:			Project Manager:	ager:					*O:		(tn	
QA/QC Package: □ Standard		☐ Level 4 (Full Validation)	x	Summers	5.	S08) s.	bcB,z	SWISO	s.,₀0q		iesdA\tr	
Accreditation:	□ Az Co	☐ Az Compliance ☐ Other	Sampler: On Ice:	C JAGON	oN □		Z808/s	728 rc	_	(A		
□ EDD (Type)			# of Coolers:	7			epi	01				
			Cooler Tem	O(including CF): 1.9-	Cooler Tempinousing CF): 1.8+6 = 1.8 /3.6+6 = 3,6%		oitsec	68 yd	_			
Date Time	Matrix	Sample Name	Container Type and #	Preservative Type	IGOOF 83		1808	0.000	CI, F.	0928	3000010	
Chala Good	V	5	1492	1201	in the same of the	8			Q			
200				2003	3	-						
							8					
									-			
Pate. Time: 457/19 1050	Relinquished by:	hed by:	Month.	> -	<sup>1</sup> Date Time √27/15 1655	Remarks:	15. P. 27.	to h	- "	2003 7035	219	
Marie 740		All the All The Is.	received by:	on Marie	6284930		AFE	EA	Chelh/	On		Ya

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



July 25, 2019

Kyle Summers ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410 TEL: (903) 821-5603

FAX:

RE: Blanco Storage OrderNo.: 1907A69

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/20/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/25/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-1@1'-H

 Project:
 Blanco Storage
 Collection Date: 7/18/2019 12:00:00 PM

 Lab ID:
 1907A69-001
 Matrix: SOIL
 Received Date: 7/20/2019 10:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	7/25/2019 12:17:14 AM	46374
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/24/2019 10:51:22 PM	46341
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/24/2019 10:51:22 PM	46341
Surr: DNOP	86.2	70-130	%Rec	1	7/24/2019 10:51:22 PM	46341
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	7/22/2019 4:27:39 PM	G61546
Surr: BFB	90.5	73.8-119	%Rec	1	7/22/2019 4:27:39 PM	G61546
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.021	mg/Kg	1	7/22/2019 4:27:39 PM	B61546
Toluene	ND	0.041	mg/Kg	1	7/22/2019 4:27:39 PM	B61546
Ethylbenzene	ND	0.041	mg/Kg	1	7/22/2019 4:27:39 PM	B61546
Xylenes, Total	ND	0.082	mg/Kg	1	7/22/2019 4:27:39 PM	B61546
Surr: 4-Bromofluorobenzene	89.6	80-120	%Rec	1	7/22/2019 4:27:39 PM	B61546

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 9

Date Reported: 7/25/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-2@4'-H

 Project:
 Blanco Storage
 Collection Date: 7/18/2019 12:30:00 PM

 Lab ID:
 1907A69-002
 Matrix: SOIL
 Received Date: 7/20/2019 10:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	60	mg/Kg	20	7/25/2019 12:29:38 AM	46374
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/25/2019 2:33:54 AM	46344
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/25/2019 2:33:54 AM	46344
Surr: DNOP	92.3	70-130	%Rec	1	7/25/2019 2:33:54 AM	46344
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/22/2019 4:51:15 PM	G61546
Surr: BFB	103	73.8-119	%Rec	1	7/22/2019 4:51:15 PM	G61546
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.024	mg/Kg	1	7/22/2019 4:51:15 PM	B61546
Toluene	ND	0.048	mg/Kg	1	7/22/2019 4:51:15 PM	B61546
Ethylbenzene	ND	0.048	mg/Kg	1	7/22/2019 4:51:15 PM	B61546
Xylenes, Total	ND	0.097	mg/Kg	1	7/22/2019 4:51:15 PM	B61546
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	7/22/2019 4:51:15 PM	B61546

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 2 of 9

Date Reported: 7/25/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-3@4'-H

 Project:
 Blanco Storage
 Collection Date: 7/18/2019 1:00:00 PM

 Lab ID:
 1907A69-003
 Matrix: SOIL
 Received Date: 7/20/2019 10:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	7/25/2019 12:42:03 AM	46374
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	7/25/2019 3:40:43 AM	46344
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/25/2019 3:40:43 AM	46344
Surr: DNOP	89.8	70-130	%Rec	1	7/25/2019 3:40:43 AM	46344
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/22/2019 5:14:54 PM	G61546
Surr: BFB	95.2	73.8-119	%Rec	1	7/22/2019 5:14:54 PM	G61546
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/22/2019 5:14:54 PM	B61546
Toluene	ND	0.049	mg/Kg	1	7/22/2019 5:14:54 PM	B61546
Ethylbenzene	ND	0.049	mg/Kg	1	7/22/2019 5:14:54 PM	B61546
Xylenes, Total	ND	0.098	mg/Kg	1	7/22/2019 5:14:54 PM	B61546
Surr: 4-Bromofluorobenzene	93.8	80-120	%Rec	1	7/22/2019 5:14:54 PM	B61546

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
- PQL Practical Quanitative Limit

- 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 Limit

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Date Reported: 7/25/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-4@4'-H

 Project:
 Blanco Storage
 Collection Date: 7/18/2019 1:30:00 PM

 Lab ID:
 1907A69-004
 Matrix: SOIL
 Received Date: 7/20/2019 10:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	7/25/2019 12:54:27 AM	46374
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	7/25/2019 4:03:03 AM	46344
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/25/2019 4:03:03 AM	46344
Surr: DNOP	89.0	70-130	%Rec	1	7/25/2019 4:03:03 AM	46344
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/22/2019 5:38:30 PM	G61546
Surr: BFB	99.0	73.8-119	%Rec	1	7/22/2019 5:38:30 PM	G61546
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	7/22/2019 5:38:30 PM	B61546
Toluene	ND	0.047	mg/Kg	1	7/22/2019 5:38:30 PM	B61546
Ethylbenzene	ND	0.047	mg/Kg	1	7/22/2019 5:38:30 PM	B61546
Xylenes, Total	ND	0.093	mg/Kg	1	7/22/2019 5:38:30 PM	B61546
Surr: 4-Bromofluorobenzene	94.8	80-120	%Rec	1	7/22/2019 5:38:30 PM	B61546

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
- PQL Practical Quanitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1907A69** 

25-Jul-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-46374 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 46374 RunNo: 61634

Prep Date: 7/24/2019 Analysis Date: 7/24/2019 SeqNo: 2089324 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-46374 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 46374 RunNo: 61634

Prep Date: 7/24/2019 Analysis Date: 7/24/2019 SeqNo: 2089325 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.4 90 110

### 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

PQL Practical Quanitative Limit

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 Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1907A69 25-Jul-19** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: 1907A69-002AMS	SampTy	/pe: <b>MS</b>	3	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: HB-2@4'-H	Batch	ID: <b>46</b> 3	344	F	RunNo: 6	1604				
Prep Date: 7/23/2019	Analysis Da	ate: <b>7/</b> 2	25/2019	5	SeqNo: 2	088999	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.4	46.86	0	106	57	142			
Surr: DNOP	4.4		4.686		94.8	70	130			
Sample ID: 1907A69-002AMS	<b>D</b> SampTy	/pe: <b>MS</b>	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: HB-2@4'-H	Batch	ID: <b>46</b> 3	344	F	RunNo: 6	1604				
Prep Date: 7/23/2019	Analysis Da	ate: <b>7/</b>	25/2019	5	SegNo: 2	089000	Units: mg/K	(a		

Client ID: HB-2@4'-H	Batch	ID: 46	344	F	RunNo: 6	1604				
Prep Date: 7/23/2019	Analysis Da	ate: <b>7/</b>	25/2019	S	SeqNo: 20	089000	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.10	0	100	57	142	1.22	20	
Surr: DNOP	4.2		5.010		84.1	70	130	0	0	

Sample ID: LCS-46341	SampT	ype: <b>LC</b>	:S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	n ID: 46	341	F	RunNo: 6	1604				
Prep Date: 7/23/2019	Analysis D	oate: 7/	24/2019	8	SeqNo: 2	089020	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.2	63.9	124			
Surr: DNOP	3.8		5.000		77.0	70	130			

Sample ID: LCS-46344	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	n ID: 46	344	F	RunNo: 6	1604				
Prep Date: 7/23/2019	Analysis D	Date: 7/	25/2019	9	SeqNo: 2	089021	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.4	63.9	124			
Surr: DNOP	4.3		5.000		85.8	70	130			

Sample ID: MB-46341 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics										
Client ID: PBS	Batch	n ID: <b>46</b> 3	341	F	RunNo: 6	1604				
Prep Date: <b>7/23/2019</b>	Analysis D	Date: <b>7/</b>	25/2019	9	SeqNo: 2	089024	Units: mg/K	g		
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	7.9		10.00		78.5	70	130			

### 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
- PQL Practical Quanitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1907A69 25-Jul-19** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-46344 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 46344 RunNo: 61604

Prep Date: 7/23/2019 Analysis Date: 7/25/2019 SeqNo: 2089025 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 11 10.00 111 70 130

### 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

PQL Practical Quanitative Limit

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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1907A69 25-Jul-19** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G61546 RunNo: 61546

Prep Date: Analysis Date: 7/22/2019 SeqNo: 2086492 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 73.8 119

Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G61546 RunNo: 61546

1000

Prep Date: Analysis Date: 7/22/2019 SeqNo: 2086493 Units: mg/Kg

1000

Qual Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 21 5.0 25.00 0 85.4 80.1 123

103

73.8

119

### Qualifiers:

Surr: BFB

- 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
- PQL Practical Quanitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

1.0

WO#: **1907A69** 

25-Jul-19

Client: ENSOLUM
Project: Blanco Storage

Surr: 4-Bromofluorobenzene

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: **B61546** RunNo: 61546 Prep Date: Analysis Date: 7/22/2019 SeqNo: 2086510 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Benzene ND 0.025 Toluene ND 0.050 ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

103

80

120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B61546** RunNo: 61546 Units: mg/Kg Prep Date: Analysis Date: 7/22/2019 SeqNo: 2086511 Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.96 0.025 1.000 0 96.2 80 120 Benzene Toluene 1.0 0.050 1.000 0 99.9 80 120 0.050 0 97.2 80 120 Ethylbenzene 0.97 1.000 2.9 0.10 3.000 0 96.6 80 120 Xylenes, Total 90.3 Surr: 4-Bromofluorobenzene 0.90 1.000 80 120

1.000

### 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
- PQL Practical Quanitative Limit
- 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 Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **ENSOLUM AZTEC** Work Order Number: 1907A69 RcptNo: 1 Received By: **Desiree Dominguez** 7/20/2019 10:00:00 AM Completed By: **Desiree Dominguez** 7/20/2019 11:57:13 AM 7/22/19 Reviewed By: Chain of Custody 1. Is Chain of Custody complete? Yes 🔽 No 🛄 Not Present 2 How was the sample delivered? Courier Log In No 🗆 3. Was an attempt made to cool the samples? Yes 🔽 NA 🗀 No 🗀 Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 NA 🗀 Sample(s) in proper container(s)? Yes 🔽 No 🗔 Yes 🗹 No 🗀 6. Sufficient sample volume for indicated test(s)? 7. Are samples (except VOA and ONG) properly preserved? Yes 🗹 No 🗀 8. Was preservative added to bottles? Yes 🗌 No 🗸 NA 🔲 9. VOA vials have zero headspace? Yes  $\square$ No . No VOA Vials Yes 🗀 10. Were any sample containers received broken? No 🔽 # of preserved bottles checked 11. Does paperwork match bottle labels? Yes 🗸 No 🗀 for pH: (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes 🗹 No 🗌 12. Are matrices correctly identified on Chain of Custody? 13. Is it clear what analyses were requested? Yes 🗸 No  $\square$ 14. Were all holding times able to be met? Yes 🔽 No 🗆 Checked by: DAD 7/22 (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes 🗌 No 🗀 NA 🗸 Person Notified: Date: By Whom: Via: eMail Phone Fax Regarding: Client Instructions: 16. Additional remarks: 17. Cooler Information Cooler No Temp °C Condition Seal Intact | Seal No Seal Date Signed By 5.8 Good Not Present

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Chain-of-Custody Record	m		Mailing Address:	7		Fax#:	QA/QC Package: □ Standard	ation: C	□ EDD (Type)		Time	200	1930	1300	1330									Time:	Date: Time:	TO T
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

August 16, 2019

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

**FAX** 

RE: Blanco Storage OrderNo.: 1908614

### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/24/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 8/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-5

 Project:
 Blanco Storage
 Collection Date: 7/23/2019 11:00:00 AM

 Lab ID:
 1908614-001
 Matrix: SOIL
 Received Date: 7/24/2019 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	8/14/2019 2:04:00 PM	46784
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: TOM
Diesel Range Organics (DRO)	ND	8.9	Н	mg/Kg	1	8/15/2019 2:56:48 PM	46758
Motor Oil Range Organics (MRO)	ND	45	Н	mg/Kg	1	8/15/2019 2:56:48 PM	46758
Surr: DNOP	96.3	70-130	Н	%Rec	1	8/15/2019 2:56:48 PM	46758
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	Н	mg/Kg	1	8/13/2019 12:39:01 PM	46741
Surr: BFB	105	77.4-118	Н	%Rec	1	8/13/2019 12:39:01 PM	46741
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.025	Н	mg/Kg	1	8/13/2019 12:39:01 PM	46741
Toluene	ND	0.050	Н	mg/Kg	1	8/13/2019 12:39:01 PM	46741
Ethylbenzene	ND	0.050	Н	mg/Kg	1	8/13/2019 12:39:01 PM	46741
Xylenes, Total	ND	0.10	Н	mg/Kg	1	8/13/2019 12:39:01 PM	46741
Surr: 4-Bromofluorobenzene	98.5	80-120	Н	%Rec	1	8/13/2019 12:39:01 PM	46741

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
- PQL Practical Quanitative Limit

- 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 Limit

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Date Reported: 8/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-6

 Project:
 Blanco Storage
 Collection Date: 7/23/2019 11:05:00 AM

 Lab ID:
 1908614-002
 Matrix: SOIL
 Received Date: 7/24/2019 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	8/14/2019 2:16:24 PM	46784
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: TOM
Diesel Range Organics (DRO)	ND	8.6	Н	mg/Kg	1	8/15/2019 3:20:56 PM	46758
Motor Oil Range Organics (MRO)	ND	43	Н	mg/Kg	1	8/15/2019 3:20:56 PM	46758
Surr: DNOP	97.7	70-130	Н	%Rec	1	8/15/2019 3:20:56 PM	46758
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	Н	mg/Kg	1	8/13/2019 1:01:57 PM	46741
Surr: BFB	102	77.4-118	Н	%Rec	1	8/13/2019 1:01:57 PM	46741
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.025	Н	mg/Kg	1	8/13/2019 1:01:57 PM	46741
Toluene	ND	0.050	Н	mg/Kg	1	8/13/2019 1:01:57 PM	46741
Ethylbenzene	ND	0.050	Н	mg/Kg	1	8/13/2019 1:01:57 PM	46741
Xylenes, Total	ND	0.10	Н	mg/Kg	1	8/13/2019 1:01:57 PM	46741
Surr: 4-Bromofluorobenzene	95.2	80-120	Н	%Rec	1	8/13/2019 1:01:57 PM	46741

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
- PQL Practical Quanitative Limit
- 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 Limit

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Date Reported: 8/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB 7

 Project:
 Blanco Storage
 Collection Date: 7/23/2019 11:10:00 AM

 Lab ID:
 1908614-003
 Matrix: SOIL
 Received Date: 7/24/2019 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	8/14/2019 2:28:48 PM	46784
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.7	Н	mg/Kg	1	8/15/2019 3:45:03 PM	46758
Motor Oil Range Organics (MRO)	ND	48	Н	mg/Kg	1	8/15/2019 3:45:03 PM	46758
Surr: DNOP	106	70-130	Н	%Rec	1	8/15/2019 3:45:03 PM	46758
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	Н	mg/Kg	1	8/13/2019 1:24:49 PM	46741
Surr: BFB	104	77.4-118	Н	%Rec	1	8/13/2019 1:24:49 PM	46741
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.025	Н	mg/Kg	1	8/13/2019 1:24:49 PM	46741
Toluene	ND	0.050	Н	mg/Kg	1	8/13/2019 1:24:49 PM	46741
Ethylbenzene	ND	0.050	Н	mg/Kg	1	8/13/2019 1:24:49 PM	46741
Xylenes, Total	ND	0.099	Н	mg/Kg	1	8/13/2019 1:24:49 PM	46741
Surr: 4-Bromofluorobenzene	96.4	80-120	Н	%Rec	1	8/13/2019 1:24:49 PM	46741

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
- PQL Practical Quanitative Limit

- 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 Limit

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Date Reported: 8/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB 8

 Project:
 Blanco Storage
 Collection Date: 7/23/2019 11:15:00 AM

 Lab ID:
 1908614-004
 Matrix: SOIL
 Received Date: 7/24/2019 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	8/14/2019 2:41:13 PM	46784
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.5	Н	mg/Kg	1	8/15/2019 4:57:32 PM	46758
Motor Oil Range Organics (MRO)	ND	47	Н	mg/Kg	1	8/15/2019 4:57:32 PM	46758
Surr: DNOP	100	70-130	Н	%Rec	1	8/15/2019 4:57:32 PM	46758
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	Н	mg/Kg	1	8/13/2019 1:47:41 PM	46741
Surr: BFB	102	77.4-118	Н	%Rec	1	8/13/2019 1:47:41 PM	46741
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.025	Н	mg/Kg	1	8/13/2019 1:47:41 PM	46741
Toluene	ND	0.049	Н	mg/Kg	1	8/13/2019 1:47:41 PM	46741
Ethylbenzene	ND	0.049	Н	mg/Kg	1	8/13/2019 1:47:41 PM	46741
Xylenes, Total	ND	0.098	Н	mg/Kg	1	8/13/2019 1:47:41 PM	46741
Surr: 4-Bromofluorobenzene	95.1	80-120	Н	%Rec	1	8/13/2019 1:47:41 PM	46741

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
- PQL Practical Quanitative Limit

- 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 Limit

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Date Reported: 8/16/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: ENSOLUM Client Sample ID:** HB 9

Collection Date: 7/23/2019 11:20:00 AM **Project:** Blanco Storage 1908614-005 Lab ID: Matrix: SOIL Received Date: 7/24/2019 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	8/14/2019 3:18:26 PM	46784
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	BRM
Diesel Range Organics (DRO)	ND	9.8	Н	mg/Kg	1	8/15/2019 12:12:23 AM	46758
Motor Oil Range Organics (MRO)	ND	49	Н	mg/Kg	1	8/15/2019 12:12:23 AM	46758
Surr: DNOP	73.7	70-130	Н	%Rec	1	8/15/2019 12:12:23 AM	46758
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	Н	mg/Kg	1	8/13/2019 2:10:34 PM	46741
Surr: BFB	104	77.4-118	Н	%Rec	1	8/13/2019 2:10:34 PM	46741
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024	Н	mg/Kg	1	8/13/2019 2:10:34 PM	46741
Toluene	ND	0.049	Н	mg/Kg	1	8/13/2019 2:10:34 PM	46741
Ethylbenzene	ND	0.049	Н	mg/Kg	1	8/13/2019 2:10:34 PM	46741
Xylenes, Total	ND	0.098	Н	mg/Kg	1	8/13/2019 2:10:34 PM	46741
Surr: 4-Bromofluorobenzene	96.5	80-120	Н	%Rec	1	8/13/2019 2:10:34 PM	46741

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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908614** 

16-Aug-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-46784 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 46784 RunNo: 62158

Prep Date: 8/14/2019 Analysis Date: 8/14/2019 SeqNo: 2109704 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-46784 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 46784 RunNo: 62158

Prep Date: 8/14/2019 Analysis Date: 8/14/2019 SeqNo: 2109705 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 91.1 90 110

### 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
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908614** 

16-Aug-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-46758 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 46758 RunNo: 62129 Prep Date: 8/13/2019 Analysis Date: 8/14/2019 SeqNo: 2108956 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result PQL HighLimit Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 7.7 76.5 70 10.00 130

Sample ID: MB-46805 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 46805 RunNo: 62154 Prep Date: 8/15/2019 Analysis Date: 8/15/2019 SeqNo: 2109604 Units: %Rec Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: DNOP 10.00 130 9.5 94.6

Sample ID: LCS-46805 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 46805 RunNo: 62154 Prep Date: 8/15/2019 Analysis Date: 8/15/2019 SeqNo: 2109605 Units: %Rec HighLimit SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result POI LowLimit Qual Surr: DNOP 4.7 5.000 93.3 70 130

Sample ID: LCS-46758 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 46758 RunNo: 62154 Analysis Date: 8/15/2019 Prep Date: 8/13/2019 SeqNo: 2110663 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 94.1 63.9 124 Surr: DNOP 5.000 70 4.7 94.9 130

#### 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
- PQL Practical Quantitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908614 16-Aug-19** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-46741 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 46741 RunNo: 62099

Prep Date: 8/12/2019 Analysis Date: 8/13/2019 SeqNo: 2107590 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 100 77.4 118

Sample ID: LCS-46741 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 46741 RunNo: 62099

1100

Prep Date: 8/12/2019 Analysis Date: 8/13/2019 SeqNo: 2107591 Units: mg/Kg

1000

Qual Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 24 5.0 25.00 0 94.5 80 120

113

77.4

118

### Qualifiers:

Surr: BFB

- 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
- PQL Practical Quanitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

2.8

0.99

0.10

WO#: **1908614** 

16-Aug-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-46741 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 46741 RunNo: 62099

Prep Date: 8/12/2019 Analysis Date: 8/13/2019 SeqNo: 2107617 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 0.95 1.000 94.9 80 120

3.000

1.000

Sample ID: LCS-46741	mple ID: LCS-46741 SampType: LCS TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS	Batc	Batch ID: <b>46741</b> RunNo: <b>62099</b>								
Prep Date: 8/12/2019	Analysis [	Date: 8/	13/2019	5	SeqNo: 2	107618	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	85.7	80	120			
Toluene	0.91	0.050	1.000	0	91.0	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.5	80	120			

94.1

98.9

80

80

120

120

### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

- 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 9 of 9



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: E	ENSOLUM AZTEC	Work Order Nur	mber: 1908614		RcptNo	: 1
Received By:	Andy Freeman	7/24/2019 11:15:0	00 AM	adje	<b></b> .	
Completed By:	Yazmine Garduno	8/12/2019 11:42:4	9 AM	Aftigmine lightedouts		
Reviewed By: Dr	10 8/12/19			g u		
Chain of Custo	ody					
1. Is Chain of Cus	tody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the sa	imple delivered?		<u>Courier</u>			
<u>Log In</u>				_		
3. Was an attempt	made to cool the sample	es?	Yes 🗹	No 🗌	NA 🗌	
4. Were all sample	s received at a temperat	ure of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗆	
5. Sample(s) in pro	oper container(s)?		Yes 🔽	No 🗌		
6. Sufficient sample	e volume for indicated te	st(s)?	Yes 🗹	No 🗌		
7. Are samples (exc	cept VOA and ONG) pro	perly preserved?	Yes 🗸	No 🗌		
8. Was preservative	e added to bottles?		Yes	No 🗹	NA 🗆	
9. VOA vials have z	zero headspace?	•	Yes	No 🗌	No VOA Vials 🗹	
10. Were any sampl	e containers received br	oken?	Yes	No 🗹	# of preserved	
11. Does paperwork (Note discrepand	match bottle labels? ies on chain of custody)		Yes 🗹	No 🗆	bottles checked for pH:	>12 unless noted)
12. Are matrices corr	ectly identified on Chain	of Custody?	Yes 🗸	No 🗌	Adjusted?	
13. Is it clear what ar	nalyses were requested?		Yes 🗹	No 🗆		, _\ \.A
	times able to be met? omer for authorization.)		Yes 🗹	No 🗆	Checked by:	+ Slistin
Special Handling	g (if applicable)			/		
15. Was client notifie	ed of all discrepancies wi	th this order?	Yes	No 🗌	NA 🗹	
Person No	tified:	Date	:			
By Whom:		Via:	eMail P	hone  Fax	In Person	
Regarding						
Client Instr	ructions:					
16. Additional remai	rks:					
17. Cooler Informa	tion					
	Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By		
general argent authority of refer to	.6 Good	endanor stretterieren en et				



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

September 16, 2019

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

FAX:

RE: Blanco Storage OrderNo.: 1909356

### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/7/2019 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 9/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-10 @ 1'-5'

 Project:
 Blanco Storage
 Collection Date: 9/6/2019 9:00:00 AM

 Lab ID:
 1909356-001
 Matrix: SOIL
 Received Date: 9/7/2019 1:30:00 PM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	SRM
Chloride	ND	60	mg/Kg	20	9/12/2019 5:05:34 PM	47442
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	11	mg/Kg	1	9/12/2019 4:15:35 PM	47424
Motor Oil Range Organics (MRO)	ND	53	mg/Kg	1	9/12/2019 4:15:35 PM	47424
Surr: DNOP	96.6	70-130	%Rec	1	9/12/2019 4:15:35 PM	47424
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/12/2019 6:07:34 PM	47421
Surr: BFB	97.2	77.4-118	%Rec	1	9/12/2019 6:07:34 PM	47421
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	9/12/2019 6:07:34 PM	47421
Toluene	ND	0.049	mg/Kg	1	9/12/2019 6:07:34 PM	47421
Ethylbenzene	ND	0.049	mg/Kg	1	9/12/2019 6:07:34 PM	47421
Xylenes, Total	ND	0.099	mg/Kg	1	9/12/2019 6:07:34 PM	47421
Surr: 4-Bromofluorobenzene	89.6	80-120	%Rec	1	9/12/2019 6:07:34 PM	47421

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
- PQL Practical Quanitative Limit

- 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 Limit

pple pH Not In Range Page 1 of 6

Date Reported: 9/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-11 @ 1'-5'

 Project:
 Blanco Storage
 Collection Date: 9/6/2019 10:00:00 AM

 Lab ID:
 1909356-002
 Matrix: SOIL
 Received Date: 9/7/2019 1:30:00 PM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	SRM
Chloride	ND	60	mg/Kg	20	9/12/2019 5:17:59 PM	47442
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/12/2019 4:37:54 PM	47424
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/12/2019 4:37:54 PM	47424
Surr: DNOP	100	70-130	%Rec	1	9/12/2019 4:37:54 PM	47424
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/12/2019 6:30:22 PM	47421
Surr: BFB	95.2	77.4-118	%Rec	1	9/12/2019 6:30:22 PM	47421
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	9/12/2019 6:30:22 PM	47421
Toluene	ND	0.049	mg/Kg	1	9/12/2019 6:30:22 PM	47421
Ethylbenzene	ND	0.049	mg/Kg	1	9/12/2019 6:30:22 PM	47421
Xylenes, Total	ND	0.098	mg/Kg	1	9/12/2019 6:30:22 PM	47421
Surr: 4-Bromofluorobenzene	86.5	80-120	%Rec	1	9/12/2019 6:30:22 PM	47421

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 2 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1909356** 

16-Sep-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-47442 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 47442 RunNo: 62896

Prep Date: 9/12/2019 Analysis Date: 9/12/2019 SeqNo: 2143661 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-47442 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 47442 RunNo: 62896

Prep Date: 9/12/2019 Analysis Date: 9/12/2019 SeqNo: 2143662 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 96.2 90 110

### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 3 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1909356** 

16-Sep-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-47424 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **PBS** Batch ID: **47424** RunNo: **62855** 

Prep Date: 9/11/2019 Analysis Date: 9/12/2019 SeqNo: 2141599 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 9.5 10.00 95.0 70 130

### 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
- PQL Practical Quanitative Limit

- 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 Limit

Page 4 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1909356** 

16-Sep-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-47421 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 47421 RunNo: 62879

Prep Date: 9/11/2019 Analysis Date: 9/12/2019 SeqNo: 2142846 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 960 1000 96.4 77.4 118

Sample ID: LCS-47421 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 47421 RunNo: 62879

Prep Date: 9/11/2019 Analysis Date: 9/12/2019 SeqNo: 2142847 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 O 94.3 80 120 Surr: BFB S 1200 1000 118 77.4 118

Sample ID: MB-47445 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 47445 RunNo: 62922

Prep Date: 9/12/2019 Analysis Date: 9/13/2019 SeqNo: 2144336 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 950 1000 95.3 77.4 118

Sample ID: LCS-47445 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 47445 RunNo: 62922

Prep Date: 9/12/2019 Analysis Date: 9/13/2019 SeqNo: 2144337 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 1100 1000 112 77.4 118

### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1909356** 

16-Sep-19

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-47421 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 47421 RunNo: 62879 Prep Date: 9/11/2019 Analysis Date: 9/12/2019 SeqNo: 2142874 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 0.86 1.000 86.0 80 120 Surr: 4-Bromofluorobenzene

Sample ID: LCS-47421 SampType: LCS Client ID: LCSS Batch ID: 47421			s	TestCode: EPA Method 8021B: Volatiles						
			421	RunNo: <b>62879</b>						
Prep Date: 9/11/2019	Analysis Date: 9/12/2019			SeqNo: 2142875			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.2	80	120			
Toluene	0.99	0.050	1.000	0	99.2	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.0	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.4	80	120			

### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 6 of 6



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:	ENSOLUM AZTEC	Work Order Nu	mber: 1909356		RcptNo:	1
Received By:	Yazmine Garduno	9/7/2019 1:30:00	PM	rfaquin befordari Anne Ar	ā	
Completed By:	Anne Thorne	9/9/2019 12:42:30	РМ	Om A		
Reviewed By:	LB	9/9/19		ana gi		
Chain of Cus	stody					
1. Is Chain of C	custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the	sample delivered?		Courier			
<u>Log In</u>						
3. Was an atten	npt made to cool the sample	es?	Yes 🗸	No 🗌	NA 🗆	
4. Were all sam	ples received at a temperat	ure of >0° C to 6.0°C	Yes	No 🗸	NA 🗆	
5 Comple/e) in	proper container(s)?		CW CONTACTI			
o. Sample(s) in	proper container(s)?		Yes 🗸	No 🗀		
6. Sufficient sam	nple volume for indicated te	st(s)?	Yes 🗸	No 🗌		
7. Are samples (	(except VOA and ONG) pro	perly preserved?	Yes 🗸	No 🗌		
8. Was preserva	ative added to bottles?		Yes	No 🗸	NA 🗆	
9. VOA vials hav	/e zero headspace?		Yes	No 🗌	No VOA Vials 🗹	/
10. Were any sar	mple containers received br	oken?	Yes	No 🗸	# of preserved bottles checked	
	ork match bottle labels? ancies on chain of custody)		Yes 🗸	No 🗌	for pH:	>12 unless noted)
12. Are matrices of	correctly identified on Chain	of Custody?	Yes 🗸	No 🗌	Adjusted?	
13. Is it clear wha	t analyses were requested?		Yes 🗸	No 🗌		ur alah
	ng times able to be met? ustomer for authorization.)		Yes 🗸	No 🗌	Checked by:	1001011
Special Handl	ing (if applicable)				J	
15. Was client no	otified of all discrepancies w	ith this order?	Yes	No 🗌	NA 🗹	
Person	Notified:	Date	e [			
By Who	om:	Via:	eMail	Phone  Fax	☐ In Person	
Regardi	- '					
Client Ir	nstructions:				***************************************	
16. Additional red	marks: DDY SEALS INTACT ON SC	01/0/9 te/S/AR. III				
17. Cooler Infor		VIE OMNOJAL BIBITS				
Cooler No	Temp °C Condition	Seal Intact Seal No Yes	Seal Date	Signed By		

Chain-of-Custody Record	Turn-Around Time:	Time:										Recei
Client: En 30/13		□ Rush				ANA	-	VSTS	Z Z	O O	ENVIRONMENT	ved by
	Project Name:	X	The state of the s			WOW	olled,	) ivi		www. hallenvironmental com	3	
Mailing Address: Joh S R'& Garde	Blanco	no Star	Tha	49	4901 Hawkins NE	kins N	,	Albuqu	nerane	N N	Albuqueraue, NM 87109	'D: 8/
874	Project #:			Tel.	el. 505-	505-345-3975	10	Fax	505	505-345-4107	107	/15/2
Phone #:	050	41336043	6/30				A	Analysis		rest		023
email or Fax#:	Project Manager:	ger:			3		•	<b>₽</b> ○		(tu		10:4
QA/QC Package:  □ Standard □ Level 4 (Full Validation)		Smar	h		bcB <sub>i</sub> s	SWISC	0 00	C TOTA	171	ıəsdA\tı		45:18 A
Accreditation:   Az Compliance  Delta Delt	Sampler: On Ice:	OH10.	nh.					17ON	(A	Preser		M
EDD (Type)_	# of Coolers:									) w.		
	Cooler Temp(including CF):	(including CF):	0403-7.5				-			olilo		
Date Time Matrix Sample Name	Container Type and #	Preservative Type	HEAL NO. 1909 1909	\ XЭТ8 08:НЧТ	8081 P6 M) BQ3	d sHA9	RCRA 8	Cl' E' E	s) 07S8	O lstoT		
, 900 5 HB-1001-5		Per l	102				-					
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												-9
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			The first of the second of the							de la constant		
	0.00	The state of the s										
Date: Time: Relinquished by:	Received by:	Via:	9/6/19 1130 Date Time	Remarks:	of a	1. 30	100	18 6	20	a		Page 2
	3	( CMME	OFFILM T		AFE	A	4	13	2			290 of 3
If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.	ubcontracted to other ac	scredited laboratories	This serves as	possibility.	Any sub-co	ontracted	data wil	be clea	rly notate	ed on the	notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	384



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

January 22, 2020

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

**FAX** 

RE: Blanco Storage OrderNo.: 2001728

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/18/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

# Analytical Report Lab Order 2001728

Date Reported: 1/22/2020

1/20/2020 10:28:49 AM B65910

1/20/2020 10:28:49 AM B65910

1/20/2020 10:28:49 AM B65910

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-53

 Project:
 Blanco Storage
 Collection Date: 1/17/2020 9:30:00 AM

 Lab ID:
 2001728-001
 Matrix: MEOH (SOIL)
 Received Date: 1/18/2020 10:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride ND 60 mg/Kg 20 1/20/2020 10:47:48 AM 49911 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM Diesel Range Organics (DRO) ND 9.8 mg/Kg 1/20/2020 10:11:04 AM 49907 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 1/20/2020 10:11:04 AM 49907 Surr: DNOP 81.9 55.1-146 %Rec 1 1/20/2020 10:11:04 AM 49907 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 1/20/2020 10:28:49 AM G65910 Gasoline Range Organics (GRO) ND 5 22 mg/Kg Surr: BFB 78.7 66.6-105 %Rec 5 1/20/2020 10:28:49 AM G65910 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND mg/Kg 1/20/2020 10:28:49 AM B65910 Benzene 0.11 5 Toluene ND 0.22 mg/Kg 1/20/2020 10:28:49 AM B65910

ND

ND

91.6

0.22

0.45

80-120

mg/Kg

mg/Kg

%Rec

5

5

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 1 of 8

Date Reported: 1/22/2020

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: ENSOLUM** Client Sample ID: S-54

**Project:** Blanco Storage Collection Date: 1/17/2020 9:35:00 AM

2001728-002 Lab ID: Matrix: MEOH (SOIL) Received Date: 1/18/2020 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	1/20/2020 11:00:12 AM	49911
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	BRM
Diesel Range Organics (DRO)	360	9.5		mg/Kg	1	1/20/2020 10:20:00 AM	49907
Motor Oil Range Organics (MRO)	150	47		mg/Kg	1	1/20/2020 10:20:00 AM	49907
Surr: DNOP	121	55.1-146		%Rec	1	1/20/2020 10:20:00 AM	49907
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	1500	20		mg/Kg	5	1/20/2020 10:52:07 AM	G65910
Surr: BFB	1030	66.6-105	S	%Rec	5	1/20/2020 10:52:07 AM	G65910
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	1.1	0.10		mg/Kg	5	1/20/2020 10:52:07 AM	B65910
Toluene	20	2.0		mg/Kg	50	1/20/2020 2:00:06 PM	B65910
Ethylbenzene	11	0.20		mg/Kg	5	1/20/2020 10:52:07 AM	B65910
Xylenes, Total	110	4.1		mg/Kg	50	1/20/2020 2:00:06 PM	B65910
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	50	1/20/2020 2:00:06 PM	B65910

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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 2 of 8

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001728** 

22-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-49911 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **49911** RunNo: **65902** 

Prep Date: 1/20/2020 Analysis Date: 1/20/2020 SeqNo: 2264169 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-49911 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 49911 RunNo: 65902

Prep Date: 1/20/2020 Analysis Date: 1/20/2020 SeqNo: 2264170 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.3 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 3 of 8

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001728 22-Jan-20** 

Client:	ENSOLUM
Project:	Blanco Storage

Sample ID: <b>2001728-001AMS</b>	SampType: <b>M</b>	s	Tes	tCode: <b>FP</b>	A Method	8015M/D: Di	esel Rang	e Organics	
Client ID: S-53	Batch ID: 49			RunNo: <b>65</b>		00 13 W/D. DI	csci italigi	c Organics	
Prep Date: 1/20/2020	Analysis Date: 1			SeqNo: <b>22</b>		Units: mg/k	(a		
Analyte	Result PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52 9.7		6.155	93.3	47.4	136	/0NFD	KFDLIIIII	Quai
Surr: DNOP	3.9	4.869		79.5	55.1	146			
Sample ID: <b>2001728-001AMS</b>	<b>D</b> SampType: <b>M</b>	SD.	Tos	tCode: <b>ED</b>	A Method	8015M/D: Di	osol Pang	o Organics	
Client ID: <b>S-53</b>	Batch ID: 49			RunNo: <b>65</b>		OUTSWIFE. DI	esei italigi	e Organics	
Prep Date: 1/20/2020	Analysis Date: 1			SeqNo: <b>22</b>		Units: mg/k	(a		
Analyte	Result PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53 9.9		6.155	94.3	47.4	136	2.74	43.4	Quai
Surr: DNOP	4.1	4.970		81.5	55.1	146	0	0	
Sample ID: <b>LCS-49907</b>	SampType: <b>L</b> (	~ <u> </u>	Too	tCode: <b>ED</b>	A Mothad	8015M/D: Di	osol Pana	o Organice	
Client ID: LCSS	Batch ID: 49			RunNo: <b>65</b>		OU I SIVI/D. DI	esei Kang	e Organics	
Prep Date: 1/20/2020	Analysis Date: 1			SegNo: 22		Units: mg/k	(a		
Analyte	•		SPK Ref Val		LowLimit	J	%RPD	RPDLimit	Ougl
Diesel Range Organics (DRO)	Result PQL 50 10		0	100	63.9	HighLimit 124	%RPD	KPDLIMIL	Qual
Surr: DNOP	4.1	5.000	· ·	81.0	55.1	146			
Sample ID: <b>MB-49907</b>	SampType: <b>M</b>	BI K	Tas	tCode: <b>ED</b>	A Method	8015M/D: Di	osol Pang	o Organics	
Client ID: PBS	Batch ID: 49			RunNo: <b>65</b>		OUTSWIFE. DI	esei italigi	e Organics	
Prep Date: 1/20/2020	Analysis Date: 1			SeqNo: <b>22</b>		Units: mg/k	(a		
	Result PQL		SPK Ref Val			HighLimit	%RPD	RPDLimit	Qual
Analyte Diesel Range Organics (DRO)	ND 10		SPK Kei Vai	70KEC	LOWLIIIII	підпіліпі	%KFD	KPDLIIIII	Quai
Motor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	8.0	10.00		80.5	55.1	146			
Sample ID: LCS-49861	SampType: L0	cs	Tes	tCode: <b>EP</b>	A Method	8015M/D: Di	esel Range	e Organics	
Client ID: LCSS	Batch ID: 49	9861	F	RunNo: <b>65</b>	901				
Prep Date: 1/16/2020	Analysis Date: 1	/21/2020	5	SeqNo: <b>22</b>	63856	Units: %Re	С		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3	5.000		107	55.1	146		<u> </u>	
Sample ID: LCS-49891	SampType: L0	cs	Tes	tCode: <b>EP</b>	A Method	8015M/D: Di	esel Range	e Organics	
Client ID: LCSS	Batch ID: 49			RunNo: <b>65</b>				•	
Prep Date: 1/17/2020	Analysis Date: 1			SeqNo: 22		Units: %Re	С		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<del></del>									

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 4 of 8

#### Hall Environmental Analysis Laboratory, Inc.

t: 2001728 22-Jan-20

WO#:

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-49891 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **LCSS** Batch ID: **49891** RunNo: **65901** 

Prep Date: 1/17/2020 Analysis Date: 1/20/2020 SeqNo: 2263857 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.0 5.000 79.2 55.1 146

Sample ID: MB-49861 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **PBS** Batch ID: **49861** RunNo: **65901** 

Prep Date: 1/16/2020 Analysis Date: 1/21/2020 SeqNo: 2263860 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 11 10.00 108 55.1 146

Sample ID: MB-49891 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 49891 RunNo: 65901

Prep Date: 1/17/2020 Analysis Date: 1/20/2020 SeqNo: 2263861 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 8.9 10.00 89.4 55.1 146

#### 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
- PQL Practical Quantitative Limit
- 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 Limit

Page 5 of 8

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 2001728

22-Jan-20

Client: **ENSOLUM Project:** Blanco Storage

Sample ID: rb SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G65910 RunNo: 65910

Prep Date: Analysis Date: 1/20/2020 SeqNo: 2263618 Units: mq/Kq

SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 770 1000 77.4 66.6 105

Sample ID: 2.5ug gro lcsb SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G65910 RunNo: 65910

Prep Date: Analysis Date: 1/20/2020 SeqNo: 2263619 Units: mg/Kg

HighLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 O 98.0 80 120 Surr: BFB 890

88.5

66.6

105

Sample ID: 2001728-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

1000

Client ID: S-53 Batch ID: G65910 RunNo: 65910

Prep Date: Analysis Date: 1/20/2020 SeqNo: 2263620 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result POI LowLimit HighLimit Qual Gasoline Range Organics (GRO) 90 22 112.2 0 79.9 69.1 142 Surr: BFB 4488 4600 101 66.6 105

Sample ID: 2001728-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: S-53 Batch ID: G65910 RunNo: 65910

Prep Date: Analysis Date: 1/20/2020 SeqNo: 2263621 Units: mg/Kg

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual Gasoline Range Organics (GRO) 140 22 45.3 R 112 2 127 69.1 142 20 Surr: BFB 4400 4488 98.2 66.6 105 0 0

Sample ID: mb-49896 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PRS Batch ID: 49896 RunNo: 65910

Prep Date: 1/17/2020 Analysis Date: 1/20/2020 SeqNo: 2263634 Units: %Rec

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Surr: BFB 1000 66.6 820 82.0 105

Sample ID: Ics-49896 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 49896 RunNo: 65910

Prep Date: 1/17/2020 Analysis Date: 1/20/2020 SeqNo: 2263635 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Surr: BFB 880 1000 87.9 66.6 105

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

120

6.1

140

6.7

0.41

0.41

12.18

4.058

12.18

4.058

WO#: **2001728** 

22-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: rb SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: B65910 RunNo: 65910

Prep Date: Analysis Date: 1/20/2020 SeqNo: 2263650 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 0.90 1.000 90.0 80 120

Sample ID: 100ng btex Icsb SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: B65910 RunNo: 65910

Prep Date:	Analysis [	Date: 1/	20/2020	5	SeqNo: 2	263651	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.8	80	120			
Toluene	0.99	0.050	1.000	0	99.5	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.6	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.4	80	120			

Sample ID: 2001728-002AMS	SampT	ype: <b>MS</b>	5	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: S-54	Batch	1D: <b>B6</b>	5910	F	RunNo: 6	5910				
Prep Date:	Analysis D	ate: 1/	20/2020	9	SeqNo: 2	263652	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5.1	0.10	4.058	1.118	98.6	78.5	119			
Toluene	25	0.20	4.058	20.73	113	75.7	123			Е
Ethylbenzene	15	0.20	4.058	10.60	99.6	74.3	126			

105.4

Sample ID: 2001728-002AMSD	SampT	ype: MS	SD	Tes	tCode: <b>EF</b>	PA Method	8021B: Volat	tiles		
Client ID: S-54	Batch	n ID: <b>B6</b>	5910	F	RunNo: 6	5910				
Prep Date:	Analysis Date: 1/20/2020				SeqNo: 22	263653	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.7	0.10	4.058	1.118	161	78.5	119	39.6	20	RS
Toluene	30	0.20	4.058	20.73	233	75.7	123	17.5	20	ES
Ethylbenzene	19	0.20	4.058	10.60	197	74.3	126	23.9	20	RS

105.4

Qualifiers:

Xylenes, Total

Xylenes, Total

Surr: 4-Bromofluorobenzene

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

274

165

107

149

72.9

72.9

80

80

130

120

130

120

15.8

0

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 7 of 8

20

0

Ε

S

ES

S

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001728** 

22-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb-49896 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: **PBS** Batch ID: **49896** RunNo: **65910** 

Prep Date: 1/17/2020 Analysis Date: 1/20/2020 SeqNo: 2263654 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: 4-Bromofluorobenzene 0.95 1.000 94.7 80 120

Sample ID: LCS-49896 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: **LCSS** Batch ID: **49896** RunNo: **65910** 

Prep Date: 1/17/2020 Analysis Date: 1/20/2020 SeqNo: 2263655 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

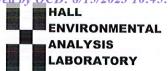
Surr: 4-Bromofluorobenzene 0.92 1.000 92.1 80 120

#### 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
- PQL Practical Quantitative Limit
- 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 Limit

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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: E	ENSOLUM AZTEC	Work Order Num	ber: 2001728		RcptNo: 1	
Received By:	Erin Melendrez	1/18/2020 10:00:00	) AM	in	7	
Completed By:	Erin Melendrez	1/18/2020 10:39:02	2 AM	MUL	<u> </u>	
Reviewed By: M	A 1/18/20			,		
Chain of Custo	ody					
1. Is Chain of Cus	tody sufficiently complet	e?	Yes 🗸	No 🗌	Not Present	
2. How was the sa	ample delivered?		Courier			
Log In						
	made to cool the sample	es?	Yes 🗸	No 🗌	NA 🗌	
4. Were all sample	es received at a tempera	ture of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗆	
5. Sample(s) in pro	oper container(s)?		Yes 🗹	No 🗌		
3. Sufficient sample	e volume for indicated te	est(s)?	Yes 🗹	No 🗌		
7. Are samples (ex	cept VOA and ONG) pro	perly preserved?	Yes 🗸	No 🗌		
8. Was preservativ	e added to bottles?		Yes	No 🗹	NA 🗆	
9. Received at leas	st 1 vial with headspace	<1/4" for AQ VOA?	Yes	No 🗌	NA 🗹	
0. Were any samp	le containers received b	roken?	Yes	No 🗹	# of preserved	/
			-		bottles checked	
	match bottle labels? cies on chain of custody	Ĭ.	Yes 🗸	No 📙	for pH:	unless noted)
	rectly identified on Chair		Yes 🗸	No 🗆	Adjusted?	uniess noteu)
	nalyses were requested	300 00-11 00 0000-100 000-000 0000-000-00	Yes 🗹	No 🗆	/	
	times able to be met?		Yes 🗹	No 🗆	Checked by: EN	M 1/18/7
	tomer for authorization.)				/	
pecial Handlin	g (if applicable)					
5. Was client notifi	ied of all discrepancies v	vith this order?	Yes	No 🗌	NA 🗸	
Person No	otified:	Date	TOTAL CONTINUE OF THE PARTY OF	Personal and Control of the Control		
By Whom	:	Via:	eMail F	hone  Fax	☐ In Person	
Regarding		A APPENDICULAR DESCRIPTION OF THE PROPERTY OF				
Client Inst	tructions:		**********	December 2011	CONTRACTOR OF THE WAY TO SEE STREET	
6. Additional rema	arks:					
7. Cooler Informa	ation					
Cooler Informa	Temp °C Condition	Seal Intact   Seal No	Seal Date	Signed By		
	1.1 Good	Yes		_ '3''' _ '		

Received by OCD: 8/15/2023	10:45:18 AM	Page 301 of 384
CONMENTAL ABORATOR al.com b, NM 87109 345-4107		3/20 sport.
RA.		4 VIS
IALL ENVIRONMENT NALYSIS LABORATC www.hallenvironmental.com ns NE - Albuquerque, NM 87109 15-3975 Fax 505-345-4107 Analysis Request	Total Coliform (Present/Absent)	779 ENIL
enta rque, 05-3	(AOV-ima2) 0728	* wordsted
HALL ENVIRO ANALYSIS LAE www.hallenvironmental.co kins NE - Albuquerque, NN 345-3975 Fax 505-345- Analysis Request	(AOV) 09S8	Searly The State of the State o
YS   YS     Albu	2 C C E BY MO3, MO2, PQ4, 504	Sylva COOK
AL A.hal W.hal VE - 975	RCRA 8 Metals	My 1/2 Mg
HAL ANA www.h kins NE 345-397	SMI20728 10 01 8270 SIMS	tracted tracted
ANALL ANALLA www.ha Hawkins NE 505-345-3975	EDB (Method 504.1)	Who con
ANA www.h 4901 Hawkins NE Tel. 505-345-3978	8081 Pesticides/8082 PCB's	S: Any s
4	BLEX   WHEE   (8021)	Remarks:  ***********************************
	S P BTEX / MIBE (8021)	₩ sin
1688 Rush 10000 Storage 6000	Project Manager:  **Manager:**  Sampler: **A D About  On Ice: **A Yes	Date Time Remarks: 19 (2001) Continues  DUNIEL Date Time  RESCULL INTEGERAL ON COOLET # - ENH 1/18/1  A Secul intoct on CooleT # - ENH 1/18/1  A Secul intoct on CooleT # - ENH 1/18/1  A Secul intoct on CooleT # - ENH 1/18/1  A Secul intoct on CooleT # - ENH 1/18/1  A Secul intocted data will be clearly notated on the analytical report
ime:	Symus Conducting CF: 1.0 Hpc    D Hpc     D Hp	Via: COU
Turn-Around T  □ Standard  Project Name:  B/R/N  Project #:	Sampler: On Ice: # of Coolers: Container Type and # T  You You You You You You You You You Yo	Received by: Received by: An
Chain-of-Custody Record Client: £150lm Mailing Address: 606 S Ro Gank Surt A SOWO Phone #:	# gg :: (e) 1	Date: Time: Relinquished by:  Date: Time: Relinquished by:  Date: Time: Relinquished by:  Received by: Via:  Received by: Via:  Na:COUNTIENT  If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.



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

January 23, 2020

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 2001819

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/22/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 1/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-55

 Project:
 Blanco Storage
 Collection Date: 1/21/2020 12:00:00 PM

 Lab ID:
 2001819-001
 Matrix: SOIL
 Received Date: 1/22/2020 8:05:00 AM

Analyses	Result	RL	Qual U	J <b>nits</b>	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60	m	ng/Kg	20	1/22/2020 10:41:59 AM	49969
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	BRM
Diesel Range Organics (DRO)	ND	9.3	m	ng/Kg	1	1/22/2020 10:13:35 AM	49967
Motor Oil Range Organics (MRO)	ND	46	m	ng/Kg	1	1/22/2020 10:13:35 AM	49967
Surr: DNOP	99.5	55.1-146	%	%Rec	1	1/22/2020 10:13:35 AM	49967
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	18	m	ng/Kg	5	1/22/2020 9:33:05 AM	A65976
Surr: BFB	87.2	66.6-105	%	%Rec	5	1/22/2020 9:33:05 AM	A65976
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.089	m	ng/Kg	5	1/22/2020 9:33:05 AM	B65976
Toluene	ND	0.18	m	ng/Kg	5	1/22/2020 9:33:05 AM	B65976
Ethylbenzene	ND	0.18	m	ng/Kg	5	1/22/2020 9:33:05 AM	B65976
Xylenes, Total	ND	0.36	m	ng/Kg	5	1/22/2020 9:33:05 AM	B65976
Surr: 4-Bromofluorobenzene	98.8	80-120	%	%Rec	5	1/22/2020 9:33:05 AM	B65976

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 1 of 7

Date Reported: 1/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-56

 Project:
 Blanco Storage
 Collection Date: 1/21/2020 12:05:00 PM

 Lab ID:
 2001819-002
 Matrix: SOIL
 Received Date: 1/22/2020 8:05:00 AM

Analyses	Result	RL	Qual Uni	its I	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60	mg,	′Kg	20	1/22/2020 10:54:20 AM	49969
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg,	′Kg	1	1/22/2020 10:22:43 AM	49967
Motor Oil Range Organics (MRO)	ND	47	mg/	′Kg	1	1/22/2020 10:22:43 AM	49967
Surr: DNOP	93.1	55.1-146	%R	ec	1	1/22/2020 10:22:43 AM	49967
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	19	mg/	′Kg	5	1/22/2020 9:56:32 AM	A65976
Surr: BFB	86.0	66.6-105	%R	ес	5	1/22/2020 9:56:32 AM	A65976
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.095	mg/	′Kg	5	1/22/2020 9:56:32 AM	B65976
Toluene	ND	0.19	mg/	′Kg	5	1/22/2020 9:56:32 AM	B65976
Ethylbenzene	ND	0.19	mg/	′Kg	5	1/22/2020 9:56:32 AM	B65976
Xylenes, Total	ND	0.38	mg/	′Kg	5	1/22/2020 9:56:32 AM	B65976
Surr: 4-Bromofluorobenzene	98.2	80-120	%R	ec	5	1/22/2020 9:56:32 AM	B65976

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 2 of 7

Date Reported: 1/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-57

 Project:
 Blanco Storage
 Collection Date: 1/21/2020 12:10:00 PM

 Lab ID:
 2001819-003
 Matrix: SOIL
 Received Date: 1/22/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	1/22/2020 11:06:42 AM	49969
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	BRM
Diesel Range Organics (DRO)	1400	92		mg/Kg	10	1/22/2020 10:31:51 AM	49967
Motor Oil Range Organics (MRO)	880	460		mg/Kg	10	1/22/2020 10:31:51 AM	49967
Surr: DNOP	0	55.1-146	S	%Rec	10	1/22/2020 10:31:51 AM	49967
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	5900	400		mg/Kg	100	1/22/2020 11:06:49 AM	A65976
Surr: BFB	204	66.6-105	S	%Rec	100	1/22/2020 11:06:49 AM	A65976
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	15	0.10		mg/Kg	5	1/22/2020 10:19:45 AM	B65976
Toluene	75	4.0		mg/Kg	100	1/22/2020 11:06:49 AM	B65976
Ethylbenzene	26	4.0		mg/Kg	100	1/22/2020 11:06:49 AM	B65976
Xylenes, Total	270	8.0		mg/Kg	100	1/22/2020 11:06:49 AM	B65976
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	100	1/22/2020 11:06:49 AM	B65976

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 3 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001819 23-Jan-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-49969 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 49969 RunNo: 65978

Prep Date: 1/22/2020 Analysis Date: 1/22/2020 SeqNo: 2266714 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-49969 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 49969 RunNo: 65978

Prep Date: 1/22/2020 Analysis Date: 1/22/2020 SeqNo: 2266715 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.3 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 4 of 7

## Hall Environmental Analysis Laboratory, Inc.

Batch ID: 49967

Analysis Date: 1/22/2020

PQL

9.5

Result

48

4.2

WO#: **2001819 23-Jan-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-49967	SampT	Гуре: <b>LC</b>	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: LCSS	Batcl	h ID: <b>49</b>	967	F	RunNo: 6	5969				
Prep Date: 1/22/2020	Analysis D	Date: 1/	22/2020	8	SeqNo: 2	265920	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	101	63.9	124			
Surr: DNOP	4.3		5.000		86.9	55.1	146			
Sample ID: <b>MB-49967</b>	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PBS	Batcl	h ID: <b>49</b>	967	F	RunNo: 6	5969				
Prep Date: 1/22/2020	Analysis D	Date: 1/	22/2020	\$	SeqNo: 2	265922	Units: mg/k	<b>(</b> g		
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								
Motor Oil Range Organics (MRO) Surr: DNOP	ND 9.2	50	10.00		91.9	55.1	146			

Surr: DNOP	4.3		4.748		89.5	55.1	146			
Sample ID: 2001819-001AMSD	SampTy	ype: MS	SD .	Tes	tCode: EF	PA Method	8015M/D: Die	esel Rango	e Organics	
Client ID: S-55	Batch	ID: <b>49</b> 9	967	R	RunNo: 6	5969				
Prep Date: 1/22/2020	Analysis Da	ate: 1/2	22/2020	S	SeqNo: 22	266553	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.2	45.91	4.927	91.2	47.4	136	3.12	43.4	

SPK value SPK Ref Val %REC

4.927

47.48

4.591

RunNo: 65969

91.3

91.7

SeqNo: 2266552

LowLimit

47.4

55.1

Units: mg/Kg

136

146

%RPD

0

**RPDLimit** 

0

Qual

HighLimit

#### Qualifiers:

Client ID: S-55

Surr: DNOP

Prep Date: 1/22/2020

Diesel Range Organics (DRO)

- 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 7

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2001819** 

23-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MBS SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: A65976 RunNo: 65976

Prep Date: Analysis Date: 1/22/2020 SeqNo: 2266391 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 87.6 66.6 105

Sample ID: 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: A65976 RunNo: 65976

Prep Date: Analysis Date: 1/22/2020 SeqNo: 2266392 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 0 102 80 120

 Gasoline Range Organics (GRO)
 25
 5.0
 25.00
 0
 102
 80
 120

 Surr: BFB
 1000
 1000
 102
 66.6
 105

Sample ID: 2001819-001ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **S-55** Batch ID: **A65976** RunNo: **65976** 

Prep Date: Analysis Date: 1/23/2020 SeqNo: 2266393 Units: mg/Kg

%REC Result SPK value SPK Ref Val HighLimit %RPD **RPDLimit** Analyte PQL LowLimit Qual Gasoline Range Organics (GRO) 80 18 89.29 0 89.4 69.1 142 Surr: BFB 3571 95.2 66.6 3400 105

Sample ID: 2001819-001amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: S-55 Batch ID: A65976 RunNo: 65976

Prep Date: Analysis Date: 1/23/2020 SeqNo: 2266394 Units: mq/Kq

Result SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte PQL LowLimit Qual Gasoline Range Organics (GRO) 78 18 89.29 86.8 69.1 142 2.95 20 Surr: BFB 3400 3571 94.4 66.6 105 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
- PQL Practical Quantitative Limit
- 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 Limit

Page 6 of 7

#### Hall Environmental Analysis Laboratory, Inc.

3.0

1.0

3.8

0.10

WO#: **2001819** 

23-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MBS SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: B65976 RunNo: 65976

Prep Date: Analysis Date: 1/22/2020 SeqNo: 2266434 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
 99.7
 80
 120

3.000

1.000

3.820

Sample ID: 100ng btex Ics SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B65976** RunNo: 65976 Prep Date: Analysis Date: 1/22/2020 SeqNo: 2266435 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.025 1.000 1.0 n 100 80 120 Benzene Toluene 0.99 0.050 1.000 0 99.0 80 120 0.98 0 98.5 80 Ethylbenzene 0.050 1.000 120

0

98.7

101

99.5

80

80

80

120

120

120

Sample ID: 2001819-002ams SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: S-56 Batch ID: **B65976** RunNo: 65976 Prep Date: Analysis Date: 1/23/2020 SeqNo: 2266436 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.095 102 78.5 3.9 3.820 119 Benzene O Toluene 3.8 0.19 3.820 0 100 75.7 123 0 99.9 74.3 126 Ethylbenzene 3.8 0.19 3.820 Xylenes, Total 11 0.38 11.46 n 98.1 72.9 130

TestCode: EPA Method 8021B: Volatiles Sample ID: 2001819-002amsd SampType: MSD Client ID: S-56 Batch ID: **B65976** RunNo: 65976 Prep Date: Analysis Date: 1/23/2020 SeqNo: 2266437 Units: mg/Kg SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual 3.7 0.095 3.820 0 98.0 78.5 119 4.01 20 Benzene Toluene 3.7 0.19 3.820 0 96.2 75.7 123 4.30 20 Ethylbenzene 3.6 0.19 3.820 0 95.5 74.3 126 4 47 20 11.46 Xylenes, Total 11 0.38 0 95.5 72.9 130 2.70 20 Surr: 4-Bromofluorobenzene 3.8 3.820 98.4 120 0 0 80

#### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

Surr: 4-Bromofluorobenzene

- \* 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 7 of 7



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: ENSOLUM AZTEC	Work Order Nun	nber: <b>2001819</b>	-	RcptNo: 1	
Received By: Desiree Dominguez	1/22/2020 8:05:00	АМ	D <sub>3</sub>		
Completed By: Leah Baca	1/22/2020 8:07:40	АМ	Look Baca		
Reviewed By: ENM	1/22/20		Lawys		
Chain of Custody					
1. Is Chain of Custody sufficiently complete?		Yes 🗹	No 🗌	Not Present	
2. How was the sample delivered?		<u>Courier</u>			
Log In  3. Was an attempt made to cool the samples	?	Yes 🗹	No 🗌	NA 🗌	
4. Were all samples received at a temperatur	e of >0° C to 6.0°C	Yes 🗹	No 🗌	na 🗀	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗆		
6. Sufficient sample volume for indicated test	(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) proper	erly preserved?	Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. Received at least 1 vial with headspace <1	/4" for AQ VOA?	Yes	No 🗌	NA 🗹	
<ol><li>Were any sample containers received brol</li></ol>	ken?	Yes	No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗸	No 🗆	bottles checked for pH: (<2 or >12	unless noted)
12. Are matrices correctly identified on Chain of	f Custody?	Yes 🗹	No 🗆	Adjusted?	
13. Is it clear what analyses were requested?		Yes 🗹	No 🗌	7	
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗆	Checked by: DAD	1/22/20
Special Handling (if applicable)					
15. Was client notified of all discrepancies with	this order?	Yes 🗌	No 🗆	NA 🗹	
Person Notified:	Date			١	
By Whom:	Via:	eMail F	Phone 🔲 Fax	In Person	
Regarding:					
Client Instructions:		w			
16. Additional remarks:					
17. Cooler Information		***************************************	COLUMN STANFORM TOWN TO THE COLUMN TWO TWO THE COLUMN TWO THE COLU		
	Seal Intact Seal No	Seal Date	Signed By		
1 2.2 Good Y	es				

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Chain-of-Custody Record	阿		Mailing Address:	7.3		ax#:	QA/QC Package:	ي. ي: اع		(ype)			Time	7201	3	0161								Time:	III.	If necessary,
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

January 24, 2020

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

FAX:

RE: Blanco Storage OrderNo.: 2001901

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/23/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 1/24/2020

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-58

 Project:
 Blanco Storage
 Collection Date: 1/22/2020 1:00:00 PM

 Lab ID:
 2001901-001
 Matrix: MEOH (SOIL)
 Received Date: 1/23/2020 9:05:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch Analyses EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride ND 60 mg/Kg 20 1/23/2020 12:02:30 PM 49992 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM Diesel Range Organics (DRO) ND 9.3 mg/Kg 1/23/2020 10:21:45 AM 49989 ND Motor Oil Range Organics (MRO) 47 mg/Kg 1 1/23/2020 10:21:45 AM 49989 Surr: DNOP 95.1 55.1-146 %Rec 1/23/2020 10:21:45 AM 49989 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 1/23/2020 9:58:25 AM 49978 4.4 mg/Kg Surr: BFB 88.0 66.6-105 %Rec 1/23/2020 9:58:25 AM 49978 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND mg/Kg 1/23/2020 9:58:25 AM Benzene 0.022 49978 Toluene ND 0.044 mg/Kg 1/23/2020 9:58:25 AM 49978 Ethylbenzene ND 0.044 mg/Kg 1 1/23/2020 9:58:25 AM 49978 Xylenes, Total ND 0.088 mg/Kg 1/23/2020 9:58:25 AM 49978 Surr: 4-Bromofluorobenzene 99.3 80-120 %Rec 1/23/2020 9:58:25 AM 49978

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 1 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001901** 

24-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-49992 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 49992 RunNo: 66016

Prep Date: 1/23/2020 Analysis Date: 1/23/2020 SeqNo: 2268195 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-49992 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 49992 RunNo: 66016

Prep Date: 1/23/2020 Analysis Date: 1/23/2020 SeqNo: 2268196 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.9 90 110

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 2 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001901 24-Jan-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-49989 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 49989 RunNo: 66004 Prep Date: 1/23/2020 Analysis Date: 1/23/2020 SeqNo: 2266978 Units: mg/Kg PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Analyte Result LowLimit Diesel Range Organics (DRO) 10 0 50 50.00 100 63.9 124 Surr: DNOP 4.5 5.000 89.5 55.1 146

Sample ID: MB-49989 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: MBLK Client ID: PBS Batch ID: 49989 RunNo: 66004 Prep Date: 1/23/2020 Analysis Date: 1/23/2020 SeqNo: 2266979 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 9.3 10.00 93.0 55.1 146

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

PQL Practical Quanitative Limit

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 Limit

Page 3 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001901** 

24-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb-49978 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 49978 RunNo: 66017

Prep Date: 1/22/2020 Analysis Date: 1/23/2020 SeqNo: 2267664 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 890 1000 88.5 66.6 105

Sample ID: Ics-49978 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 49978 RunNo: 66017

990

Prep Date: 1/22/2020 Analysis Date: 1/23/2020 SeqNo: 2267665 Units: mg/Kg

1000

Qual Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 23 5.0 25.00 0 92.7 80 120

99.4

66.6

105

#### Qualifiers:

Surr: BFB

- 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
- PQL Practical Quanitative Limit
- 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 Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2001901 24-Jan-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb-49978 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 49978 RunNo: 66017

Prep Date: 1/22/2020 Analysis Date: 1/23/2020 SeqNo: 2267696 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 99.9 80 120

Sample ID: LCS-49978 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 49978 RunNo: 66017

Prep Date: 1/22/2020	Analysis [	Date: 1/	23/2020	5	SeqNo: 2	267697	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.8	80	120			
Toluene	0.96	0.050	1.000	0	96.3	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 5



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:	ENSOLUM	AZTEC	Work	Order Numb	per: 200	1901		ranka consum	RcptNo	: 1
Received By:	Leah Bac	a	1/23/20	20 9:05:00 /	AM		Lash	Baci	4	
Completed By:	Isaiah Or	tiz	1/23/20	20 9:12:02	AM		Last)	C	2-6	
Reviewed By:	TO		01/23/2	020						
Chain of Cus	tody									
1. Is Chain of Cu	ustody suffic	iently comple	te?		Yes	<b>✓</b>	No		Not Present	
2. How was the	sample deliv	vered?			Cou	rier				
l og In										
<u>Log In</u> 3. Was an attem	pt made to	cool the same	oles?		Yes	<b>✓</b>	No		NA 🗆	
					100		110			
4. Were all samp	les received	l at a tempera	ature of >0° C	to 6.0°C	Yes	<b>V</b>	No		NA 🗆	
5 Cample (a) in a										
5. Sample(s) in p	roper conta	iner(s)?			Yes	~	No	Ш		
6. Sufficient samp	ple volume f	or indicated t	est(s)?		Yes	<b>V</b>	No [			
7. Are samples (e	except VOA	and ONG) pr	operly preserve	ed?	Yes	<b>V</b>	No [			
8. Was preservat	ive added to	bottles?			Yes		No [	<b>/</b>	NA 🗆	
9. Received at lea	ast 1 vial wit	h headspace	<1/4" for AQ V	OA?	Yes		No [		NA 🗸	
10. Were any sam	ple containe	ers received b	oroken?		Yes		No	<b>V</b>		
									# of preserved bottles checked	
11. Does paperwo			ă.		Yes	<b>~</b>	No [		for pH:	12 ml
(Note discrepa 12. Are matrices c			25		Yes	<b>~</b>	No [	n l	Adjusted?	>12 unless noted)
13. Is it clear what			10.70		Yes	<b>V</b>	-			,
14. Were all holdin		-			Yes	<b>✓</b>	No [		Checked by:	1B 1/23/2020
(If no, notify cu	stomer for a	uthorization.)						-1		70
Special Handli	ng (if app	olicable)								
15. Was client not	ified of all d	iscrepancies	with this order?		Yes		No		NA 🗸	
Person I	Notified:			Date:		rie at the content to a		no Consumity"		
By Who	m:			Via:	eM	ail [	Phone	Fax	☐ In Person	
Regardir	ng:		Octobries and Control and Cont		NAMES OF THE OWNER.	MARK TAND OF STREET		William Status		
Client In	structions:				PM-CLOSED STREET, ST.		MANAGE AND REAL PROPERTY OF THE PROPERTY OF TH	-	Management of the control of the con	
16. Additional ren	narks:									
17. Cooler Inform	<u>nation</u>									
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal D	ate	Signed B	у	No. of Contrasting	
1	0.3	Good	Yes						No.	

Chai	n-of-C	Chain-of-Custody Record	Turn-Around Time:	Time:	1169 Same							
Clien	Ensolum	W	Standard	, ⊠ Rush	1-33-30 Day		ANA		YSTS	AB	ENVIKONMENTAL /STS I ABORATOR	, >
			Project Name:	72			VVVV	, hallen	vironm	www.hallenvironmental.com		
Mailing Address:	300) :sse	6 S A, o Gard	B	Blanco s	storats	4901 H	4901 Hawkins NE	3 '	ondne	Albuquerque, NM 87109	87109	D: 8/
105	A S	21410	Project #:			Tel. 50	505-345-3975	10	Fax 50	505-345-4107	107	15/2
Phone #:			08	54 1336042	6042		-	Anal		Request		023
email or Fax#:	<del>;</del> :	1100	Project Manager	iger:				₽ <b>O</b>	la la	(ţu		10:4
QA/QC Package:	.: de:	☐ Level 4 (Full Validation)	X. S	Summers		AM / O	SWISC	PO4, 3		əsdA\tr		45:18 A
Accreditation:		☐ Az Compliance	Sampler:	AA	anti	AQ /		NO <sub>2</sub> ,				M
	□ Other	10	On Ice:	☑ Yes	oN □	05						
☐ EDD (Type)	(e)		# of Coolers:	<b>)</b>		(GI			(			
			Cooler Temp(including CF):C.	(including CF): $G_{\star}$ $\stackrel{?}{\sim}$	25.0 = 32+	12D			AO\			
Date Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL NO J	/ X3T8 08:H9T 9 1808	N) BO3 SHA9	RCRA CI, F, 1	7) 0928	2) 0728 O lstoT		
1/3/2 1300	5 2	85-5	1 402	100/	187	x X		X				
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	9						1 2 3					
Date: Time: Date: Time:	Relinquished by:	hed by:	Received by:	Wa: CDC	/2z/20   44U    Date Time   F	Remarks:	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 3 - 4 3 -	200	719		Page 319 o
lf necess	sary, samples su	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.	contracted to other a	ccredited laboratorie.	This	ossibility. Any sul	o-contracted	data will b	e clearly n	otated on th	e analytical report.	



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

January 30, 2020

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 2001A90

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/29/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 2001A90

Date Reported: 1/30/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-59

 Project:
 Blanco Storage
 Collection Date: 1/28/2020 2:00:00 PM

 Lab ID:
 2001A90-001
 Matrix: SOIL
 Received Date: 1/29/2020 7:55:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	1/29/2020 11:30:56 AM	50130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	16	8.9	mg/Kg	1	1/29/2020 9:41:05 AM	50123
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	1/29/2020 9:41:05 AM	50123
Surr: DNOP	84.4	55.1-146	%Rec	1	1/29/2020 9:41:05 AM	50123
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	22	mg/Kg	5	1/29/2020 10:19:36 AM	50099
Surr: BFB	76.4	66.6-105	%Rec	5	1/29/2020 10:19:36 AM	50099
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.11	mg/Kg	5	1/29/2020 10:19:36 AM	50099
Toluene	ND	0.22	mg/Kg	5	1/29/2020 10:19:36 AM	50099
Ethylbenzene	ND	0.22	mg/Kg	5	1/29/2020 10:19:36 AM	50099
Xylenes, Total	ND	0.43	mg/Kg	5	1/29/2020 10:19:36 AM	50099
Surr: 4-Bromofluorobenzene	86.2	80-120	%Rec	5	1/29/2020 10:19:36 AM	50099

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 1 of 7

# Analytical Report Lab Order 2001A90

Date Reported: 1/30/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-60

**Project:** Blanco Storage
 Collection Date: 1/28/2020 2:05:00 PM

 **Lab ID:** 2001A90-002
 Matrix: SOIL
 Received Date: 1/29/2020 7:55:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	1/29/2020 11:43:18 AM	50130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	1/29/2020 9:50:16 AM	50123
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	1/29/2020 9:50:16 AM	50123
Surr: DNOP	94.2	55.1-146	%Rec	1	1/29/2020 9:50:16 AM	50123
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	22	mg/Kg	5	1/29/2020 10:43:00 AM	50099
Surr: BFB	74.6	66.6-105	%Rec	5	1/29/2020 10:43:00 AM	50099
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.11	mg/Kg	5	1/29/2020 10:43:00 AM	50099
Toluene	ND	0.22	mg/Kg	5	1/29/2020 10:43:00 AM	50099
Ethylbenzene	ND	0.22	mg/Kg	5	1/29/2020 10:43:00 AM	50099
Xylenes, Total	ND	0.44	mg/Kg	5	1/29/2020 10:43:00 AM	50099
Surr: 4-Bromofluorobenzene	83.8	80-120	%Rec	5	1/29/2020 10:43:00 AM	50099

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 2 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2001A90**30-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50130 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 50130 RunNo: 66151

Prep Date: 1/29/2020 Analysis Date: 1/29/2020 SeqNo: 2273387 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-50130 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 50130 RunNo: 66151

Prep Date: 1/29/2020 Analysis Date: 1/29/2020 SeqNo: 2273388 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 91.1 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 3 of 7

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2001A90** 

30-Jan-20

Client:	ENSOLUM
Project:	Blanco Storage

Dianco 5	torage			
Sample ID: MB-50123	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range C	<b>Drganics</b>
Client ID: PBS	Batch ID: 50123	RunNo: <b>66140</b>		
Prep Date: 1/29/2020	Analysis Date: 1/29/2020	SeqNo: 2271931	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD I	RPDLimit Qual
Diesel Range Organics (DRO)	ND 10			
Motor Oil Range Organics (MRO)	ND 50			
Surr: DNOP	8.5 10.00	84.6 55.1	146	
Sample ID: LCS-50123	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range C	Organics
Client ID: LCSS	Batch ID: 50123	RunNo: <b>66140</b>		
Prep Date: 1/29/2020	Analysis Date: 1/29/2020	SeqNo: <b>2271933</b>	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD I	RPDLimit Qual
Diesel Range Organics (DRO)	50 10 50.00	0 100 63.9	124	
Surr: DNOP	4.7 5.000	93.3 55.1	146	
Sample ID: 2001A90-001AMS	SampType: MS	TestCode: EPA Method	8015M/D: Diesel Range C	Organics
Client ID: S-59	Batch ID: 50123	RunNo: <b>66140</b>		
Prep Date: 1/29/2020	Analysis Date: 1/29/2020	SeqNo: <b>2272368</b>	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD I	RPDLimit Qual
Diesel Range Organics (DRO)	55 9.2 45.87	15.67 84.7 47.4	136	
Surr: DNOP	3.6 4.587	78.5 55.1	146	
Sample ID: 2001A90-001AMS	D SampType: MSD	TestCode: EPA Method	8015M/D: Diesel Range C	Organics
Client ID: S-59	Batch ID: 50123	RunNo: <b>66140</b>		
Prep Date: 1/29/2020	Analysis Date: 1/29/2020	SeqNo: <b>2272369</b>	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD I	RPDLimit Qual
Diesel Range Organics (DRO)	60 9.5 47.26	15.67 93.6 47.4	136 9.36	43.4
Surr: DNOP	4.5 4.726	95.6 55.1	146 0	0
Sample ID: LCS-50102	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range C	Organics
Client ID: LCSS	Batch ID: 50102	RunNo: <b>66140</b>		
Prep Date: 1/28/2020	Analysis Date: 1/29/2020	SeqNo: <b>2273238</b>	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD I	RPDLimit Qual
Surr: DNOP	3.8 5.000	77.0 55.1	146	
Sample ID: <b>MB-50102</b>	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range C	Drganics
Client ID: PBS	Batch ID: 50102	RunNo: <b>66140</b>		
Prep Date: 1/28/2020	Analysis Date: 1/29/2020	SeqNo: 2273239	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD I	RPDLimit Qual

#### 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
- PQL Practical Quanitative Limit

- 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 Limit

Page 4 of 7

### Hall Environmental Analysis Laboratory, Inc.

2001A90

WO#:

30-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50102 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 50102 RunNo: 66140

Prep Date: 1/28/2020 Analysis Date: 1/29/2020 SeqNo: 2273239 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 7.9 10.00 79.3 55.1 146

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2001A90** 

30-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb-50099 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 50099 RunNo: 66150

Prep Date: 1/28/2020 Analysis Date: 1/29/2020 SeqNo: 2272828 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 720 1000 72.0 66.6 105

Sample ID: Ics-50099 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 50099 RunNo: 66150

850

Prep Date: 1/28/2020 Analysis Date: 1/29/2020 SeqNo: 2272829 Units: mg/Kg

1000

Qual Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 23 5.0 25.00 0 90.6 80 120

85.4

66.6

105

#### Qualifiers:

Surr: BFB

- 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
- PQL Practical Quantitative Limit
- 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 Limit

Page 6 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2001A90** 

30-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50099	Samp	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batc	h ID: <b>50</b>	099	F	RunNo: 6	6150				
Prep Date: 1/28/2020	Analysis [	Date: 1/	29/2020	\$	SeqNo: 2	272873	Units: mg/K	g		
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	0.82		1.000		82.0	80	120			

Sample ID: LCS-50099	Samp	Гуре: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batc	h ID: <b>50</b>	099	F	RunNo: 6	6150				
Prep Date: 1/28/2020	Analysis [	Date: 1/	29/2020	8	SeqNo: 2	272874	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.6	80	120			
Toluene	0.96	0.050	1.000	0	96.3	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.6	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	80	120			

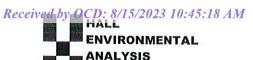
#### Qualifiers:

- 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
- PQL Practical Quanitative Limit

- 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 Limit

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Chai	n-of-C	Chain-of-Custody Record	Turn-Around Time:	Time:	10%					Č		H	Receiv
Client: £	nsolin	6	☐ Standard	Rush	1-39-30		ZZ		VSTS	Y	ROB	VSTS I ABORATOR	. >
			Project Name:				NA NA	CT.	nviron	nental	Com		
Mailing Address:	907 :sse	1 Shir Goods	13/2	Eneo St	Sage	4901 F	4901 Hawkins NE	,	Albuqu	erque,	Albuquerque, NM 87109	99	D: 8/
52,4	A	8740	Project #:			Tel. 5	505-345-3975	10	Fax	505-34	505-345-4107		/15/2
Phone #:			00	A 1236042	242			An		Request	est		023
email or Fax#:	¥:		Project Manager	ager:					₽₩	(1-	(ju		10:4
QA/QC Package:	 de:	☐ Level 4 (Full Validation)	X	Jumers	512	AM \ O			e mad		əsdA\tr	la l	45:18 A
Accreditation:		☐ Az Compliance	Sampler:	CD Apogt	1/4	AQ /	(1.4		16 <sup>2</sup>		1989.		M
□ NELAC	□ Other	ər	On Ice:		□ No	05	709	S	٤' ا		۱۲)		
☐ EDD (Type)	(e)		# of Coolers:			(GF	рс	etal			ıı		
			Cooler Temp(including CF);	(including CF): 2,8	+0.0=2.8°	12D	yetho	•M 8		A STATE OF	OIIIO		
Date Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	X3T8 08:H9T 9 1808	N) BOB BAHs b	АЯЭЯ	Cl'. <b>L' ,</b> l 85e0 (/	8) 0728	) ibio i		
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Date: Ime: 12822 1743	<u>a</u>	inquished by:	Received by:	Via: Couries	1729/20 7:55	*	AFE	# N	141243	143			e 328 oj
lf neces:	sary, samples su	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.	ocontracted to other a	accredited laboratorie	s. This serves as notice of this possibility.	possibility. Any s	ub-contract	ed data wi	I be clearl	y notated	Any sub-contracted data will be clearly notated on the analytical report	tical report.	384



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

# Sample Log-In Check List

LABORATORY

Client Name: ENSOLUM AZTEC	Work Order Num	per: 2001A90		RcptNo	o: 1
Received By: Desiree Dominguez	1/29/2020 7:55:00 /	AM	Da		
Completed By: Leah Baca	1/29/2020 7:57:07	AM	In Page		
Reviewed By: JP 1/29/20			Lawys		
Chain of Custody					
1. Is Chain of Custody sufficiently compl	ete?	Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
Log In					
3. Was an attempt made to cool the sam	ples?	Yes 🗸	No 📙	NA 🗌	
4. Were all samples received at a temper	rature of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated	test(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) p	roperly preserved?	Yes 🗸	No 🗌		
8. Was preservative added to bottles?		Yes	No 🗸	NA $\square$	
9. Received at least 1 vial with headspace	e <1/4" for AQ VOA?	Yes	No 🗌	NA 🗸	
10. Were any sample containers received	broken?	Yes	No 🗸	<i>n</i> .	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custod	lw)	Yes 🗸	No 🗆	# of preserved bottles checked for pH:	r >12 unless noted)
12. Are matrices correctly identified on Cha	ā.i	Yes 🗸	No 🗆	Adjusted?	
13. Is it clear what analyses were requeste		Yes 🗸	No 🗌		1011
14. Were all holding times able to be met? (If no, notify customer for authorization		Yes 🗸	No 🗆	Checked by:	LB 1/19/1020
Special Handling (if applicable)					
15. Was client notified of all discrepancies	with this order?	Yes	No 🗌	NA 🗹	
Person Notified: 12 y/e S	ummer) Date:	1/29/2020			
By Whom: Leah	Baca Via:	☐ eMail [X] F	Phone  Fax	☐ In Person	
Regarding: Collection	n time date ducrep	muy -002		W.E. CORPORATE STATE STA	
Client Instructions: Times	The same of the sa	correct			
16. Additional remarks:			THE RESIDENCE OF THE CASE AND ADDRESS OF THE CASE AND		
17. Cooler Information					

2.8

Good

Yes



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

January 31, 2020

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 2001B45

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/30/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

# **Analytical Report**Lab Order **2001B45**

Date Reported: 1/31/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-61

 Project:
 Blanco Storage
 Collection Date: 1/29/2020 10:00:00 AM

 Lab ID:
 2001B45-001
 Matrix: SOIL
 Received Date: 1/30/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	1/30/2020 11:55:29 AM	50158
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	CLP
Diesel Range Organics (DRO)	240	9.4		mg/Kg	1	1/30/2020 9:44:44 AM	50155
Motor Oil Range Organics (MRO)	150	47		mg/Kg	1	1/30/2020 9:44:44 AM	50155
Surr: DNOP	129	55.1-146		%Rec	1	1/30/2020 9:44:44 AM	50155
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	550	20		mg/Kg	5	1/30/2020 10:22:27 AM	50149
Surr: BFB	724	66.6-105	S	%Rec	5	1/30/2020 10:22:27 AM	50149
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	0.25	0.099		mg/Kg	5	1/30/2020 10:22:27 AM	50149
Toluene	6.2	0.20		mg/Kg	5	1/30/2020 10:22:27 AM	50149
Ethylbenzene	3.7	0.20		mg/Kg	5	1/30/2020 10:22:27 AM	50149
Xylenes, Total	36	0.40		mg/Kg	5	1/30/2020 10:22:27 AM	50149
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	5	1/30/2020 10:22:27 AM	50149

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 1 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2001B45** *31-Jan-20* 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50158 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 50158 RunNo: 66201

Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2274288 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-50158 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 50158 RunNo: 66201

Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2274289 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.1 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 2 of 6

#### Hall Environmental Analysis Laboratory, Inc.

4.0

WO#: **2001B45** 

31-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: <b>MB-50155</b>	SampT	уре: МЕ	BLK	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: PBS	Batch	ID: <b>50</b> 1	155	F	RunNo: 60	6185				
Prep Date: 1/30/2020	Analysis D	ate: <b>1/</b> 3	30/2020	9	SeqNo: 22	273378	Units: mg/K	g		
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	8.5		10.00		85.0	55.1	146			

Sample ID: LCS-50155 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 50155 RunNo: 66185 Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2273379 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 47 10 50.00 94.5 63.9 124

80.9

55.1

146

5.000

Sample ID: 2001B45-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: S-61 Batch ID: 50155 RunNo: 66185 Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2273381 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 330 9.2 243.6 47.4 S 45.96 197 136 Surr: DNOP 7.0 4.596 153 55.1 146 S

Sample ID: 2001B45-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: S-61 Batch ID: 50155 RunNo: 66185 Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2273382 Units: mg/Kg Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte POI Diesel Range Organics (DRO) 420 9.7 48.50 243.6 368 47.4 136 23.3 43.4 S Surr: DNOP S 4.850 199 55.1 146 0 0 9.6

Sample ID: MB-50153 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: MBLK PBS Batch ID: 50153 RunNo: 66185 Client ID: Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2273551 Units: %Rec %RPD Analyte Result PQL SPK value SPK Ref Val %REC HighLimit **RPDLimit** Qual LowLimit Surr: DNOP 8.8 10.00 87.8 55.1 146

Sample ID: LCS-50153 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS Client ID: LCSS Batch ID: 50153 RunNo: 66185 Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2273552 Units: %Rec PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual

#### Qualifiers:

Surr: DNOP

- 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 3 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2001B45** 

31-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-50153 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 50153 RunNo: 66185

Prep Date: 1/30/2020 Analysis Date: 1/30/2020 SeqNo: 2273552 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.1 5.000 81.0 55.1 146

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 4 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2001B45** 

31-Jan-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb-50149 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 50149 RunNo: 66183

Prep Date: 1/29/2020 Analysis Date: 1/30/2020 SeqNo: 2274174 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 810 1000 80.8 66.6 105

Sample ID: Ics-50149 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 50149 RunNo: 66183

Prep Date: 1/29/2020 Analysis Date: 1/30/2020 SeqNo: 2274175 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 O 87.2 80 120

Surr: BFB 910 1000 91.2 66.6 105

Sample ID: mb-50144 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 50144 RunNo: 66183

Prep Date: 1/29/2020 Analysis Date: 1/31/2020 SeqNo: 2274193 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 760 1000 76.0 66.6 105

Sample ID: Ics-50144 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 50144 RunNo: 66183

Prep Date: 1/29/2020 Analysis Date: 1/31/2020 SeqNo: 2274194 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 850 1000 85.3 66.6 105

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 6

#### Hall Environmental Analysis Laboratory, Inc.

2001B45 31-Jan-20

WO#:

Client: ENSOLUM

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb-50149 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 50149 RunNo: 66183 Prep Date: Analysis Date: 1/30/2020 SeqNo: 2274219 1/29/2020 Units: mq/Kq PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual Benzene ND 0.025 Toluene ND 0.050 0.050 Ethylbenzene ND Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.91 1.000 91.3 80 120

Sample ID: LCS-50149 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 50149 RunNo: 66183 Analysis Date: 1/30/2020 SeqNo: 2274220 Prep Date: 1/29/2020 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.000 0.89 0.025 0 88.7 80 120 Benzene Toluene 0.91 0.050 1.000 0 91.2 80 120 0 89.6 80 Ethylbenzene 0.90 0.050 1.000 120 0 91.2 Xylenes, Total 2.7 0.10 3.000 80 120 Surr: 4-Bromofluorobenzene 0.95 1.000 94.5 80 120

SampType: MBLK TestCode: EPA Method 8021B: Volatiles Sample ID: mb-50144 Client ID: PBS Batch ID: 50144 RunNo: 66183 Prep Date: Analysis Date: 1/31/2020 SeqNo: 2274238 Units: %Rec 1/29/2020 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.88 1.000 88.4 Surr: 4-Bromofluorobenzene 80 120

Sample ID: LCS-50144 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 50144 RunNo: 66183 SeqNo: 2274239 Prep Date: 1/29/2020 Analysis Date: 1/31/2020 Units: %Rec POL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Surr: 4-Bromofluorobenzene 0.90 1.000 90.2 80 120

#### 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
- PQL Practical Quantitative Limit
- 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 Limit

Page 6 of 6



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: ENSOLUM AZTEC Work Order I	Number: 2001B45		RcptNo: 1
Received By: Desiree Dominguez 1/30/2020 8:20	0:00 AM	De la company de	
Completed By: Anne Thorne 1/30/2020 8:34	I:49 AM	anne An	_
Reviewed By: DAD 1/30/70			
Chain of Custody			•
1. Is Chain of Custody sufficiently complete?	Yes 🗹	No 🗌	Not Present
2. How was the sample delivered?	<u>Courier</u>		
<u>Log In</u>			
3. Was an attempt made to cool the samples?	Yes 🗸	No 🗌	NA $\square$
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗀
5. Sample(s) in proper container(s)?	Yes 🗹	No 🗆	
6. Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗌	
7. Are samples (except VOA and ONG) properly preserved?	Yes 🔽	No 🗌	•
8. Was preservative added to bottles?	Yes 🗌	No 🔽	NA 🗆
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes 🗌	No 🗆	NA 🗹
10. Were any sample containers received broken?	Yes	No 🗹	# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗆	bottles checked for pH: (<2 or >12 unless noted)
2. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗆	Adjusted?
3. Is it clear what analyses were requested?	Yes 🗸	No 🗌	
4. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗆	Checked by: DI 30 Zo
Special Handling (if applicable)			
15. Was client notified of all discrepancies with this order?	Yes 🗆	No 🗆	NA 🗹
Person Notified:	Date		
By Whom:	/ia: 🗌 eMail 🔲 F	Phone 🗌 Fax	in Person
Regarding:			2.45 (2.14 (1.14 (
Client Instructions:			
16. Additional remarks: CUStody Seal In	tact on s	soil Jan	K-01/30/20
17. <u>Cooler Information</u>			
Cooler No Temp °C Condition Seal Intact Seal N	No Seal Date	Signed By	
1 0.7 Good Yes			

Chain-of-Custody Record	Turn-Around Time:	Wall Same	# 				( (			Recei
Client: Ensolva	☐ Standard 🖒 Rush /	1-30-58mg					7 F	ENVIRONMENTAL YSTS LABORATORY		
			100 h						2	_
Mailing Address: LOG S R.O Granke	Blanco	Storage	4901 F	www.n: 4901 Hawkins NE		Mironn Ibuque	nental.c erque. №	allenvironmental.com - Albuquerque, NM 87109		CD: 8
Hater Um 874110	Project #:		Tel. 5(	505-345-3975		Fax	505-345-4107	5-4107		/15/2
Phone #:	C40 9661 1850	42			Ana		Request	it		2023
email or Fax#:	Project Manager:			<u> </u>	Ø		(tu			10:
QA/QC Package:   □ Standard  □ Level 4 (Full Validation)	K Summes		AM / O	SWIS			 əsdA\tı			45:18 A
Accreditation:   Az Compliance  Delta NELAC   Other	Sampler: C A A post		90 \ DR		,					M
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125	Courter 1	1/36/20 8:20	\$	产产后母	H A	N 41343	~<			338 oj
sarr	ocontracted to other accredited laboratories. T	This serves as notice of this	ossibility. Any su	b-contracte	data will l	e clearly	notated or	the analytical repo	ř	f 384



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

February 06, 2020

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 2002122

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/5/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 2/6/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-62

 Project:
 Blanco Storage
 Collection Date: 2/4/2020 1:00:00 PM

 Lab ID:
 2002122-001
 Matrix: SOIL
 Received Date: 2/5/2020 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/5/2020 11:46:01 AM	50267
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	2/5/2020 10:05:21 AM	50266
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/5/2020 10:05:21 AM	50266
Surr: DNOP	88.3	55.1-146	%Rec	1	2/5/2020 10:05:21 AM	50266
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	2/5/2020 12:11:33 PM	G66314
Surr: BFB	78.9	66.6-105	%Rec	1	2/5/2020 12:11:33 PM	G66314
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	2/5/2020 12:11:33 PM	B66314
Toluene	ND	0.047	mg/Kg	1	2/5/2020 12:11:33 PM	B66314
Ethylbenzene	ND	0.047	mg/Kg	1	2/5/2020 12:11:33 PM	B66314
Xylenes, Total	ND	0.094	mg/Kg	1	2/5/2020 12:11:33 PM	B66314
Surr: 4-Bromofluorobenzene	87.4	80-120	%Rec	1	2/5/2020 12:11:33 PM	B66314

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
- PQL Practical Quantitative Limit
- 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 Limit

exporting Limit Page 1 of 8

Date Reported: 2/6/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-63

 Project:
 Blanco Storage
 Collection Date: 2/4/2020 1:05:00 PM

 Lab ID:
 2002122-002
 Matrix: SOIL
 Received Date: 2/5/2020 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/5/2020 11:58:23 AM	50267
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	CLP
Diesel Range Organics (DRO)	21	8.9	mg/Kg	1	2/5/2020 10:14:28 AM	50266
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	2/5/2020 10:14:28 AM	50266
Surr: DNOP	88.8	55.1-146	%Rec	1	2/5/2020 10:14:28 AM	50266
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	2/5/2020 12:34:49 PM	G66314
Surr: BFB	79.6	66.6-105	%Rec	1	2/5/2020 12:34:49 PM	G66314
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.021	mg/Kg	1	2/5/2020 12:34:49 PM	B66314
Toluene	ND	0.041	mg/Kg	1	2/5/2020 12:34:49 PM	B66314
Ethylbenzene	ND	0.041	mg/Kg	1	2/5/2020 12:34:49 PM	B66314
Xylenes, Total	ND	0.082	mg/Kg	1	2/5/2020 12:34:49 PM	B66314
Surr: 4-Bromofluorobenzene	88.0	80-120	%Rec	1	2/5/2020 12:34:49 PM	B66314

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 2 of 8

Date Reported: 2/6/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-64

 Project:
 Blanco Storage
 Collection Date: 2/4/2020 1:10:00 PM

 Lab ID:
 2002122-003
 Matrix: SOIL
 Received Date: 2/5/2020 8:15:00 AM

Analyses	Result	RL	Qual Uni	s DI	F Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: CAS
Chloride	ND	60	mg/	(g 20	2/5/2020 12:10:44 PM	50267
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: CLP
Diesel Range Organics (DRO)	36	9.6	mg/	(g 1	2/5/2020 10:23:33 AM	50266
Motor Oil Range Organics (MRO)	ND	48	mg/	<b>(</b> g 1	2/5/2020 10:23:33 AM	50266
Surr: DNOP	90.5	55.1-146	%Re	ec 1	2/5/2020 10:23:33 AM	50266
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: RAA
Gasoline Range Organics (GRO)	ND	16	mg/	(g 5	2/5/2020 12:58:07 PM	G66314
Surr: BFB	83.1	66.6-105	%Re	ec 5	2/5/2020 12:58:07 PM	G66314
EPA METHOD 8021B: VOLATILES					Analys	t: RAA
Benzene	ND	0.079	mg/	(g 5	2/5/2020 12:58:07 PM	B66314
Toluene	ND	0.16	mg/	(g 5	2/5/2020 12:58:07 PM	B66314
Ethylbenzene	ND	0.16	mg/	(g 5	2/5/2020 12:58:07 PM	B66314
Xylenes, Total	ND	0.31	mg/	(g 5	2/5/2020 12:58:07 PM	B66314
Surr: 4-Bromofluorobenzene	91.2	80-120	%Re	ec 5	2/5/2020 12:58:07 PM	B66314

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 3 of 8

Date Reported: 2/6/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: S-65

 Project:
 Blanco Storage
 Collection Date: 2/4/2020 1:15:00 PM

 Lab ID:
 2002122-004
 Matrix: SOIL
 Received Date: 2/5/2020 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CAS
Chloride	ND	60		mg/Kg	20	2/5/2020 12:23:05 PM	50267
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	CLP
Diesel Range Organics (DRO)	140	8.9		mg/Kg	1	2/5/2020 10:48:19 AM	50266
Motor Oil Range Organics (MRO)	150	45		mg/Kg	1	2/5/2020 10:48:19 AM	50266
Surr: DNOP	98.7	55.1-146		%Rec	1	2/5/2020 10:48:19 AM	50266
EPA METHOD 8015D: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	8.7	4.2		mg/Kg	1	2/5/2020 1:21:23 PM	G66314
Surr: BFB	170	66.6-105	S	%Rec	1	2/5/2020 1:21:23 PM	G66314
EPA METHOD 8021B: VOLATILES						Analyst	RAA
Benzene	ND	0.021		mg/Kg	1	2/5/2020 1:21:23 PM	B66314
Toluene	ND	0.042		mg/Kg	1	2/5/2020 1:21:23 PM	B66314
Ethylbenzene	0.055	0.042		mg/Kg	1	2/5/2020 1:21:23 PM	B66314
Xylenes, Total	0.12	0.084		mg/Kg	1	2/5/2020 1:21:23 PM	B66314
Surr: 4-Bromofluorobenzene	95.9	80-120		%Rec	1	2/5/2020 1:21:23 PM	B66314

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 4 of 8

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002122** 

06-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50267 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 50267 RunNo: 66318

Prep Date: 2/5/2020 Analysis Date: 2/5/2020 SeqNo: 2279270 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-50267 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 50267 RunNo: 66318

Prep Date: 2/5/2020 Analysis Date: 2/5/2020 SeqNo: 2279271 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.8 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 5 of 8

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2002122 06-Feb-20

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: MB-50266 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS

Batch ID: 50266 RunNo: 66306

Prep Date: 2/5/2020 Analysis Date: 2/5/2020 SeqNo: 2277774 Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Diesel Range Organics (DRO) ND 10

Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 8.6 10.00 85.7 55.1 146

Sample ID: LCS-50266 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 50266 RunNo: 66306

3.9

Prep Date: 2/5/2020 Analysis Date: 2/5/2020 SeqNo: 2277775 Units: mg/Kg

5.000

SPK value SPK Ref Val %REC Analyte PQL LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 45 10 50.00 90.4 75.7 130

78.2

55.1

146

#### Qualifiers:

Surr: DNOP

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 6 of 8

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002122 06-Feb-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G66314 RunNo: 66314

Prep Date: Analysis Date: 2/5/2020 SeqNo: 2278108 Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit Gasoline Range Organics (GRO) 0 24 5.0 25.00 95.1 80 120

Surr: BFB 880 1000 87.7 66.6 105

Sample ID: mb SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G66314 RunNo: 66314

Prep Date: Analysis Date: 2/5/2020 SeqNo: 2278111 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 830 1000 83.3 66.6 105

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002122 06-Feb-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: 100ng btex Ics	Samp	Гуре: <b>LC</b>	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batc	h ID: <b>B6</b>	6314	F	RunNo: 6	6314				
Prep Date:	Analysis Date: 2/5/2020				SeqNo: 2	278126	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.5	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.2	80	120			

Sample ID: mb	SampT	SampType: <b>MBLK</b>			tCode: El	iles				
Client ID: PBS	Batcl	h ID: <b>B6</b>	6314	F	RunNo: 6	6314				
Prep Date:	Analysis D	Date: <b>2/</b>	5/2020	8	SeqNo: 2	278129	Units: mg/K	(g		
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	0.94		1.000		94.3	80	120			

Sample ID: 2002122-001ams	SampT	уре: МS	3	TestCode: EPA Method 8021B: Volatiles						
Client ID: S-62	Batcl	n ID: <b>B6</b>	6314	F	RunNo: 6	6314				
Prep Date: Analysis Date: 2/5/2020				S	SeqNo: 2	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9443	0	94.5	78.5	119			
Toluene	0.91	0.047	0.9443	0	96.5	75.7	123			
Ethylbenzene	0.92	0.047	0.9443	0	97.4	74.3	126			
Xylenes, Total	2.8	0.094	2.833	0.02125	97.3	72.9	130			
Surr: 4-Bromofluorobenzene	0.91		0.9443		96.8	80	120			

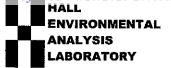
Sample ID: 2002122-001ams	<b>d</b> SampT	Гуре: <b>МS</b>	SD	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: S-62	Batcl	h ID: <b>B6</b>	6314	F	RunNo: 6	6314				
Prep Date:	Analysis D	Date: <b>2/</b>	5/2020	5	SeqNo: 2	280026	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9443	0	94.1	78.5	119	0.498	20	
Toluene	0.90	0.047	0.9443	0	95.4	75.7	123	1.14	20	
Ethylbenzene	0.91	0.047	0.9443	0	96.5	74.3	126	0.949	20	
Xylenes, Total	2.8	0.094	2.833	0.02125	96.5	72.9	130	0.857	20	
Surr: 4-Bromofluorobenzene	0.93		0.9443		98.7	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
- PQL Practical Quanitative Limit
- 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 Limit

Page 8 of 8



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **ENSOLUM AZTEC** Work Order Number: 2002122 RcptNo: 1 Received By: **Desiree Dominguez** 2/5/2020 8:15:00 AM Completed By: Leah Baca 2/5/2020 8:26:48 AM 2/5/20 Reviewed By: Chain of Custody No 🗆 1. Is Chain of Custody sufficiently complete? Yes 🗹 Not Present 2 How was the sample delivered? Courier Log In Was an attempt made to cool the samples? Yes 🔽 No 🗔 NA 🗀 No 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C NA 🗌 Yes 🗹 No Sample(s) in proper container(s)? Yes 🗸 No 🗌 6. Sufficient sample volume for indicated test(s)? Yes 🗸 7. Are samples (except VOA and ONG) properly preserved? Yes 🗸 No 🔲 8. Was preservative added to bottles? No 🗹 NA 🗌 Yes 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes 🗌 No 🗔 NA 🗹 No 🗹 10. Were any sample containers received broken? Yes # of preserved bottles checked No .... for pH: Yes 🗹 11. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) No 🗌 Adjusted Yes 🗸 12. Are matrices correctly identified on Chain of Custody? No 🗌 Yes 🗹 13. Is it clear what analyses were requested? Checked by: 2/0 14. Were all holding times able to be met? No 🗌 Yes 🗸 (If no, notify customer for authorization.) Special Handling (if applicable) 15. 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: 16. Additional remarks: 17. Cooler Information

Cooler No	Temp ⁰C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				

Re	ceiv	ed by	v <b>0</b> 0	CD: 8/	/15/2	023	10:	45:18	AM	-							<u> </u>				ŀ				Pag	e 349 o	384
	<	ANALYSTS LABORATORY					-							i												T	
	Z	- L	<i>;</i> •	•																							al report.
	ENVIDONMENTAL	OR C	,	Albuquerque, NM 87109	107		<u></u>								-												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
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

February 10, 2020

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 2002279

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/7/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

**CLIENT: ENSOLUM** 

### **Analytical Report**

Lab Order **2002279**Date Reported: **2/10/2020** 

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: S-66

 Project:
 Blanco Storage
 Collection Date: 2/6/2020 10:30:00 AM

 Lab ID:
 2002279-001
 Matrix: SOIL
 Received Date: 2/7/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/7/2020 11:15:22 AM	50328
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: CLP
Diesel Range Organics (DRO)	69	8.3	mg/Kg	1	2/7/2020 10:50:53 AM	50322
Motor Oil Range Organics (MRO)	96	42	mg/Kg	1	2/7/2020 10:50:53 AM	50322
Surr: DNOP	102	55.1-146	%Rec	1	2/7/2020 10:50:53 AM	50322
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/7/2020 9:51:01 AM	50313
Surr: BFB	84.7	66.6-105	%Rec	1	2/7/2020 9:51:01 AM	50313
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.019	mg/Kg	1	2/7/2020 9:51:01 AM	50313
Toluene	ND	0.037	mg/Kg	1	2/7/2020 9:51:01 AM	50313
Ethylbenzene	ND	0.037	mg/Kg	1	2/7/2020 9:51:01 AM	50313
Xylenes, Total	ND	0.075	mg/Kg	1	2/7/2020 9:51:01 AM	50313
Surr: 4-Bromofluorobenzene	91.9	80-120	%Rec	1	2/7/2020 9:51:01 AM	50313

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
- PQL Practical Quanitative Limit

- 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 Limit

Page 1 of 5

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002279** 

10-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50328 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 50328 RunNo: 66427

Prep Date: 2/7/2020 Analysis Date: 2/7/2020 SeqNo: 2282379 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-50328 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 50328 RunNo: 66427

Prep Date: 2/7/2020 Analysis Date: 2/7/2020 SeqNo: 2282380 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.3 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 2 of 5

### Hall Environmental Analysis Laboratory, Inc.

Batch ID: 50322

Analysis Date: 2/7/2020

PQL

8.7

Result

120

4.3

WO#: 2002279

10-Feb-20

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: MB-50322	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: PBS	Batch	1D: <b>50</b>	322	F	RunNo: 6	6379				
Prep Date: 2/7/2020	Analysis D	ate: <b>2/</b>	7/2020	5	SeqNo: 2	281223	Units: mg/K	(g		
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	9.7		10.00		97.0	55.1	146			
Sample ID: LCS-50322	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	Organics	
Sample ID: LCS-50322 Client ID: LCSS		ype: <b>LC</b>			tCode: El		8015M/D: Die	esel Range	e Organics	
· .		1D: <b>50</b>	322	F		6379	8015M/D: Did		e Organics	
Client ID: LCSS	Batch	1D: <b>50</b>	322 7/2020	F	RunNo: 6	6379			e Organics  RPDLimit	Qual
Client ID: LCSS Prep Date: 2/7/2020	Batch Analysis D	n ID: <b>50</b> : ate: <b>2/</b>	322 7/2020	F	RunNo: 6 SeqNo: 2	6379 281224	Units: mg/K	(g	·	Qual
Client ID: LCSS Prep Date: 2/7/2020 Analyte	Batch Analysis D Result	n ID: <b>50</b> : Pate: <b>2/</b>	<b>322</b> <b>7/2020</b> SPK value	SPK Ref Val	RunNo: 6 SeqNo: 2 %REC	6379 281224 LowLimit	Units: mg/K	(g	·	Qual

Sample ID: 2002279-001AMSD	SampT	/pe: <b>MS</b>	SD .	Test	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: <b>S-66</b> Batch ID: <b>50322</b> RunNo: <b>66379</b>										
Prep Date: 2/7/2020 Analysis Date: 2/7/2020 SeqNo: 2281307 Units: mg/Kg								g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110	10	50.05	69.08	84.0	47.4	136	7.98	43.4	
Surr: DNOP	4.9		5.005		97.6	55.1	146	0	0	

69.08

SPK value SPK Ref Val

43.25

4.325

RunNo: 66379

%REC

119

98.5

SeqNo: 2281306

LowLimit

47.4

55.1

Units: mg/Kg

136

146

%RPD

**RPDLimit** 

Qual

HighLimit

#### Qualifiers:

Client ID: S-66

Surr: DNOP

Prep Date: 2/7/2020

Diesel Range Organics (DRO)

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 3 of 5

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002279** 

10-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: Ics-50313 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 50313 RunNo: 66388

Prep Date: 2/6/2020 Analysis Date: 2/7/2020 SeqNo: 2282531 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Gasoline Range Organics (GRO) 22 5.0 25.00 0 86.2 80 120

 Gasoline Range Organics (GRO)
 22
 5.0
 25.00
 0
 86.2
 80
 120

 Surr: BFB
 920
 1000
 92.1
 66.6
 105

Sample ID: mb-50313 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 50313 RunNo: 66388

Prep Date: 2/6/2020 Analysis Date: 2/7/2020 SeqNo: 2282532 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 840 1000 84.4 66.6 105

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 4 of 5

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002279 10-Feb-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-50313 Client ID: LCSS	·	Гуре: <b>LC</b> h ID: <b>50</b> 3			tCode: El		8021B: Vola	tiles				
Prep Date: 2/6/2020	,					SeqNo: <b>2282556</b> Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.93	0.025	1.000	0	93.0	80	120					
Toluene	0.94	0.050	1.000	0	94.5	80	120					
Ethylbenzene	0.95	0.050	1.000	0	95.2	80	120					
Xylenes, Total	2.9	0.10	3.000	0	96.2	80	120					
Surr: 4-Bromofluorobenzene 0.96 1.00					95.6	80	120					

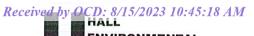
Sample ID: mb-50313	Samp1	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batc	h ID: <b>50</b>	313	F	RunNo: 6	6388				
Prep Date: 2/6/2020	Analysis [	Date: <b>2/</b>	7/2020	8	SeqNo: 2	282557	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		95.6	80	120			

#### 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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 5



NVIRONMENTAL

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

Sample Log-In Check List

LABC	DRATORY		: www.hallenviro		7.07.00		
Client Name:	ENSOLUM AZTEC	Work Order	Number: 20022	279		RcptNo	: 1
Received By:	Desiree Dominguez	2/7/2020 8:00:	00 AM		D		
Completed By:	Leah Baca	2/7/2020 8:14:	06 AM		1.1 Page		
Reviewed By:	DAD 2-7-20				Law Jane		
Chain of Cu	stody						
1. Is Chain of	Custody sufficiently complete	?	Yes	<b>~</b>	No 🗌	Not Present	
2. How was the	e sample delivered?		Client				
<u>Log In</u> 3. Was an atte	mpt made to cool the sample:	s?	Yes	<b>V</b>	No 🗆	NA 🗆	
4. Were all san	nples received at a temperatu	re of >0° C to 6.0°C	Yes [	<b>/</b>	No 🗌	NA 🗆	
5. Sample(s) in	n proper container(s)?		Yes [	<b>/</b>	No 🗌		
6. Sufficient sai	mple volume for indicated test	t(s)?	Yes		No 🗌		
7. Are samples	(except VOA and ONG) prop	erly preserved?	Yes		No 🗌		
8. Was preserv	ative added to bottles?		Yes		No 🗸	NA 🗌	
9. Received at I	least 1 vial with headspace <1	/4" for AQ VOA?	Yes [		No 🗌	NA 🗹	
10. Were any sa	ample containers received bro	ken?	Yes		No 🗹	# of preserved	
	vork match bottle labels? pancies on chain of custody)		Yes 🖢		No 🗆	bottles checked for pH:	>12 unless noted)
	correctly identified on Chain of	of Custody?	Yes		No 🗌	Adjusted?	
3. Is it clear wha	at analyses were requested?		Yes		No 🗌		1 1
	ling times able to be met? customer for authorization.)		Yes N		No 🗆	Checked by:	12 2/7/70
Special Hand	lling (if applicable)						
15. Was client n	otified of all discrepancies wit	h this order?	Yes [		No 🗌	NA 🗹	
By Wh Regard			Date:   /ia:	☐ Ph	one  Fax	☐ In Person	

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good				

	. >		<b>):</b> 8/1	5/20	23	10:4	5:18 A	<i>M</i> —															Page	e 357 of .	384
FINAMACCINA	LABORATOR	www.hallenvironmental.com	Albuquerque, NM 87109	505-345-4107	quest	(ţu	əsdA\tr					and the same of											2719	R	tated on the analytical report.
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						J. Fryse	.208) s'				114		9							~			Remarks:		possibil
Turn-Around Time:	□ Standard □(Rush 2-7-20_	Project Name:	Blanco Storage	Project #:	OSH1376042	Project Manager:	K Sunners		×	olers:	Cooler Temp(including CF): 0,3+0.0 = 0.3 (°C)	Container Preservative HEAL No. Type 20022 $\Rightarrow$ 9	Cool				Service of the confidence of t	the company of the boundary production of the pr		The first programme of a feature for the feature of the feature for the feature of the feature for the feature of the feature for the feature of the feature for the feature of the featur	produces the management of the second of the		the Wat 2/6/20	Received by: Via: Date Time	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.
Chain-of-Custody Record	= nsolum		S. bol Shis Grande	. 4 A 87410		selved 6 s	: □ Level 4 (Full Validation)	☐ Az Compliance	□ Other			Matrix Sample Name	5-66						B. Della, C. St., Williams	Maria and the state of the stat		in a graph with a registrate of the class about	Relinquished by:	Relinquished by:	y, samples submitted to Hall Environmental may be subc
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ن ا	Client:	·	Mailing Address:	the state of	Phone #:	email or Fax#:	QA/QC Package: ☐ Standard	Accreditation:	□ NELAC	☐ EDD (Type)		Date	3/1/20								A T			Date:	±



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

February 14, 2020

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

**FAX** 

RE: Blanco Storage OrderNo.: 2002405

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/11/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

**CLIENT: ENSOLUM** 

### **Analytical Report**

Lab Order 2002405

Date Reported: 2/14/2020

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: S-67

**Project:** Blanco Storage Collection Date: 2/10/2020 10:00:00 AM

**Lab ID:** 2002405-001 **Matrix:** MEOH (SOIL) **Received Date:** 2/11/2020 8:05:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	69	60	mg/Kg	20	2/11/2020 12:12:32 PM	50383
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	2/11/2020 11:41:22 AM	GS66459
Surr: BFB	91.5	70-130	%Rec	1	2/11/2020 11:41:22 AM	GS66459
EPA METHOD 8015M/D: DIESEL RANGE ORGAI	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	2/11/2020 11:12:12 AM	50375
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/11/2020 11:12:12 AM	50375
Surr: DNOP	82.1	55.1-146	%Rec	1	2/11/2020 11:12:12 AM	50375
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	DJF
Benzene	ND	0.022	mg/Kg	1	2/11/2020 11:41:22 AM	SS66459
Toluene	ND	0.044	mg/Kg	1	2/11/2020 11:41:22 AM	SS66459
Ethylbenzene	ND	0.044	mg/Kg	1	2/11/2020 11:41:22 AM	SS66459
Xylenes, Total	ND	0.088	mg/Kg	1	2/11/2020 11:41:22 AM	SS66459
Surr: 4-Bromofluorobenzene	92.3	70-130	%Rec	1	2/11/2020 11:41:22 AM	SS66459
Surr: Toluene-d8	99.7	70-130	%Rec	1	2/11/2020 11:41:22 AM	SS66459

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 5

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002405** 

14-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50383 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 50383 RunNo: 66464

Prep Date: 2/11/2020 Analysis Date: 2/11/2020 SeqNo: 2284361 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-50383 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 50383 RunNo: 66464

Prep Date: 2/11/2020 Analysis Date: 2/11/2020 SeqNo: 2284364 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 91.6 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

Page 2 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2002405** 14-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50375 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 50375 RunNo: 66445

Prep Date: 2/11/2020 Analysis Date: 2/11/2020 SeqNo: 2283399 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 11 10.00 108 55.1 146

Sample ID: LCS-50375 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 50375 RunNo: 66445

4.2

Prep Date: 2/11/2020 Analysis Date: 2/11/2020 SeqNo: 2283414 Units: mg/Kg

5.000

SPK value SPK Ref Val %REC Analyte PQL LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 48 10 50.00 95.2 70 130

83.5

55.1

146

#### Qualifiers:

Surr: DNOP

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

PQL Practical Quanitative Limit

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 Limit

Page 3 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2002405** 

14-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb1	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8260B: Volatiles Short List					
Client ID: PBS	Batc	h ID: SS	66459	F	RunNo: 6	6459						
Prep Date:	Analysis [	Date: <b>2/</b>	11/2020	5	SeqNo: 2	284118	Units: mg/k	(g				
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: 1,2-Dichloroethane-d4	0.48		0.5000		95.3	70	130					
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.8	70	130					
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130					
Surr: Toluene-d8	0.50		0.5000		101	70	130					

Sample ID: 100ng lcs	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8260B: Volat	tiles Short	List	
Client ID: LCSS	Batcl	h ID: <b>SS</b>	66459	F	RunNo: 6	6459				
Prep Date:	Analysis D	Date: <b>2/</b>	11/2020	S	SeqNo: 2	284119	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.0	70	130			
Toluene	0.97	0.050	1.000	0	97.4	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.4	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.3	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.8	70	130			
Surr: Toluene-d8	0.50		0.5000		99.2	70	130			

### 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
- PQL Practical Quanitative Limit

- 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 Limit

Page 4 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2002405** 

14-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: mb1 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: PBS Batch ID: GS66459 RunNo: 66459

Prep Date: Analysis Date: 2/11/2020 SeqNo: 2284342 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 480 500.0 95.8 70 130

Sample ID: 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: LCSS Batch ID: GS66459 RunNo: 66459

460

Prep Date: Analysis Date: 2/11/2020 SeqNo: 2284343 Units: mg/Kg

500.0

Qual Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** 70 Gasoline Range Organics (GRO) 21 5.0 25.00 0 84.8 130

92.9

70

130

#### Qualifiers:

Surr: BFB

- 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
- PQL Practical Quanitative Limit
- 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 Limit

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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	ENSOLUM	AZTEC	Work	Order Number:	200	2405			RcptNo: 1	
Received By	: Andy Free	eman	2/11/202	0 8:05:00 AM			andy	_	_	
Completed B	y: Isaiah Ort	iz	2/11/202	0 8:15:49 AM			andy!	C	24	
Reviewed By	: B		2/11/2	2020					7	
Chain of C	ustody									
1. Is Chain o	f Custody suffici	ently comple	ete?		Yes	<b>V</b>	No [		Not Present	
2. How was t	he sample deliv	ered?			Cou	<u>rier</u>				
<u>Log In</u>										
3. Was an at	tempt made to c	ool the sam	ples?		Yes	<b>✓</b>	No		NA 🗆	
4. Were all sa	amples received	at a temper	ature of >0° C to	o 6.0°C	Yes	<b>✓</b>	No [		NA $\square$	
5. Sample(s)	in proper contai	ner(s)?			Yes	<b>V</b>	No [			
6. Sufficient s	ample volume fo	or indicated	test(s)?		Yes	<b>V</b>	No	]		
7. Are sample	es (except VOA	and ONG) p	roperly preserved	d?	Yes	<b>✓</b>	No 🗆			
8. Was prese	rvative added to	bottles?			Yes		No 🗹	•	NA 🗆	
9. Received a	t least 1 vial witl	n headspace	e <1/4" for AQ V	DA?	Yes		No 🗆		NA 🗸	
10. Were any	sample containe	rs received	broken?		Yes		No 🕨		# of preserved	d 2/11/2020
	rwork match bot epancies on cha		v)		Yes	<b>✓</b>	No [	]	bottles checked for pH: (<2 or >12 u	
	es correctly ident				Yes	<b>V</b>	No 🗆	]	Adjusted?	
13. Is it clear w	hat analyses we	re requeste	d?		Yes	<b>~</b>	No 🗆			
	olding times able of customer for a		)		Yes	✓	No 🗆		Checked by:	
Special Han	dling (if app	licable)								
15. Was client	notified of all di	screpancies	with this order?		Yes		No [		NA 🗸	
Pers	on Notified:			Date:	em galeriatura	THE OWNER OF THE PERSON OF	THE CONTRACTOR OF THE CONTRACT	anane"		
By V	Vhom:	A SHIP TO BE SHIP THE STATE OF THE SHIP SHIP SHIP SHIP SHIP SHIP SHIP SHIP	CONTRACTOR OF THE SECOND STATES	Via:	] eMa	ail 🗌	Phone F	ax	☐ In Person	
	arding: nt Instructions:									
16. Additional										
17. Cooler In										
Cooler	Marie Andreas & Control Control Control	Condition	Seal Intact	Seal No S	eal D	ate	Signed By			
1	1.8	Good	Yes			AND DESCRIPTION		P. S. S. S. S. S. S. S. S. S. S. S. S. S.		
2	1.6	Good	Yes							

Standard   WRush   2-17   2-25   2-	Time Remarks:	Via:   Date Time Remarks: DM Tom Long	Via: Date Time Remarks: Dm Tom Long  Via: Date Time Remarks: Dm Tom Long  Via: Date Time	Received by: Via: Date Time Remarks: DM Tom Long Received by: Via: Date Time ARE # N 4/1343	Received by: Via:   Date Time   Remarks:   DM 70 m 6 ng   Received by: Via:   Date Time   Re	Date Time Remarks: DM Tom Long  2/10/20 1055  Date Time Remarks: DM Tom Long  1/11/2010 0805  A EE A W 411343  Sp. 2/11/2010 0805	Date Time Remarks: DM 70m Long  2/10/20 1055  Date Time  1/11/2010 0803  AFE A N 411343  SP. D.	Date Time Remarks: Dm Tom Long  2/10/20 1055  Date Time Remarks: Dm Tom Long  2/11/2010 0803  This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	Date Time Remarks: $DM$ Tom Long 2/10/20/00/80\$  A FE A VII A 43  This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	
ame	Time: Relinquished by:	E. Time: Relinquished by:	Time: Relinquished by: 7.0   10   55   75   75   75   75   75   75   7	Time: Relinquished by: Time: Relinquished by:	Time: Relinquished by: Time: Relinquished by:	0 3	0 3	0 3	Time: Relinquished by: Time: Relinquished by: Time: Relinquished by: Time: Relinquished by: Its 1957 Time: Relinquished by: It necessary samples submitted to Hall Environmental may be subco	9 3



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

February 19, 2020

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Blanco Storage OrderNo.: 2002503

### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/13/2020 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 qualifiers 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-12@ 0-11

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 8:30:00 AM

 Lab ID:
 2002503-001
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	75	60	mg/Kg	20	2/14/2020 11:55:24 AM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	2/14/2020 4:39:35 PM	50437
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/14/2020 4:39:35 PM	50437
Surr: DNOP	139	55.1-146	%Rec	1	2/14/2020 4:39:35 PM	50437
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	2/14/2020 7:46:27 PM	50430
Surr: BFB	81.5	66.6-105	%Rec	1	2/14/2020 7:46:27 PM	50430
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	2/14/2020 7:46:27 PM	50430
Toluene	ND	0.050	mg/Kg	1	2/14/2020 7:46:27 PM	50430
Ethylbenzene	ND	0.050	mg/Kg	1	2/14/2020 7:46:27 PM	50430
Xylenes, Total	ND	0.099	mg/Kg	1	2/14/2020 7:46:27 PM	50430
Surr: 4-Bromofluorobenzene	89.2	80-120	%Rec	1	2/14/2020 7:46:27 PM	50430

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 15

Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-12@ 14

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 8:35:00 AM

 Lab ID:
 2002503-002
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	2/14/2020 12:32:28 PM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	2/14/2020 5:07:10 PM	50437
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	2/14/2020 5:07:10 PM	50437
Surr: DNOP	101	55.1-146	%Rec	1	2/14/2020 5:07:10 PM	50437
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/17/2020 12:00:08 PM	50430
Surr: BFB	87.0	66.6-105	%Rec	1	2/17/2020 12:00:08 PM	50430
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	2/17/2020 12:00:08 PM	50430
Toluene	ND	0.048	mg/Kg	1	2/17/2020 12:00:08 PM	50430
Ethylbenzene	ND	0.048	mg/Kg	1	2/17/2020 12:00:08 PM	50430
Xylenes, Total	ND	0.097	mg/Kg	1	2/17/2020 12:00:08 PM	50430
Surr: 4-Bromofluorobenzene	93.0	80-120	%Rec	1	2/17/2020 12:00:08 PM	50430

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
- PQL Practical Quanitative Limit

- 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 Limit

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Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-13@ 0-11

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 8:40:00 AM

 Lab ID:
 2002503-003
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	2/14/2020 12:44:48 PM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	2/14/2020 5:16:20 PM	50437
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/14/2020 5:16:20 PM	50437
Surr: DNOP	102	55.1-146	%Rec	1	2/14/2020 5:16:20 PM	50437
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	2/14/2020 9:19:55 PM	50430
Surr: BFB	87.2	66.6-105	%Rec	1	2/14/2020 9:19:55 PM	50430
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	2/14/2020 9:19:55 PM	50430
Toluene	ND	0.050	mg/Kg	1	2/14/2020 9:19:55 PM	50430
Ethylbenzene	ND	0.050	mg/Kg	1	2/14/2020 9:19:55 PM	50430
Xylenes, Total	ND	0.099	mg/Kg	1	2/14/2020 9:19:55 PM	50430
Surr: 4-Bromofluorobenzene	88.3	80-120	%Rec	1	2/14/2020 9:19:55 PM	50430

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
- PQL Practical Quanitative Limit

- 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 Limit

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Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-13@ 11

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 8:45:00 AM

 Lab ID:
 2002503-004
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	2/14/2020 12:57:09 PM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	2/14/2020 5:25:29 PM	50437
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/14/2020 5:25:29 PM	50437
Surr: DNOP	103	55.1-146	%Rec	1	2/14/2020 5:25:29 PM	50437
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	2/14/2020 9:43:21 PM	50430
Surr: BFB	82.3	66.6-105	%Rec	1	2/14/2020 9:43:21 PM	50430
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	2/14/2020 9:43:21 PM	50430
Toluene	ND	0.050	mg/Kg	1	2/14/2020 9:43:21 PM	50430
Ethylbenzene	ND	0.050	mg/Kg	1	2/14/2020 9:43:21 PM	50430
Xylenes, Total	ND	0.099	mg/Kg	1	2/14/2020 9:43:21 PM	50430
Surr: 4-Bromofluorobenzene	88.2	80-120	%Rec	1	2/14/2020 9:43:21 PM	50430

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
- PQL Practical Quanitative Limit
- 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 Limit

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Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-14@ 0-9

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 9:30:00 AM

 Lab ID:
 2002503-005
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	2/14/2020 1:09:30 PM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	2/14/2020 5:34:38 PM	50437
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/14/2020 5:34:38 PM	50437
Surr: DNOP	108	55.1-146	%Rec	1	2/14/2020 5:34:38 PM	50437
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	2/14/2020 10:06:46 PM	50430
Surr: BFB	81.8	66.6-105	%Rec	1	2/14/2020 10:06:46 PM	50430
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	2/14/2020 10:06:46 PM	50430
Toluene	ND	0.050	mg/Kg	1	2/14/2020 10:06:46 PM	50430
Ethylbenzene	ND	0.050	mg/Kg	1	2/14/2020 10:06:46 PM	50430
Xylenes, Total	ND	0.099	mg/Kg	1	2/14/2020 10:06:46 PM	50430
Surr: 4-Bromofluorobenzene	89.1	80-120	%Rec	1	2/14/2020 10:06:46 PM	50430

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
- PQL Practical Quanitative Limit
- 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 Limit

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Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-14@ 9

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 9:35:00 AM

 Lab ID:
 2002503-006
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	2/14/2020 1:46:33 PM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	2/14/2020 5:43:45 PM	50437
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/14/2020 5:43:45 PM	50437
Surr: DNOP	110	55.1-146	%Rec	1	2/14/2020 5:43:45 PM	50437
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	2/14/2020 10:30:07 PM	50430
Surr: BFB	85.0	66.6-105	%Rec	1	2/14/2020 10:30:07 PM	50430
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	2/14/2020 10:30:07 PM	50430
Toluene	ND	0.050	mg/Kg	1	2/14/2020 10:30:07 PM	50430
Ethylbenzene	ND	0.050	mg/Kg	1	2/14/2020 10:30:07 PM	50430
Xylenes, Total	ND	0.10	mg/Kg	1	2/14/2020 10:30:07 PM	50430
Surr: 4-Bromofluorobenzene	88.7	80-120	%Rec	1	2/14/2020 10:30:07 PM	50430

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
- PQL Practical Quanitative Limit
- 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 Limit

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Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-15@ 0-11

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 9:40:00 AM

 Lab ID:
 2002503-007
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: JMT
Chloride	ND	60		mg/Kg	20	2/14/2020 1:58:53 PM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: CLP
Diesel Range Organics (DRO)	130	9.2		mg/Kg	1	2/18/2020 9:43:07 AM	50473
Motor Oil Range Organics (MRO)	60	46		mg/Kg	1	2/18/2020 9:43:07 AM	50473
Surr: DNOP	98.4	55.1-146		%Rec	1	2/18/2020 9:43:07 AM	50473
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	320	25		mg/Kg	5	2/17/2020 1:10:12 PM	50430
Surr: BFB	363	66.6-105	S	%Rec	5	2/17/2020 1:10:12 PM	50430
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.12		mg/Kg	5	2/17/2020 1:10:12 PM	50430
Toluene	ND	0.25		mg/Kg	5	2/17/2020 1:10:12 PM	50430
Ethylbenzene	1.1	0.25		mg/Kg	5	2/17/2020 1:10:12 PM	50430
Xylenes, Total	7.8	0.50		mg/Kg	5	2/17/2020 1:10:12 PM	50430
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	5	2/17/2020 1:10:12 PM	50430

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
- PQL Practical Quanitative Limit
- 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 Limit

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Date Reported: 2/19/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: HB-15@ 11

 Project:
 Blanco Storage
 Collection Date: 2/12/2020 9:45:00 AM

 Lab ID:
 2002503-008
 Matrix: SOIL
 Received Date: 2/13/2020 8:04:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	:: ЈМТ
Chloride	ND	60		mg/Kg	20	2/14/2020 2:11:13 PM	50458
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: CLP
Diesel Range Organics (DRO)	230	9.6		mg/Kg	1	2/18/2020 9:52:10 AM	50473
Motor Oil Range Organics (MRO)	100	48		mg/Kg	1	2/18/2020 9:52:10 AM	50473
Surr: DNOP	108	55.1-146		%Rec	1	2/18/2020 9:52:10 AM	50473
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	110	50		mg/Kg	10	2/14/2020 11:16:54 PM	50430
Surr: BFB	107	66.6-105	S	%Rec	10	2/14/2020 11:16:54 PM	50430
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	0.26	0.25		mg/Kg	10	2/14/2020 11:16:54 PM	50430
Toluene	0.60	0.50		mg/Kg	10	2/14/2020 11:16:54 PM	50430
Ethylbenzene	0.54	0.50		mg/Kg	10	2/14/2020 11:16:54 PM	50430
Xylenes, Total	4.1	0.99		mg/Kg	10	2/14/2020 11:16:54 PM	50430
Surr: 4-Bromofluorobenzene	92.0	80-120		%Rec	10	2/14/2020 11:16:54 PM	50430

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
- PQL Practical Quanitative Limit
- 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 Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **2002503** 

19-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Sample ID: MB-50458 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 50458 RunNo: 66563

Prep Date: 2/14/2020 Analysis Date: 2/14/2020 SeqNo: 2288253 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-50458 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 50458 RunNo: 66563

Prep Date: 2/14/2020 Analysis Date: 2/14/2020 SeqNo: 2288254 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.9 90 110

#### 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

PQL Practical Quanitative Limit

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 Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: **2002503** 

19-Feb-20

	Client: Project:	ENSOL Blanco	.UM Storage
	Sample ID: MB-5	0437	SampType: MBLK
- 1	Client ID: DRS		Batch ID: <b>50/27</b>

Client ID: PBS	Batch	1 ID: <b>50</b> 4	137	R	lunNo: <b>6</b> 6	5547					
Prep Date: <b>2/13/2020</b>	Analysis D	Analysis Date: 2/14/		S	SeqNo: 22	288190	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
iesel Range Organics (DRO)	ND	10									
otor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	16		10.00		163	55.1	146			S	

TestCode: EPA Method 8015M/D: Diesel Range Organics

Table to EDA Mathad 2045M/D. Discal Dames Consulta

Sample ID: LCS-50437	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8015M/D: Diesel Range Organics										
Client ID: LCSS	Batch	ID: <b>50</b> 4	437	R	RunNo: <b>66547</b>									
Prep Date: 2/13/2020	Analysis D	ate: 2/	14/2020	S	SeqNo: 2	288191	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Diesel Range Organics (DRO)	66	10	50.00	0	132	70	130			S				
Surr: DNOP	6.2		5.000		124	55.1	146							

Sample ID: 2002503-001AMS	SampT	ype: <b>MS</b>	3	TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: HB-12@ 0-11	Batch	1D: <b>50</b> 4	437	R	tunNo: 6								
Prep Date: 2/13/2020	Analysis D	ate: <b>2/</b>	14/2020	S	SeqNo: 2	288192	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	47 9.7 48.73		4.606	87.0	47.4	136							
Surr: DNOP	4.2		4.873		86.3	55.1	146						

Sample ID: 2002503-001AMSD	SampT	уре: <b>М</b> S	SD	TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: HB-12@ 0-11	Batch	ID: <b>50</b>	437	R									
Prep Date: 2/13/2020	Analysis D	ate: <b>2/</b>	14/2020	S	SeqNo: 2	288193	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	45	45 9.4 46.86		4.606 86.7		47.4	136	3.89	43.4				
Surr: DNOP	4.0		4.686		85.4	55.1	146	0	0				

Sample ID: <b>MB-504/3</b>	Sampi	ype: IVIE	SLK	restCode: EPA Method 8015M/D: Diesei Range Organics										
Client ID: PBS	Batch	1D: <b>50</b> 4	473	F	RunNo: 60	6605								
Prep Date: 2/17/2020	Analysis D	ate: 2/	18/2020	9	SeqNo: 2	288974	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	11		10.00		107	55.1	146							

### 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
- PQL Practical Quanitative Limit

- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2002503 19-Feb-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: LCS-50473 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 50473 RunNo: 66605

Prep Date: 2/17/2020 Analysis Date: 2/18/2020 SeqNo: 2288987 Units: mg/Kg

PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Diesel Range Organics (DRO) 10 0 60 50.00 120 70 130 Surr: DNOP 5.3 5.000 107 55.1 146

Sample ID: MB-50496 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 50496 RunNo: 66605

Prep Date: 2/18/2020 Analysis Date: 2/18/2020 SeqNo: 2289090 Units: %Rec

%RPD **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Qual Surr: DNOP 8.9 10.00 88.8 55.1 146

Sample ID: LCS-50496 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 50496 RunNo: 66605

Prep Date: 2/18/2020 Analysis Date: 2/18/2020 SeqNo: 2289092 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.2 5.000 84.7 55.1 146

### 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
- PQL Practical Quanitative Limit
- 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 Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: **2002503** 

19-Feb-20

Client: ENSOL Project: Blanco	LUM Storage	
Sample ID: MB-50443	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range	
Client ID: PBS	Batch ID: 50443 RunNo: 66571	
Prep Date: 2/13/2020	Analysis Date: 2/14/2020 SeqNo: 2287764 Units: %Rec	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ıal
Surr: BFB	780 1000 78.3 66.6 105	
Sample ID: LCS-50443	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range	
Client ID: LCSS	Batch ID: 50443 RunNo: 66571	
Prep Date: 2/13/2020	Analysis Date: 2/14/2020 SeqNo: 2287765 Units: %Rec	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ıal
Surr: BFB	890 1000 88.9 66.6 105	
Sample ID: mb-50430	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range	
Client ID: PBS	Batch ID: 50430 RunNo: 66571	
Prep Date: 2/13/2020	Analysis Date: 2/14/2020 SeqNo: 2287845 Units: mg/Kg	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ıal
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 810 1000 80.6 66.6 105	
Sample ID: Ics-50430	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range	
Client ID: LCSS	Batch ID: 50430 RunNo: 66571	
Prep Date: 2/13/2020	Analysis Date: 2/14/2020 SeqNo: 2287846 Units: mg/Kg	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ıal
Gasoline Range Organics (GRO)	22 5.0 25.00 0 88.4 80 120	
Surr: BFB	920 1000 92.0 66.6 105	
Sample ID: <b>mb-50435</b>	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range	
Client ID: PBS	Batch ID: <b>50435</b> RunNo: <b>66571</b>	
Prep Date: 2/13/2020	Analysis Date: <b>2/15/2020</b> SeqNo: <b>2287867</b> Units: <b>%Rec</b>	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ıal
Surr: BFB	790 1000 78.7 66.6 105	
Sample ID: Ics-50435	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range	
Client ID: LCSS	Batch ID: 50435 RunNo: 66571	

### Qualifiers:

Analyte

Surr: BFB

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Prep Date: 2/13/2020

H Holding times for preparation or analysis exceeded

Analysis Date: 2/15/2020

Result

870

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

SeqNo: 2287868

87.4

LowLimit

66.6

Units: %Rec

105

HighLimit

%RPD

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

SPK value SPK Ref Val %REC

1000

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**RPDLimit** 

Qual

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2002503 19-Feb-20** 

Client: ENSOLUM
Project: Blanco Storage

Sample ID: 2002503-002ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: HB-12@ 14 Batch ID: 50430 RunNo: 66590

Prep Date: 2/13/2020 Analysis Date: 2/17/2020 SeqNo: 2288643 Units: mg/Kg

PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Analyte Result LowLimit 0 Gasoline Range Organics (GRO) 21 5.0 24.95 85.2 69.1 142

Surr: BFB 950 998.0 95.5 66.6 105

Sample ID: 2002503-002amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: HB-12@ 14 Batch ID: 50430 RunNo: 66590

Prep Date: 2/13/2020 Analysis Date: 2/17/2020 SeqNo: 2288644 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 21 4.9 24.63 0 87.1 69.1 142 0.893 20 Surr: BFB 940 985.2 95.5 66.6 105 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
- PQL Practical Quanitative Limit
- 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 Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 2002503

19-Feb-20

**Client: ENSOLUM Project:** Blanco Storage

Sample ID: MB-50443 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 50443 RunNo: 66571

Prep Date: 2/13/2020 Analysis Date: 2/14/2020 SeqNo: 2287894 Units: %Rec

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result %REC LowLimit HighLimit Qual Surr: 4-Bromofluorobenzene 0.87 1.000 87.2 80 120

Sample ID: LCS-50443 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 50443 RunNo: 66571

Prep Date: 2/13/2020 Analysis Date: 2/14/2020 SeqNo: 2287895 Units: %Rec

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual

Surr: 4-Bromofluorobenzene 0.89 1.000 89.2 120

Sample ID: mb-50430 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 50430 RunNo: 66571

Prep Date: 2/13/2020 Analysis Date: 2/14/2020 SeqNo: 2287905 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual ND 0.025 Benzene ND 0.050 Toluene Ethylbenzene ND 0.050 Xylenes, Total ND 0.10

TestCode: EPA Method 8021B: Volatiles

Surr: 4-Bromofluorobenzene 0.90 1.000 89.5 80 120

SampType: LCS Client ID: LCSS Batch ID: 50430 RunNo: 66571

Prep Date: 2/13/2020 Analysis Date: 2/14/2020 SeqNo: 2287929 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Benzene 0.87 0.025 1.000 0 87.4 80 120 0.050 1.000 0 89.7 80 120 Toluene 0.90 0.92 0.050 0 80 Ethylbenzene 1.000 91.8 120 Xylenes, Total 0 92.7 80 2.8 0.10 3.000 120 Surr: 4-Bromofluorobenzene 0.94 1.000 93.7 80 120

Sample ID: 2002503-001ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: HB-12@ 0-11 Batch ID: 50430 RunNo: 66571

Prep Date: 2/13/2020	Analysis D	14/2020	8	SeqNo: 2	287931	Units: mg/K				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0.01687	92.3	78.5	119			
Toluene	0.99	0.050	1.000	0.01429	97.2	75.7	123			
Ethylbenzene	1.0	0.050	1.000	0	102	74.3	126			
Xylenes, Total	3.1	0.10	3.000	0	103	72.9	130			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix

Sample ID: LCS-50430

- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

0.92

WO#: **2002503** 

19-Feb-20

Client: ENSOLUM
Project: Blanco Storage

Surr: 4-Bromofluorobenzene

Sample ID: 2002503-001ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: HB-12@ 0-11 Batch ID: 50430 RunNo: 66571

Prep Date: 2/13/2020 Analysis Date: 2/14/2020 SeqNo: 2287931 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

92.1

80

120

Sample ID: 2002503-001amsd SampType: MSD TestCode: EPA Method 8021B: Volatiles

1.000

Client ID: HB-12@ 0-11 Batch ID: 50430 RunNo: 66571

Prep Date: 2/13/2020 Analysis Date: 2/14/2020 SeqNo: 2287932 Units: mg/Kg

%RPD **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Qual Benzene 0.98 0.024 0.9766 0.01687 98.1 78.5 119 3.66 20 Toluene 1.0 0.049 0.9766 0.01429 103 75.7 123 3.70 20 0 74.3 20 Ethylbenzene 1.1 0.049 0.9766 108 126 3.31 Xylenes, Total 3.2 0.098 2.930 0 110 72.9 130 3.78 20 0 0.90 0.9766 92.3 120 0 Surr: 4-Bromofluorobenzene 80

Sample ID: mb-50435 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 50435 RunNo: 66590

Prep Date: 2/13/2020 Analysis Date: 2/17/2020 SeqNo: 2288662 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: 4-Bromofluorobenzene 0.94 1.000 93.8 80 120

Sample ID: Ics-50435 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 50435 RunNo: 66590

0.90

Prep Date: 2/13/2020 Analysis Date: 2/17/2020 SeqNo: 2288663 Units: %Rec

1.000

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

89.9

80

120

Qualifiers:

\* Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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 Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

# Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **ENSOLUM AZTEC** Work Order Number: 2002503 RcptNo: 1 Received By: Leah Baca 2/13/2020 8:04:00 AM Completed By: Isaiah Ortiz 2/13/2020 8:22:57 AM Reviewed By: JR 2/13/20 Chain of Custody 1. Is Chain of Custody sufficiently complete? No 🔲 Yes 🔽 Not Present 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? No 🗀 NA 🗌 Yes 🔽 No  $\square$  Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 NA 🗀 Sample(s) in proper container(s)? Yes 🔽 No 🗆 No 🗌 Sufficient sample volume for indicated test(s)? Yes 🗹 7. Are samples (except VOA and ONG) properly preserved? No 🗔 Yes 🗹 8. Was preservative added to bottles? Yes 🔲 No 🗸 NA 🗆 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes 🗌 No 🗆 NA 🗸 Yes □ No 🗹 10. Were any sample containers received broken? # of preserved bottles checked for pH: 11. Does paperwork match bottle labels? No 📙 >12 unless noted) (Note discrepancies on chain of custody) (<20Adjusted? 12. Are matrices correctly identified on Chain of Custody? Yes 🗹 No 🗌 13. Is it clear what analyses were requested? Yes 🔽 No 🛄 14. Were all holding times able to be met? Yes 🔽 No 🗌 Checked by (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes 🗍 No 🗆 NA 🗸 Person Notified: Date By Whom: Via: eMail Phone Fax Regarding: Client Instructions: 16. Additional remarks: Sample 005 and 006 were dropped and the containers broke, however the samples was contained and tranfered into two 4oz jars. YG 2/13/20 17. Cooler Information Cooler No Temp C Condition Seal Date Seal Intact | Seal No 0.2 Good Yes

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	NVIRON	www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107	Analysis Request	(jué	əsdA∖tn		)Λ-!	wə	V) 028 8) 0728 Total Co								:		-	Lang TCASTIG TIAYA	
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Turn-Around Time:	☐ Standard	Project Name:	Bland	Project #:	OSA	Project Manager:	X	Sampler: 6 On Ice:	# of Coolers:	Cooler Temp		1 32	<b></b>	•								Received by:	Turk!
Chain of Custody Docord	stody ivecold		Shis Garde	0/,			□ Level 4 (Full Validation)	npliance			Sample Name	10-16	12014	HB-13@ 0-11	HR-13@ 11	HB-140 0-9	HB-146 9	413-15-6 0-11	H13-15@ 11			d by:	MYS / JAMATHU MARK MAND COURS 2/13/20 8:04
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	Client:		Maili		Phone #	emai	QA/Q D St	Accı B <u>R</u>			Date	2/24	,									Date:	112/12

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

CONDITIONS

Action 252206

### **CONDITIONS**

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	252206
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
nvelez	Deferral is approved. Remediation Due date will be left open until the site has been plugged and abandoned or a major facility deconstruction takes place.	1/30/2024