State of New Mexico
Oil Conservation Division

Incident ID	NCS1931842879
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This 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?	265 (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 **not** 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.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ 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

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 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.

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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: Kijun Hong

Title: Environmental Specialist

Signature: 

Date: 5/20/2020

email: khong@harvestmidstream.com

Telephone: 505-632-4475

OCD Only

Received by: _____

Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NCS1931842879
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

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

Deferral Requests Only: ***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: Kijun Hong Title: Environmental Specialist

Signature: Date: 5/20/2020

email: khong@harvestmidstream.com Telephone: 505-632-4475

OCD Only

Received by: Date:

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: Date:

April 29, 2020

Cory Smith
New Mexico Oil Conservation Division
1000 Rio Brazos
Aztec, New Mexico 87410

Via electronic mail: cory.smith@state.nm.us

RE: Site Delineation and Preliminary Remediation Report
Trunk S Release (June 2019)
3RP-1014; Incident #NCS1931842879
Unit I, Section 7, T25N, R3W
Rio Arriba County, New Mexico

Dear Mr. Smith:

Animas Environmental Services, LLC (AES) has prepared this Site Delineation and Preliminary Remediation Report for a release which was discovered June 25, 2019, at the Harvest Four Corners (Harvest) Trunk S natural gas pipeline, located in Rio Arriba County, New Mexico. A topographic site location map is included as Figure 1, and an aerial site map is presented as Figure 2.

1.0 Release Description

The June 2019 release consisted of at least 25 barrels (bbls) of condensate and 278.5 MCF of natural gas. The source of the release was a subsurface pipeline leak. Approximately 2,000 cubic yards (yd^3) were excavated and transported off-site for disposal. Additional excavated overburden was temporarily stockpiled on-site. The excavation dimensions were reported to be 25 ft by 35 ft by 52 ft deep; however, because of the depth of the excavation, it was not possible to complete removal of all impacted soils safely. The excavation was subsequently suspended and backfilled. The pipeline was repaired and is currently back in service.

2.0 NMOCD Ranking

In accordance with NMAC 19.15.29.12 Table I (August 2018), release closure criteria for this location are based on the minimum depth to groundwater within the horizontal extent of the release area and proximity to sensitive receptors:

- **Depth to Groundwater:** A New Mexico Office of the State Engineer (NMOSE) SJ-01305 well record reported groundwater at 285 ft below ground surface (bgs).
- **Sensitive Receptor Determination:** The site is within 300 feet (ft) of a significant water course/drainage, whereby releases must be treated as if they occur less than 50 ft bgs to groundwater (NMAC 19.15.29.12C.4).

Closure Criteria are:

- 10 mg/kg benzene and 50 mg/kg total benzene, toluene, ethylbenzene, and xylene (BTEX);
- 100 mg/kg TPH as GRO/DRO and motor oil range organics (MRO); and
- 600 mg/kg chloride.

Site ranking information is included as an attachment.

3.0 Initial Field Sampling (July 2019)

During the initial release response and excavation work in early July 2019, three soil samples were collected by LT Environmental from the surface (1 ft), wall (15 ft) and floor (30 ft) for field screening volatile organic compounds (VOCs) and for laboratory analysis of BTEX, TPH (GRO, DRO, and MRO) and chlorides. Additionally, shallow soil samples were collected from (1 ft) and 5 ft depths at two potholing locations, PH01 and PH02. Two upgradient surface samples, UG01 and UG02, were also collected for field screening and laboratory analysis. Analytical results indicated that concentrations above closure criteria were as follows:

- Benzene – 40 mg/kg (wall 15 ft);
- Total BTEX – 1,236 mg/kg (wall 15 ft);
- TPH (GRO, MRO, DRO) – 17,400 mg/kg (wall 15 ft) and 230 mg/kg (floor 30 ft); and
- Chlorides – exceeded in 6 of 9 samples with the highest concentration reported at 4,900 mg/kg from just below surface (1 ft) at the excavation.

July field screening and associated laboratory analytical results are included in Table 1. Sample locations are included on Figure 2. Note that excavated soils consisted of poorly graded light brown to tan well fine-grained sand.

4.0 Soil Boring Installation

4.1 SB-1 Installation, November 2019

MW Electric completed one boring (SB-1) over the four days onsite to a total depth of 60 ft bgs. Split spoon soil samples were collected at 5-foot intervals for field screening and analytical sample collection. Four soil samples were collected from SB-1 and were

analyzed by Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Field sampling and laboratory analytical results are included in Table 1. Copies of the Hall laboratory reports are attached.

The boring SB-1 was completed as a soil vapor extraction (SVE) well, with 10 feet of screen terminating at 50 feet bgs. A soil boring log with SVE construction details is attached. Drilling activities were suspended after installation of SB-1 due to mechanical issues with the drilling rig and due to weather related safety issues.

4.2 SB-2 through SB-11 Installation, March 2020

AES and Harvest concluded that an alternate drilling contractor would need to be utilized to complete the delineation work. AES scheduled Rodgers & Co. Drilling (Rodgers) for the week of March 9, 2020. Photographs of the drilling activities are attached.

Rodgers completed 10 soil borings (SB-2 through SB-11) over 8 days, from March 9 to March 16, 2020. Soil borings were installed to depths of 29 ft bgs (SB-6 and SB-8 through SB-11), 34 ft bgs (SB-7), 53 ft bgs (SB-4), 55 ft bgs (SB-3), and 59 ft bgs (SB-2 and SB-5). Boring locations were chosen to intersect the excavation area (SB-1 through SB-5), but the borings also had to maintain a 10-ft safe distance from the pipeline running through the middle of the former excavation. The borings were placed as follows:

- SB-1 was placed near the center of the excavation area;
- SB-2 through SB-5 were placed on each corner of the excavation area; and
- SB-6 through SB-11 were completed as step-out confirmation borings.

Note that SB-6 through SB-9 locations were placed approximately along the midpoint between borings SB-2 through SB-5 and 10 feet away in each direction. SB-10 and SB-11 were placed as secondary step out locations to the east and to the south. Soil boring locations are included on Figure 3.

Soil borings SB-1 through SB-5 were completed as SVE wells, with 10 to 15 ft of screen. Soil borings SB-6 though SB-11 were backfilled after boring completion and collection of soil samples. Soil boring logs and well completion diagrams are attached. All SVE wells were permitted with NMOSE on March 5, 2020, and the permit is attached.

Generally, shallow soils consist of well graded silty to coarse sands with interbedded clays layers of varying plasticity. A very hard sandstone layer exists at a depth of approximately 30 ft but was not encountered at every location. Soil boring SB-1 was installed as close to the middle of the excavation as could be done safely with the

proximity to the active pipeline. Soils encountered in SB-1 were loose and appeared to be fill down to a depth of approximately 45 ft, which is consistent with conditions of the previous excavation and backfill. Below 45 ft, drilling became much more difficult, and soil samples were more cemented. Soil borings SB-2 through SB-5 were installed near the corners of the previously excavated area and appeared to have intersected both fill material and native material at approximately 12 to 19 ft bgs. Groundwater was not encountered in any of the soil borings that were installed. A geological cross section is included as Figure 4.

4.3 Field Screening and Results

AES collected soil samples for field screening and laboratory analysis from all soil borings. Field screening was performed at 5-ft intervals at SB-1. Soil borings SB-2 through SB-11 were continuously cored for the depth of each boring.

4.3.1 Field VOCs

Field screening for organic vapors was performed using the heated headspace method. One heated headspace sample for screening with a photo-ionization detector (PID) organic vapor meter (OVM) was taken from each 5-foot interval. Prior to field screening, the PID-OVM was calibrated in accordance with manufacturer's specifications. Soil sample collection for heated headspace analysis was performed by placing soil in clean and decontaminated 16 oz glass jars, sealed with new aluminum foil and a lid ring. Once each jar was heated and gently shaken so that vapors were released from the soil inside, the OVM probe tip was placed through the aluminum foil so that VOC readings could be recorded. Field screening results presented on each soil boring log.

The highest OVM readings (>100 ppm) from each boring with corresponding depths are listed below:

- SB-1: 3,426 ppm (15 ft bgs);
- SB-2: 7,672 ppm (29 ft bgs);
- SB-3: 10,035 ppm (49 ft bgs);
- SB-4: 398.7 ppm (39 ft bgs);
- SB-5: 397.2 ppm (34 ft bgs);
- SB-6: 119.8 ppm (19 ft bgs); and
- SB-7: 171.3 ppm (19 ft bgs).

4.3.2 Chlorides

Chloride concentrations in soil samples were evaluated in the field using Hach test kits (Model CD-51). Field chlorides ranged from 20 to 60 mg/kg in all samples. The highest field chloride concentrations from each boring are listed below:

- SB-1: 60 mg/kg at 20, 34, 45 ft bgs;
- SB-2: 40 mg/kg at 10, 15, 20, 45, 50, 55 and 60 ft bgs;
- SB-3: 40 mg/kg at all sample intervals 5 to 55 ft bgs;
- SB-4: 40 mg/kg at all sample intervals 10 to 55 ft bgs;
- SB-5: 60 mg/kg at 5 ft bgs;
- SB-6: 40 mg/kg at all sample intervals 5 to 30 ft bgs; and
- SB-7: 40 mg/kg at all sample intervals 10 to 35 ft bgs.

Field screening OVM and field chloride results are included on the attached soil boring logs. Field chloride measurements are also presented on Figure 4A.

4.4 Soil Laboratory Analyses

Two to four samples from each boring were submitted for laboratory analysis. Samples were placed in new, clean, laboratory-supplied containers, labeled, placed on ice, and logged onto a sample chain of custody record. The samples were maintained on ice until delivery to Hall. Soil samples were analyzed for the following USEPA Methods:

- BTEX per USEPA Method 8021B;
- TPH (GRO/DRO/MRO) per USEPA Method 8015M; and
- Chloride per USEPA Method 300.0.

4.5 Soil Analytical Results

Soil analytical data indicates that the remaining contaminant mass is located within the previously excavated area (SB-1 through SB-5). All step out borings (SB-6 through SB-11) were below NMOCD action levels or laboratory detection limits for all analytes. Analytical data showed the following exceedances for benzene, total BTEX, and TPH:

- SB-1 at 15 ft bgs exceeded NMOCD action levels for benzene (14 mg/kg), total BTEX (890 mg/kg) and total TPH (16,000 mg/kg); and
- SB-3 at 49 ft bgs exceeded NMOCD action levels for total BTEX (62.6 mg/kg) and combined TPH (2,270 mg/kg).

NMOCD action levels were not exceeded at any other intervals in any other soil boring locations. Laboratory analytical results for chlorides from all borings (November 2019 and March 2020) were well below the NMOCD action level of 600 mg/kg. Laboratory analytical results are summarized and presented in Table 1 and Figures 3A and 4A. Copies of the Hall laboratory reports are attached.

4.6 Shallow Soil Chloride Sampling and Analytical Results

Hand auger borings were advanced on March 18, 2020, to investigate potentially chloride impacted shallow soils. Samples were collected from the surface (1 ft bgs) and

at 3 ft bgs from an undisturbed background location located northwest of the release area. One upgradient hand boring was located to the south of the evaporation pond along a surface drainage pathway leading from the pond. Samples were collected from the surface (1 ft bgs) and at 5 ft bgs for chlorides analysis. In addition, a four-point composite sample was collected from the stockpiled soil. Chloride sample locations are included on Figures 3 and 3A.

Samples were placed in new, clean, laboratory-supplied containers, labeled, placed on ice, and logged onto a sample chain of custody record. The samples were maintained on ice until delivery to Hall. Soil samples were analyzed for chlorides per USEPA Method 300.0 as well as for additional anion/cation parameters, including fluoride, sulfate, conductivity, calcium, magnesium, potassium, sodium, and alkalinity.

Chloride concentrations from the stockpiled soil and background samples were below the action levels for chlorides. However, the upgradient samples located along a surface drainage pathway leading from the evaporation pond towards the Harvest release area exceeded the NMOCD action level, with 2,600 mg/kg (Upgradient @ 1 ft bgs) and 1,300 mg/kg (Upgradient @ 5 ft bgs).

Laboratory analytical results are summarized and presented in Table 1 and on Figures 3A and 4A. A copy of the Hall laboratory report is attached.

5.0 Remediation System

Based on the results of the site delineation activities, Harvest is proceeding with implementing SVE to volatilize and remove contaminants through desorption of contaminants from the surface of soil particles, and through biodegradation of contaminants by moving air through subsurface soil pore spaces.

5.1 SVE Wells

Based upon the results and observations from the site during soil boring installation, five borings were completed as SVE wells (SB-1 through SB-5). The SVE wells were completed with 10 ft of 0.010-inch of Schedule 40 PVC screen, except for SB-4 and SB-5, which were completed with 15 ft of 0.010-inch Schedule 40 PVC. Annular space in each SVE well was filled with 10-20 silica sand from the base of the SVE well up to at least 2 ft above the top of the screened interval. A hydrated bentonite seal, approximately 2 feet thick, was placed above the sand. Neat Portland cement grout was placed up to the surface.

5.2 SVE System

Harvest Midstream has purchased a Varisolar SVE unit which will be installed at the site to facilitate removal of the remaining VOCs contamination from the pipeline release. System specifications include the following:

- 4.6 HP vacuum blower capable of up to 190 cfm @ 50 inches of water vacuum;
- 60-gallon steel knock out tank;
- Vapor/moisture separator with high level shut off switch;
- A 6 well manifold constructed of 2-inch SCH 80 PVC with ball valves to allow for adjustable flows to each well; vacuum gauges and sample ports;
- Telemetry unit;
- Solar panel array; and
- Freeze protection circuit to allow for all season operation.

The system will be staged near the SVE well field, and the conveyance piping will be installed aboveground for the summer season. An SVE manifold will be constructed to allow for collection of flow rate data, vacuum and vapor samples. Wellheads will be constructed to allow for collection of wellhead vacuum, and vapor samples. Granular activated carbon vessels will be used to process effluent soil vapor before it is discharged.

System construction will begin with installation of four concrete footers for the SVE skid to be mounted on. Once the concrete has cured and the system is delivered and placed at the site, conveyance piping can be installed. The site is in an area that doesn't receive traffic and has an active pipeline running through the center of the well field; therefore, above ground conveyance piping will be installed.

A proposed remediation site layout is included as Figure 5, and manufacturer's information for the Varisolar SVE unit is also included as an attachment.

5.3 System Monitoring and Sampling

Harvest and AES will maintain SVE runtime greater than or equal to 90 percent per quarter. A soil gas sample for laboratory analysis will be collected shortly after initial startup of SVE operations and then a quarterly thereafter. The gas sample will be analyzed for:

- Volatile organics per USEPA Method 8260 Full List; and
- Carbon dioxide and oxygen per GPA 2261.

The gas sample port will be installed on the manifold prior to the inlet of the vacuum pump but after the convergence of all vapor streams. Harvest and AES will submit a

quarterly progress report detailing remediation operations to NMOCD. The report will include at a minimum:

- Summary of remediation activity for the quarter;
- SVE run time, SVE mass removal, and product recovery (if applicable); and
- Gas sample analytical data.

6.0 Deliverables

After the remediation system is installed and startup is complete, AES will begin preparation of a System Installation As-Built Report. The report will be submitted within 60-days of system startup. The report will include the following at a minimum:

- Discussion of installation and startup activities;
- System design specifications;
- A site map detailing equipment placement, well field and conveyance piping layouts;
- A map featuring approximate radius of vacuum influence;
- Startup data including well head and manifold vacuums, flow rates, PID data from both well head and system manifold;
- Analytical data for startup samples;
- Initial removal rates; and
- Photographs of the SVE system.

7.0 Conclusions and Recommendations

7.1 Conclusions

A release was confirmed at the Harvest Trunk S pipeline in June 2019 in which approximately 25 bbls of condensate were released along with 278.5 MCF of natural gas. The release occurred on private property owned by Tony and Craig Schmitz (TNT Landfarm). Based on site ranking, action levels were determined to be 10 mg/kg benzene, 50 mg/kg total BTEX, 100 mg/kg TPH, and 600 mg/kg chlorides.

Following the release, a limited excavation was completed and approximately 2,000 yd^3 were excavated and transported off-site for disposal. Additional excavated overburden was temporarily stockpiled on-site. Final excavation dimensions were reported to be 25 ft by 35 ft by 52 ft deep; however, it was not possible to safely remove remaining impacted soils. The pipeline was repaired and returned to service.

AES completed site delineation of the release area, the excavation extents, and outside the excavation area in November 2019 and March 2020. As part of site delineation activities, a total of 11 soil borings (SB-1 through SB-11) were advanced at the site, with total depths ranging from 29 ft to 59 ft bgs. Soils consisted of well graded silty to coarse sands with interbedded clays layers of varying plasticity. A very hard sandstone layer was noted at approximately 30 ft bgs in some of the borings. Groundwater was not encountered during the site delineation activities. Five of the borings were completed as SVE wells and will be incorporated into the SVE system to be installed at the site in May 2020.

Residual soil concentrations exceeding NMOCD action levels were noted at the edges of the previous soil excavation in SB-1 at 15 ft bgs, with benzene (14 mg/kg), total BTEX (890 mg/kg) and total TPH (16,000 mg/kg); and in SB-3 at 49 ft bgs, with total BTEX (62.6 mg/kg) and combined TPH (2,270 mg/kg). Laboratory analytical results from SB-2, SB-4, and SB-5 (within the footprint of the former excavation area) were all below NMOCD action levels. Additionally, all other laboratory analytical results from step out borings (SB-6 through SB-11) were below applicable NMOCD action levels for benzene, total BTEX, and TPH. Vertical and lateral extents of the June 2019 release appear to be defined for benzene, total BTEX and TPH.

Chloride concentrations did *not* exceed the NMOCD action level of 600 mg/kg in excavation wall or floor samples (July 2019) or in SB-1 through SB-11 (November 2019 and March 2020). However, in July 2019, several surface samples and near surface samples were collected by LT Environmental both upgradient of the release area (UG01, UG02, and PH01) and downgradient of the release area (PH02) along an area of surface drainage to the south-southeast. Chloride concentrations for the surface/near surface in July 2019 exceeded the NMOCD action level of 600 mg/kg, with concentrations ranging from 1,300 mg/kg to 3,300 mg/kg chlorides. A surface sample from the release area had 4,900 mg/kg chloride; however, however this area was within the excavation footprint, and these soils were removed from the site for off-site disposal.

Additional shallow soil samples were collected for chlorides analysis outside the release area in March 2020, including a background sample and an upgradient location draining from the evaporation pond area. A 4-point composite sample was also collected from the stockpiled soil. Results of the additional chloride sampling showed that background samples had chloride concentrations of 310 mg/kg (1 ft bgs) and 340 mg/kg (5 ft bgs); however, the concentrations from the area upgradient of the release but below the evaporation pond were reported as **2,600 mg/kg (1 ft bgs)** and **1,300 mg/kg (5 ft bgs).** Stockpiled soil chloride concentrations were reported as 180 mg/kg, which is below the action level of 600 mg/kg chloride.

7.2 Recommendations

Based on the results of the site delineation, AES makes the following recommendations:

- In order to address residual petroleum contaminant impacts from soils and vapors within the former release area, borings located within the former excavation area (SB-1 through SB-5) were completed as SVE wells and will be incorporated into the SVE system.

- For chlorides at the release area, the area of elevated chloride concentrations at the surface (4,900 mg/kg) was excavated and removed for off-site disposal in July 2019. Subsurface chloride concentrations from site delineation borings (SB-1 through SB-11) were all well below action levels, and no further action is recommended in the release area relating to chlorides.

- For chlorides in surface and near surface soils upgradient of the release area, concentrations above the NMOCD action level of 600 mg/kg were noted in samples from July 2019 and March 2020. These elevated chloride concentrations appear to be related to the presence of the upgradient evaporation ponds and may be associated with migrating overspray. Mitigation efforts for elevated chloride concentrations should be coordinated through the existing TNT facility permits and maintenance activities.

- For the stockpiled soil, contaminant concentrations for benzene, total BTEX, TPH and chlorides were all below NMOCD action levels, and no further action is recommended. Harvest will coordinate with property owners to finalize disposition of the stockpiled soil.

8.0 Project Schedule

For continuing site work, AES anticipates the following schedule:

April 2020	The VariSun SVE system was delivered to AES.
May 2020	Mobilize to the site and begin system setup work during the week of May 11, 2020. System installation should take 5 to 7 days to complete, including time for the concrete footers to cure. System startup will be performed immediately following construction. Startup and

	shakedown activities should require approximately 2 to 3 days onsite.
June 2020	Prepare and submit SVE system installation report along with startup monitoring and sampling results.

If you have any questions about site conditions or this report, please do not hesitate to contact Eddie Hubbert or Elizabeth McNally at (505) 564-2281.

Sincerely,

Edward Hubbert
Project Manager

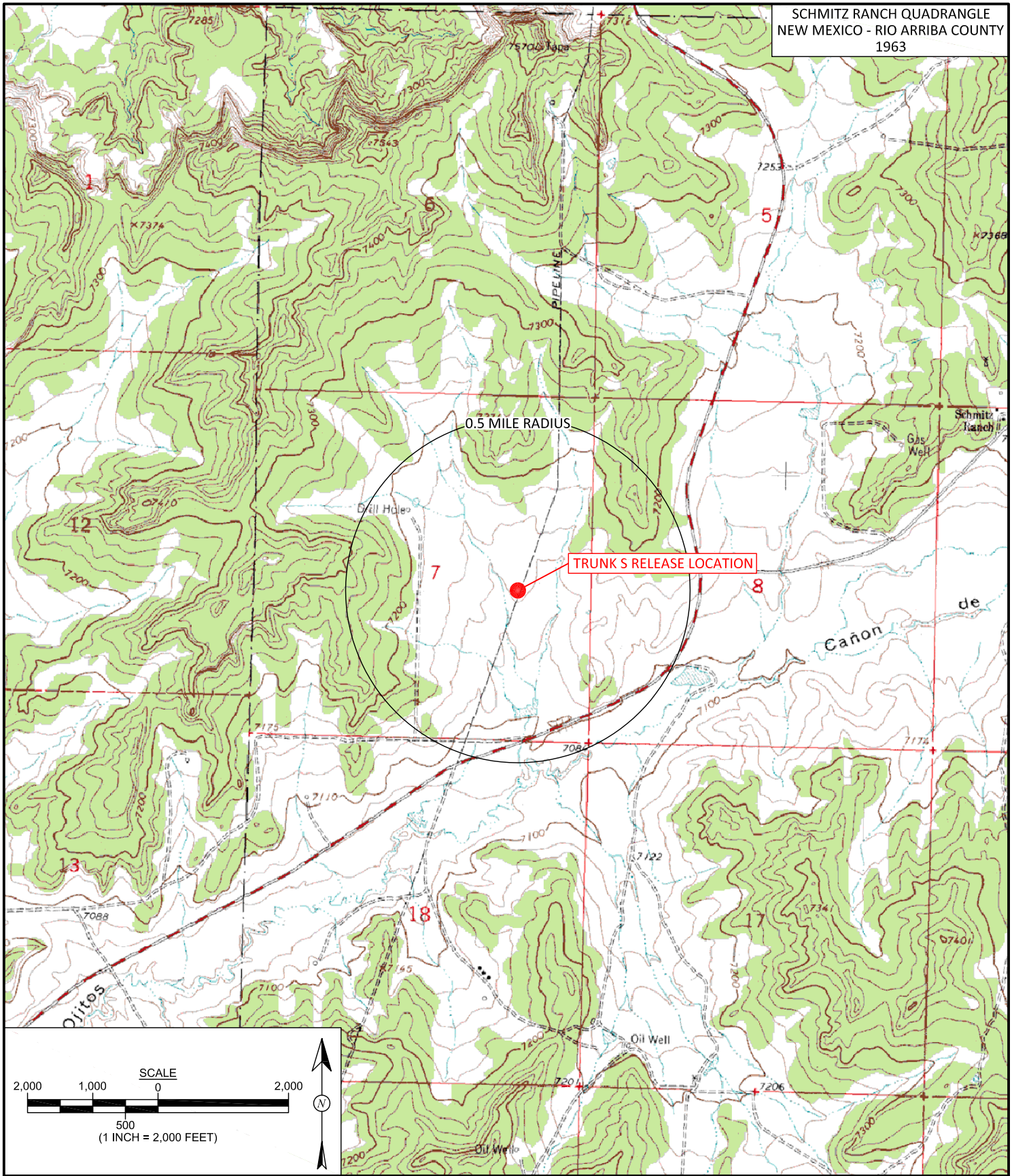
Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Location Map with July 2019 Sample Locations
Figure 3. Soil Boring Location and Sampling Results Map
Figure 3A. Soil Boring Location and Chloride Sampling Results Map
Figure 4. Geologic Cross-Section
Figure 4A. Geologic Cross-Section with Chloride Results
Figure 5. Proposed Site Remediation Layout
Table 1. Soil Analytical Results
Table 2. Soil Anion/Cation Results
Photographic Log
Soil Boring Logs and SVE Well Construction Schematics - SB-1 through SB-11
Site Ranking Information
NMOSE Permit to Drill a Well(s) with No Water Right — SJ-4380 POD1-POD9
Hall Analytical Reports 1907148, 1911A22, 1911D02, 2003514, 2003649, 2003651, 2003679, 2003860, and 2003897
Varisolar SVE System Manufacturer's Information

Cc:
Kijun Hong
Harvest Midstream Company
Electronic Mail: khong@harvestmidstream.com

Attachments

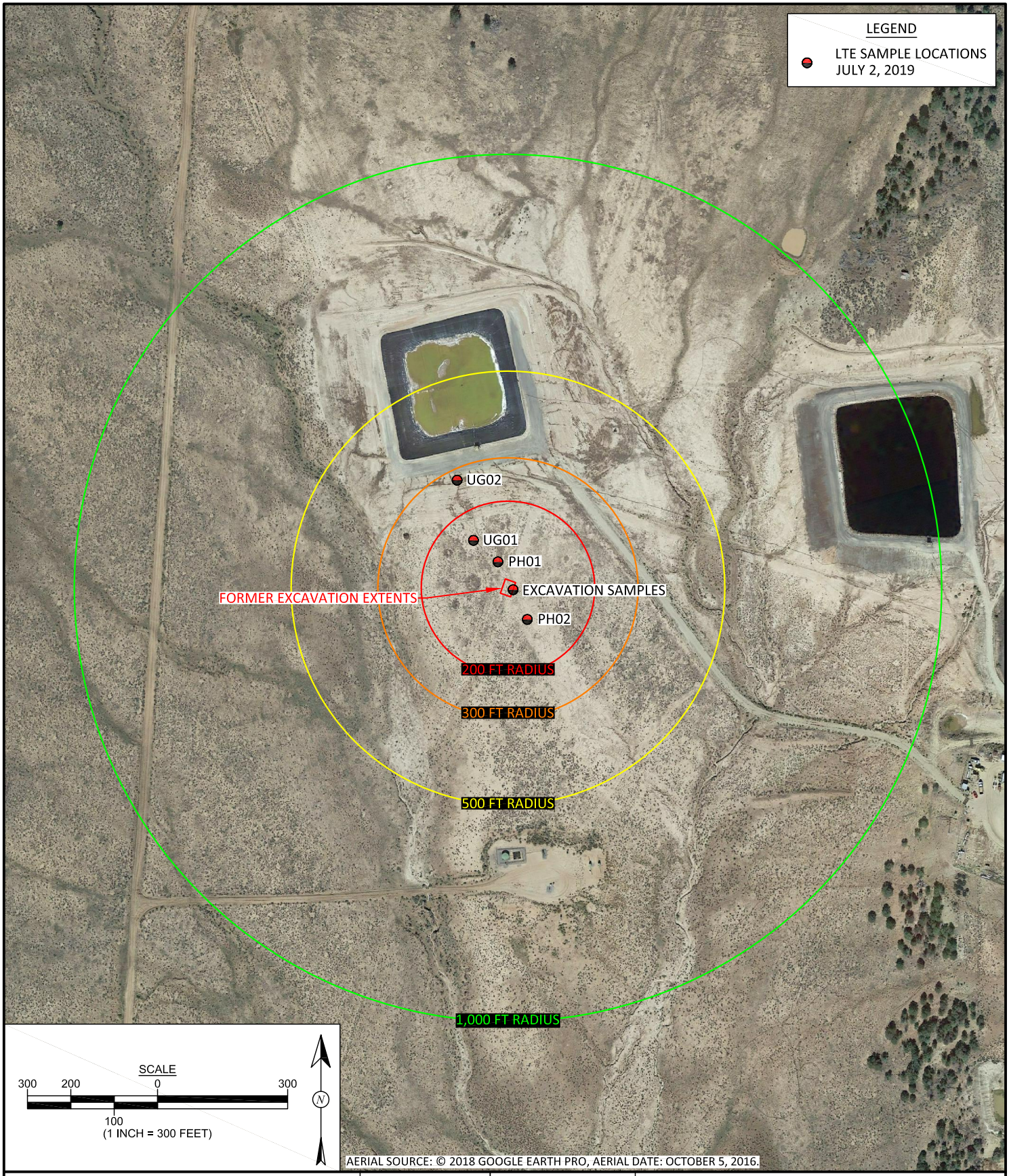


DRAWN BY: C. Lameman	**DATE DRAWN:** April 8, 2020
REVISIONS BY: C. Lameman	**DATE REVISED:** April 8, 2020
CHECKED BY: E. Hubbert	**DATE CHECKED:** April 8, 2020
APPROVED BY: E. McNally	**DATE APPROVED:** April 8, 2020

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
HARVEST MIDSTREAM
TRUNK S RELEASE LOCATION
INCIDENT NUMBER: NCS1931842879
RELEASE ID: 373888
NE¼ SE¼, SEC. 7, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.41180, W107.18085

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com



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CHECKED BY: E. Hubbert	**DATE CHECKED:** April 8, 2020
APPROVED BY: E. McNally	**DATE APPROVED:** April 8, 2020

FIGURE 2

AERIAL SITE LOCATION MAP

HARVEST MIDSTREAM
TRUNK S RELEASE LOCATION
INCIDENT NUMBER: NCS1931842879
RELEASE ID: 373888
NE¼ SE¼, SEC. 7, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.41180, W107.18085

FIGURE 3

SOIL BORING AND SAMPLE LOCATIONS MAP
HARVEST MIDSTREAM
TRUNK S RELEASE LOCATION
INCIDENT NUMBER: NCS1931842879
RELEASE ID: 373888
NE¼ SE¼, SEC. 7, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.41180, W107.18085

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C. Lameman	April 8, 2020
REVISIONS BY:	**DATE REVISED:**
C. Lameman	April 23, 2020
CHECKED BY:	**DATE CHECKED:**
E. McNally	April 23, 2020
APPROVED BY:	**DATE APPROVED:**
E. McNally	April 23, 2020

TNT PONDS

NO AERIAL COVERAGE

UPGRADIENT
Cl- @ 1ft = 2,600 mg/kg
Cl- @ 5ft = 1,300 mg/kg

STOCKPILE
Cl- = 180 mg/kg

BACKGROUND
Cl- @ 1ft = 310 mg/kg
Cl- @ 5ft = 340 mg/kg

SB-1 @ 15 FT
PID-OVM = 3,426 ppm
B = 40 mg/kg
T = 180 mg/kg
E = 35 mg/kg
X = 580 mg/kg
GRO = 13,000 mg/kg
DRO = 3,000 mg/kg
MRO = <250 mg/kg
Cl- = 14

SB-11
SB-5
SB-8
SB-7
SB-2
SB-6
SB-4
SB-10
SB-9

FORMER EXCAVATION EXTENTS

SB-3 @ 49 FT
PID-OVM = 10,035 ppm
B = 0.60 mg/kg
T = 15 mg/kg
E = 2.0 mg/kg
X = 45 mg/kg
GRO = 1,900 mg/kg
DRO = 370 mg/kg
MRO = <49 mg/kg
Cl- = <60

UNNAMED WASH LOCATED 270 FEET SW FROM FORMER EXCAVATION EXTENTS.

UNNAMED WASH LOCATED 690 FEET SE FROM FORMER EXCAVATION EXTENTS.

AERIAL SOURCE: © HIGH-ELEVATION AERIAL IMAGING AND AES,LLC., AERIAL DATE: NOVEMBER 12, 2019.

LEGEND

	SOIL BORING/ SVE WELL LOCATIONS WITH RIG (WITHIN EXCAVATION AREA)
	SOIL BORING LOCATIONS WITH RIG (OUTSIDE EXCAVATION AREA)
	SOIL BORING LOCATIONS WITH HAND AUGER
	COMPOSITE SOIL SAMPLE LOCATION
PID-OVM	PHOTO IONIZATION DETECTOR-ORGANIC VAPOR METER
B	BTEX
T	TOLUENE
E	ETHYLBENZENE
X	XYLENE
GRO	GASOLINE RANGE ORGANICS
DRO	DIESEL RANGE ORGANICS
MRO	MOTOR-OIL RANGE ORGANICS
Cl-	CHLORIDE
ppm	PARTS PER MILLION
mg/kg	MILLIGRAMS PER KILOGRAM
<	BELOW LABORATORY DETECTION LIMITS

NOTE: ONLY CONCENTRATIONS ABOVE ACTION LEVELS ARE INCLUDED. ALL RESULTS TABULATED IN TABLE 1. SAMPLES ANALYZED PER EPA METHOD 8021, 8015, AND 300.0.

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)
N

FIGURE 3A

SOIL BORING AND SAMPLE LOCATIONS MAP - CHLORIDES

HARVEST MIDSTREAM
TRUNK S RELEASE LOCATION
INCIDENT NUMBER: NCS1931842879
RELEASE ID: 373888
NE¼ SE¼, SEC. 7, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.41180, W107.18085

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E. McNally	April 23, 2020

LEGEND

- LTE SAMPLE LOCATIONS
- SOIL BORING/ SVE WELL LOCATIONS WITH RIG (WITHIN EXCAVATION AREA)
- SOIL BORING LOCATIONS WITH RIG (OUTSIDE EXCAVATION AREA)
- SOIL BORING LOCATIONS WITH HAND AUGER
- COMPOSITE SOIL SAMPLE LOCATION
- PID-OVM — PHOTO IONIZATION DETECTOR-ORGANIC VAPOR METER
- Cl- — CHLORIDE
- mg/kg — MILLIGRAMS PER KILOGRAM
- < — BELOW LABORATORY DETECTION LIMITS

NOTE: ALL RESULTS TABULATED IN TABLE 1. SAMPLES ANALYZED PER EPA METHOD 300.0.

TNT PONDS

NO AERIAL COVERAGE

UG02 (07/2019)
Cl- @ SURFACE = 3,300 mg/kg

UPGRADIENT (3/2020)
Cl- @ 1ft = 2,600 mg/kg
Cl- @ 5ft = 1,300 mg/kg

UG01 (07/2019)
Cl- @ SURFACE = 1,300 mg/kg

STOCKPILE (3/2020)
Cl- = 180 mg/kg

BACKGROUND (3/2020)
Cl- @ 1ft = 310 mg/kg
Cl- @ 5ft = 340 mg/kg

PH01 (07/2019)
Cl- @ 1ft = 2,300 mg/kg
Cl- @ 5ft = 2,200 mg/kg

SB-11 (3/2020)
Cl- @ 19ft = <60 mg/kg
Cl- @ 29ft = <61 mg/kg

FORMER EXCAVATION EXTENTS

SB-7 (3/2020)
Cl- @ 19ft = <61 mg/kg
Cl- @ 34ft = <59 mg/kg

SB-5 (3/2020)
Cl- @ 34ft = <60 mg/kg
Cl- @ 59ft = <60 mg/kg

SB-2 (3/2020)
Cl- @ 34ft = <60 mg/kg
Cl- @ 59ft = <60 mg/kg

SB-8 (3/2020)
Cl- @ 19ft = 310 mg/kg
Cl- @ 29ft = <60 mg/kg

SURFACE (7/2019)
WITHIN EXCAVATION AREA
Cl- @ SURFACE = 4,900 mg/kg

SB-1 (11/2019)
Cl- @ 8ft = <60 mg/kg
Cl- @ 15ft = 14 mg/kg
Cl- @ 50ft = <60 mg/kg
Cl- @ 60ft = <60 mg/kg

SB-6 (3/2020)
Cl- @ 19ft = <59 mg/kg
Cl- @ 29ft = <60 mg/kg

SB-4 (3/2020)
Cl- @ 39ft = <60 mg/kg
Cl- @ 53ft = <60 mg/kg

SB-3 (3/2020)
Cl- @ 19ft = <60 mg/kg
Cl- @ 49ft = <60 mg/kg
Cl- @ 55ft = <60 mg/kg

SB-10 (3/2020)
Cl- @ 19ft = <60 mg/kg
Cl- @ 29ft = <60 mg/kg

SB-9 (3/2020)
Cl- @ 19ft = <60 mg/kg
Cl- @ 29ft = <60 mg/kg

UNNAMED WASH LOCATED 270 FEET SW FROM FORMER EXCAVATION EXTENTS.

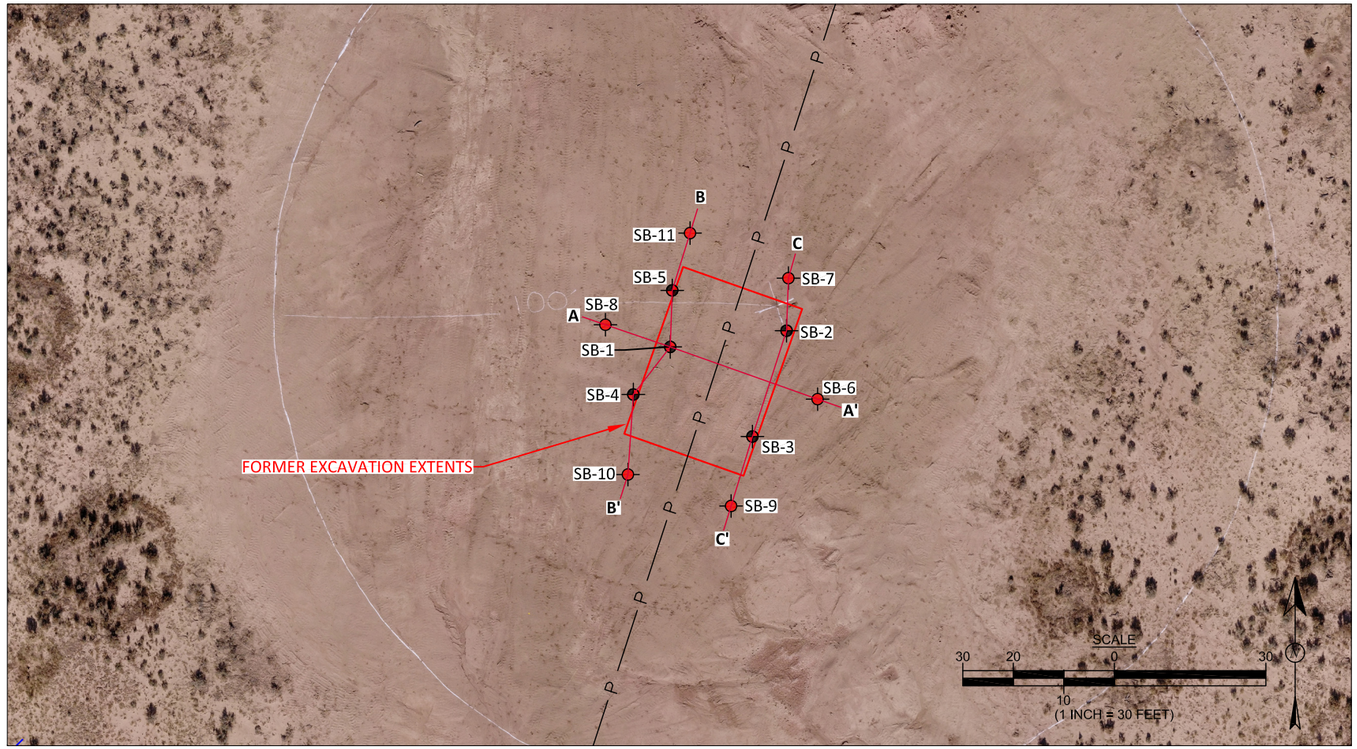
UNNAMED WASH LOCATED 690 FEET SE FROM FORMER EXCAVATION EXTENTS.

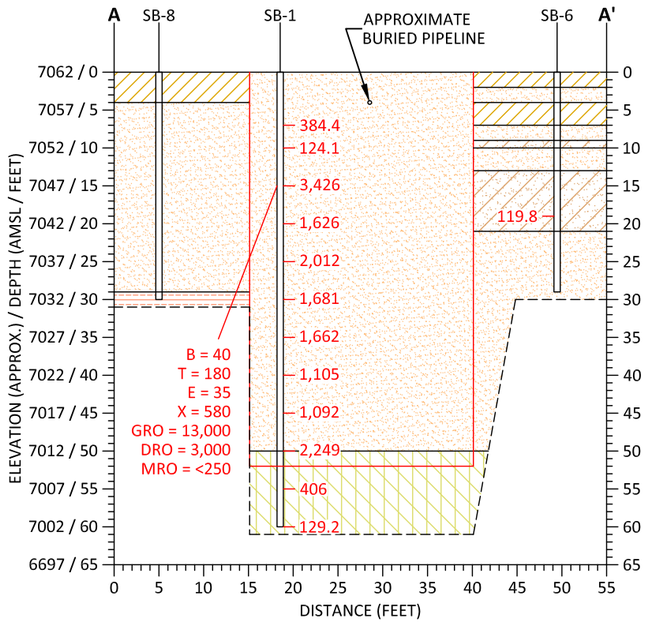
PH02 (07/2019)
Cl- @ 1ft = 2,400 mg/kg
Cl- @ 5ft = <60 mg/kg

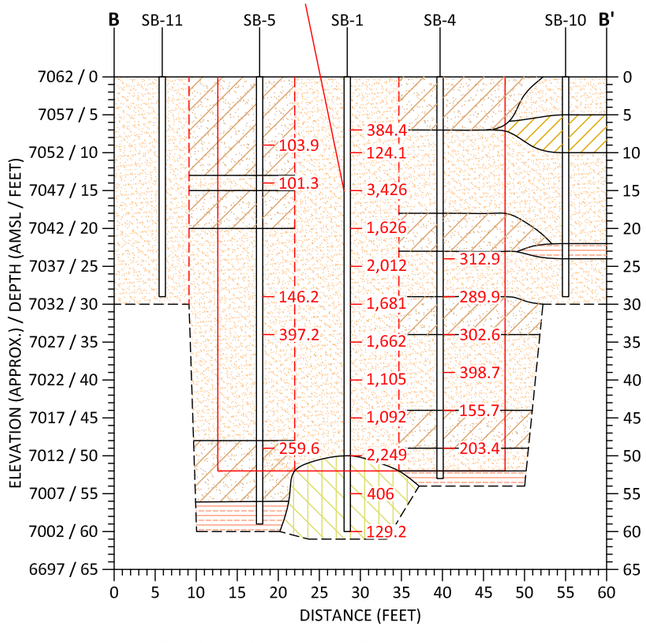
SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

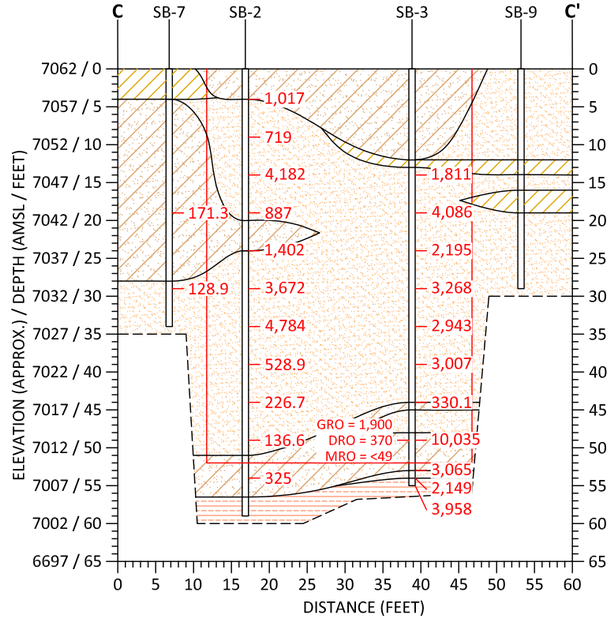
N

AERIAL SOURCE: © HIGH-ELEVATION AERIAL IMAGING AND AES,LLC., AERIAL DATE: NOVEMBER 12, 2019.









NOTE: SB-4 AND SB-5 MAY BE OUTSIDE OF EXCAVATION AREA.

NOT TO SCALE

FIGURE 4

GEOLOGIC CROSS SECTION
HARVEST MIDSTREAM
TRUNK S RELEASE LOCATION
INCIDENT NUMBER: NCS1931842879
RELEASE ID: 373888
NE¼ SE¼, SEC. 7, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.41180, W107.18085

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C. Lameman	April 27, 2020
CHECKED BY:	**DATE CHECKED:**
E. McNally	April 27, 2020
APPROVED BY:	**DATE APPROVED:**
E. McNally	April 27, 2020

LEGEND

- SOIL BORING/SVE WELL LOCATIONS WITH RIG (WITHIN EXCAVATION AREA)
- SOIL BORING LOCATIONS WITH RIG (OUTSIDE EXCAVATION AREA)
- P — APPROXIMATE BURIED PIPELINE
- SAND
- CLAY
- CLAYEY SAND
- CLAYEY SILT
- SANDSTONE
- 1,811 — PID-OVM (PHOTO IONIZATION DETECTOR- ORGANIC VAPOR METER IN PARTS PER MILLION (ppm)
- B — BTEX
- T — TOLUENE
- E — ETHYLBENZENE
- X — XYLENE
- GRO — GASOLINE RANGE ORGANICS
- DRO — DIESEL RANGE ORGANICS
- MRO — MOTOR-OIL RANGE ORGANICS

NOTE: ONLY OVM AND LABORATORY CONCENTRATIONS ABOVE NMOCD ACTION LEVELS ARE INCLUDED. ALL RESULTS TABULATED IN TABLE 1. ALL LABORATORY RESULTS REPORTED IN mg/kg. SAMPLES ANALYZED PER EPA METHOD 8021, 8015, AND 300.0.

FIGURE 4A

GEOLOGIC CROSS SECTION AND CHLORIDES
HARVEST MIDSTREAM
TRUNK S RELEASE LOCATION
INCIDENT NUMBER: NCS1931842879
RELEASE ID: 373888
NE¼ SE¼, SEC. 7, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.41180, W107.18085

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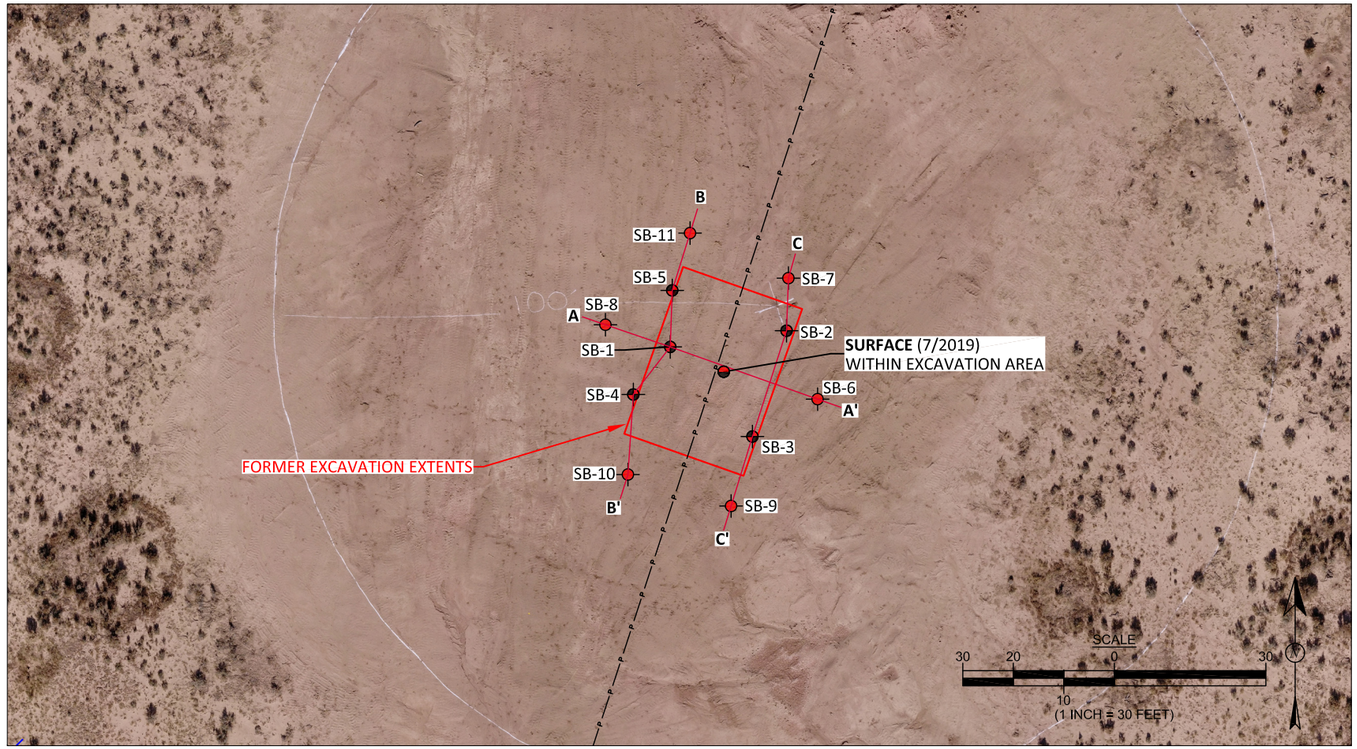
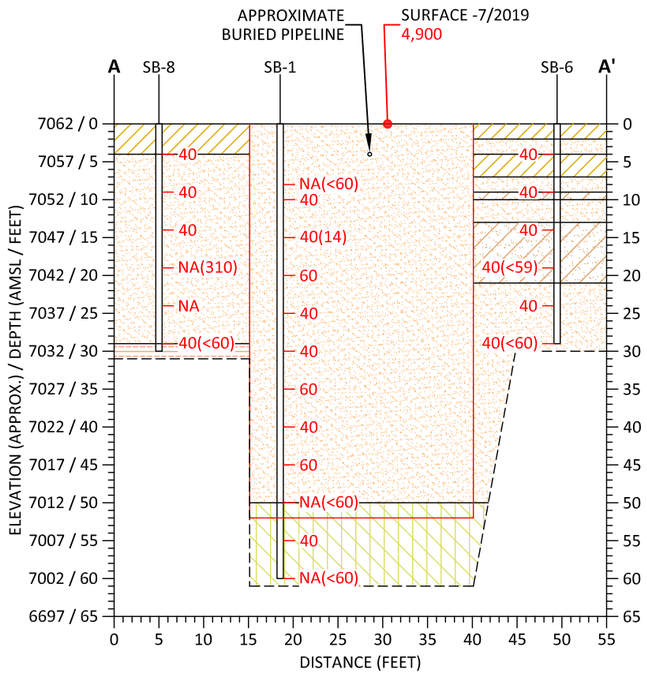
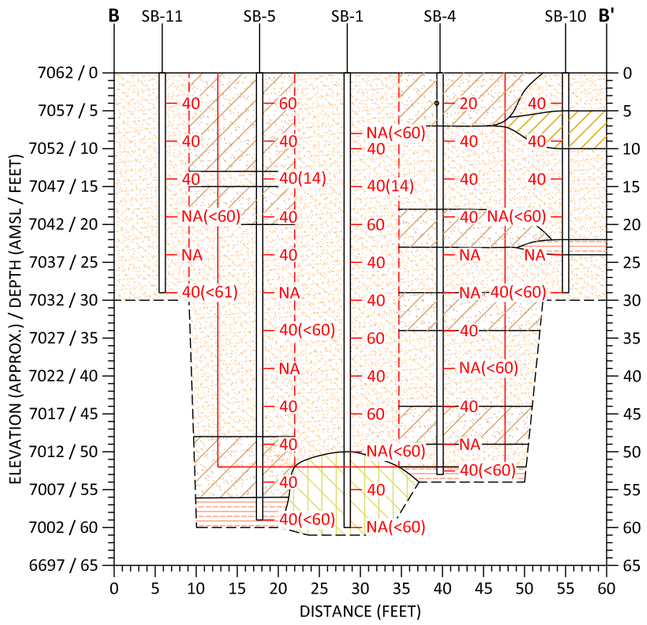
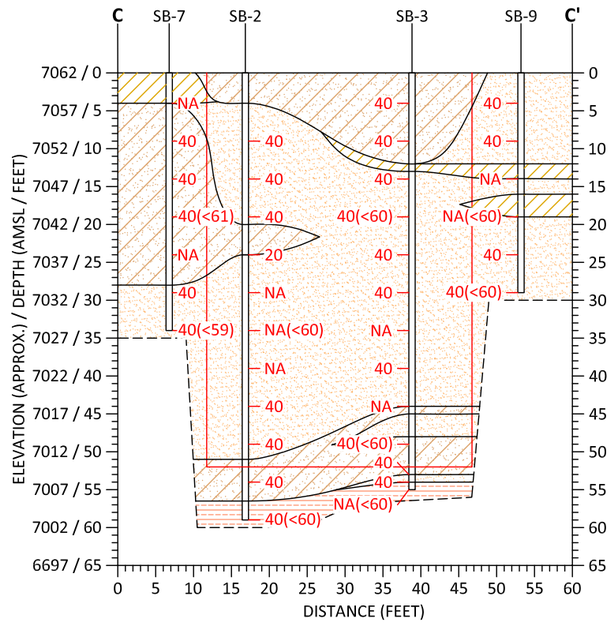








NOTE: SB-4 AND SB-5 MAY BE OUTSIDE OF EXCAVATION AREA.

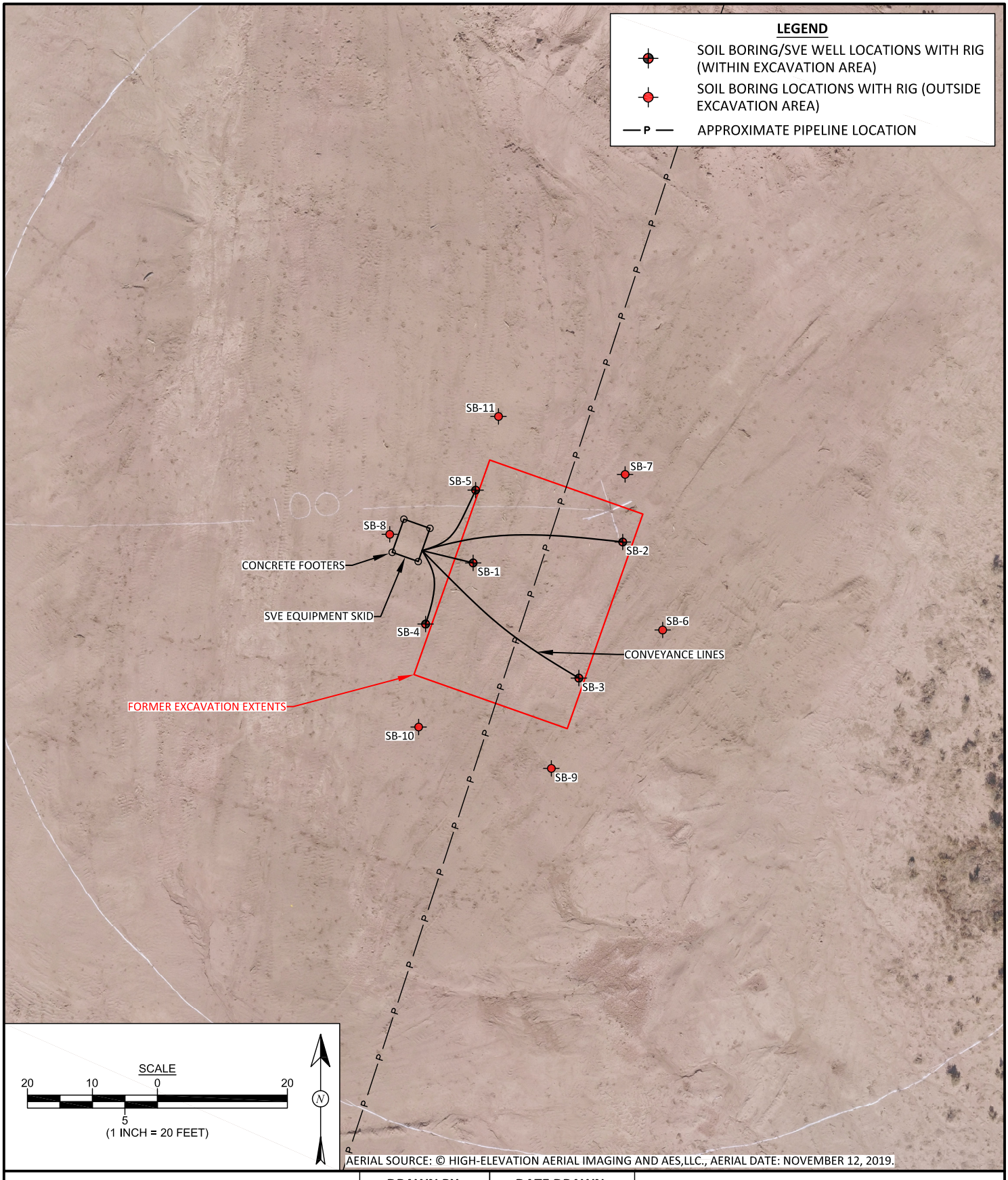
NOT TO SCALE

DRAWN BY:	DATE DRAWN:
C. Lameman	April 27, 2020
REVISIONS BY:	**DATE REVISED:**
C. Lameman	April 27, 2020
CHECKED BY:	**DATE CHECKED:**
E. McNally	April 27, 2020
APPROVED BY:	**DATE APPROVED:**
E. McNally	April 27, 2020

LEGEND

- LTE SAMPLE LOCATION
- SOIL BORING/SVE WELL LOCATIONS WITH RIG (WITHIN EXCAVATION AREA)
- SOIL BORING LOCATIONS WITH RIG (OUTSIDE EXCAVATION AREA)
- P — APPROXIMATE BURIED PIPELINE
- SAND
- CLAY
- CLAYEY SAND
- CLAYEY SILT
- SANDSTONE
- 40(14) FIELD CHLORIDE mg/L (ppm) (LAB CHLORIDE) mg/kg (ppm)

NOTE: ALL RESULTS TABULATED IN TABLE 1. SAMPLES ANALYZED PER EPA METHOD 300.0.



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DRAWN BY: C. Lameman	**DATE DRAWN:** April 23, 2020
REVISIONS BY: C. Lameman	**DATE REVISED:** April 23, 2020
CHECKED BY: D. Reese	**DATE CHECKED:** April 23, 2020
APPROVED BY: E. McNally	**DATE APPROVED:** April 23, 2020

FIGURE 5

PROPOSED SITE REMEDIATION LAYOUT
HARVEST MIDSTREAM
TRUNK S RELEASE LOCATION
INCIDENT NUMBER: NCS1931842879
RELEASE ID: 373888
NE¼ SE¼, SEC. 7, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.41180, W107.18085

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
TRUNK S RELEASE (JUNE 2019)
Rio Arriba County, New Mexico

Sample ID	Date Sampled	Depth	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO	MRO	Chloride
		(feet)	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*
	Analytical Method		**8021B**	**8021B**	**8021B**	**8021B**	**8015**	**8015**	**8015**	**300**
	NMOCD Action Level**		**10 mg/kg Benzene / 50 mg/kg BTEX**				**100**			**600**
PH01	02-Jul-19	1	<0.024	<0.049	<0.049	<0.098	<4.9	<9.9	<50	**2,300**
PH01	02-Jul-19	5	<0.024	<0.049	<0.049	<0.097	<4.9	<9.9	<50	**2,200**
PH02	02-Jul-19	1	<0.024	<0.048	<0.048	<0.097	<4.8	<9.4	<47	**2,400**
PH02	02-Jul-19	5	<0.025	<0.050	<0.050	<0.10	<5.0	<9.1	<46	<60
UG01	02-Jul-19	surface	<0.025	<0.050	<0.050	<0.099	<5.0	<10	<50	**1,300**
UG02	02-Jul-19	surface	<0.025	<0.050	<0.050	<0.10	<5.0	<9.7	<48	**3,300**
Surface	02-Jul-19	1	<0.024	<0.048	<0.048	0.17	<4.8	<9.8	<49	**4,900**
Wall	02-Jul-19	15	**40**	**420**	**66**	**710**	**16,000**	**1,400**	**<490**	<60
Floor	02-Jul-19	30	<0.12	0.61	0.31	5.4	**120**	**110**	**<46**	<60
SB-1	19-Nov-19	8	0.054	0.44	0.090	1.4	11	<9.4	<47	<60
SB-1	19-Nov-19	15	**14**	**180**	**35**	**580**	**13,000**	**3,000**	**<250**	14
SB-1	19-Nov-19	50	0.029	0.17	<0.049	1.1	37	20	<46	<60
SB-1	26-Nov-19	60	<0.024	<0.049	<0.049	<0.097	<4.9	<9.2	<46	<60
SB-2	09-Mar-20	34	<0.025	<0.050	<0.050	0.18	12	64	<47	<60
SB-2	09-Mar-20	59	<0.025	<0.049	<0.049	<0.098	<4.9	<9.7	<49	<60
SB-3	09-Mar-20	19	<0.023	<0.047	<0.047	0.53	18	27	<48	<60
SB-3	10-Mar-20	49	0.60	15	2.0	45	**1,900**	**370**	**<49**	<60
SB-3	10-Mar-20	55	<0.024	<0.049	<0.049	<0.097	<4.9	<9.6	<48	<60
SB-4	10-Mar-20	39	<0.025	<0.049	<0.049	<0.098	<4.9	<9.7	<49	<60

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
TRUNK S RELEASE (JUNE 2019)
Rio Arriba County, New Mexico

Sample ID	Date Sampled	Depth	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO	MRO	Chloride
		(feet)	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*
Analytical Method			**8021B**	**8021B**	**8021B**	**8021B**	**8015**	**8015**	**8015**	**300**
NMOCD Action Level*			**10 mg/kg Benzene / 50 mg/kg BTEX**				**100**			**600**
SB-4	10-Mar-20	53	<0.025	<0.050	<0.050	<0.10	<5.0	<9.8	<49	<60
SB-5	11-Mar-20	34	<0.025	<0.049	<0.049	<0.099	<4.9	<9.1	<46	<60
SB-5	11-Mar-20	59	<0.024	<0.048	<0.048	<0.096	<4.8	<10	<50	<60
SB-6	11-Mar-20	19	<0.025	<0.049	<0.049	<0.099	<4.9	<9.4	<47	<59
SB-6	12-Mar-20	29	<0.025	<0.049	<0.049	<0.098	<4.9	<9.4	<47	<60
SB-7	16-Mar-20	19	<0.024	<0.048	<0.048	0.16	<4.8	<9.4	<47	<61
SB-7	16-Mar-20	34	<0.025	<0.049	<0.049	<0.099	<4.9	<9.8	<49	<59
SB-8	16-Mar-20	19	<0.024	<0.048	<0.048	<0.096	<4.8	<9.0	<45	310
SB-8	16-Mar-20	29	<0.024	<0.048	<0.048	<0.096	<4.8	<9.9	<50	<60
SB-9	16-Mar-20	19	<0.025	<0.049	<0.049	<0.098	<4.9	<9.5	<48	<60
SB-9	16-Mar-20	29	<0.024	<0.048	<0.048	<0.097	<4.8	<10	<50	<60
SB-10	16-Mar-20	19	<0.024	<0.049	<0.049	<0.097	<4.9	<9.4	<47	<60
SB-10	16-Mar-20	29	<0.024	<0.048	<0.048	<0.096	<4.8	<9.3	<46	<60
SB-11	16-Mar-20	19	<0.025	<0.049	<0.049	0.11	<4.9	<9.7	<48	<60
SB-11	16-Mar-20	29	<0.024	<0.048	<0.048	<0.097	<4.8	<9.1	<45	<61

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
TRUNK S RELEASE (JUNE 2019)
Rio Arriba County, New Mexico

Sample ID	Date Sampled	Depth	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO	MRO	Chloride
		(feet)	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*
Analytical Method			**8021B**	**8021B**	**8021B**	**8021B**	**8015**	**8015**	**8015**	**300**
NMOCD Action Level*			**10 mg/kg Benzene / 50 mg/kg BTEX**				**100**			**600**
Stockpile	18-Mar-20	surface	NA	NA	NA	NA	NA	NA	NA	180
Upgradient	18-Mar-20	1	NA	NA	NA	NA	NA	NA	NA	**2,600**
Upgradient	18-Mar-20	5	NA	NA	NA	NA	NA	NA	NA	**1,300**
Background	18-Mar-20	1	NA	NA	NA	NA	NA	NA	NA	310
Background	18-Mar-20	3	NA	NA	NA	NA	NA	NA	NA	340

Notes: NE = Not Established
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
MRO = Motor Oil Range Organics
****NMAC 19.15.29.12E Table I**

TABLE 2
SUMMARY OF SOIL ANIONS/CATIONS
TRUNK S RELEASE (JUNE 2019)
Rio Arriba County, New Mexico

Sample ID	Date Sampled	Depth	Chloride	Fluoride	Sulfate	Cond.	Ca	Mg	K	Na	Alkalinity
		(feet)	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*umhos/cm*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*
Analytical Method			**300**	**300**	**300**	**SM2320B**	**6010**	**6010**	**6010**	**6010**	**ASA10-3**
NMOCD Action Level**			**600**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
SB-1 Release Area	19-Nov-19	15	14	3.7	<7.5	639	7,300	8,100	3,400	870	NA
Upgradient (Pond Drainage)	18-Mar-20	1	**2,600**	<1.5	21	4,800	2,900	4,200	2,400	2,900	23
Upgradient (Pond Drainage)	18-Mar-20	5	**1,300**	3.8	48	3,140	7,700	5,100	2,100	550	56
Background	18-Mar-20	1	310	<1.5	<7.5	1,550	3,200	4,000	1,800	710	32
Background	18-Mar-20	3	340	2	<7.5	1,530	9,300	4,700	2,000	440	94
Stockpile	18-Mar-20	Comp	180	5.8	72	1,420	6,600	5,400	2,400	860	202

Notes: NE = Not Established
NA = Not Analyzed
Composite = 4 point composite sample
Ca = Calcium
Mg = Magnesium
K = Potassium
Na = Sodium

Photo 1: SB-4 boring installation. SB-1 through SB-3 at left. ***Photo taken 3/10/2020.***

Photo 2: SB-6 boring installation. SB-1 through SB-5 at right. ***Photo taken 3/11/2020.***

Photo 3: Muddy site conditions. ***Photo taken 3/12/2020.***

Photo 4: Setup of grout and pouring. ***Photo taken 3/18/2020.***

Photo 5: Direction of upgradient sample locations. ***Photo taken 3/18/2020.***

Photo 6: Direction of background sample locations. ***Photo taken 3/18/2020.***

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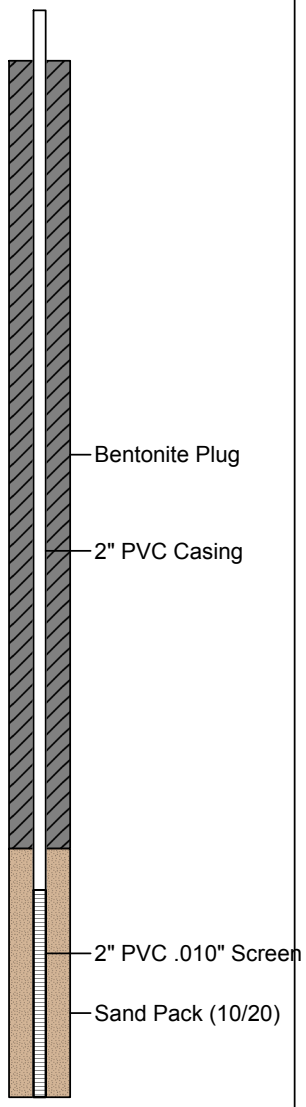
LOG OF: SB-1

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 11/19/19	Latitude	:
Date Completed	: 11/25/19	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: E. Hubbert
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev. 7062	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Chlorides (mg/L)
0	7062	SP		POORLY GRADED SAND, Tan, Fine Grained, Firm, Sagebrush Roots, Trace CaCO3 deposits, Moist, Heavy Hydrocarbon Odor, No Staining,		
5	7057				384.4	
10	7052				124.1	40
15	7047	SP		POORLY GRADED SAND, Tan, Fine Grained, Loose, Trace CaCO3 deposits, Moist, Heavy Hydrocarbon Odor, No Staining,	3,426	40
20	7042	SW		WELL GRADED SAND, Brown, Coarse, Soft, Interbedded Gravel, Slight Black Staining at 23 feet, Very Heavy Hydrocarbon Odor.	1,626	60
25	7037				2,012	40
30	7032				1,681	40
35	7027	SW		WELL GRADED SAND, Brown, Coarse, Soft, Less Hydrocarbon Odor, No Staining	1,662	60
40	7022	SW		WELL GRADED SAND, Brown, Coarse, Soft, Moderate Hydrocarbon Odor, No Staining	1,105	40
45	7017	SP		POORLY GRADED SAND, Very Hard, Brown, Fine to Medium, Dry, Cemented, CaCO3 deposits, Slight Hydrocarbon Odor, No Staining.	1,092	60
50	7012			OFFSET HOLE - PUSHED AUGER FROM 0 TO 50 FEET.	2,249	NA
55	7007			SILTY CLAY, Dark Brown, Firm, Moist, No Odor or Staining.	406	40
60	7002			TOTAL DEPTH AT 60 FEET.	129.2	NA
65						



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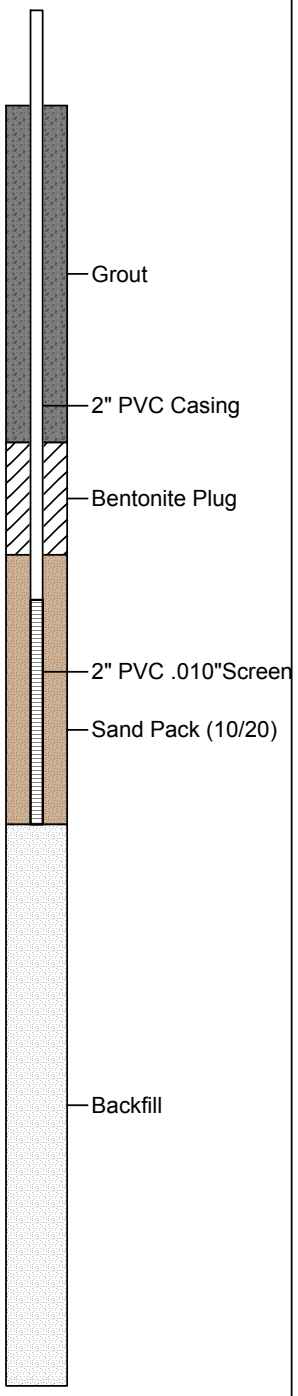
LOG OF: SB-2

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/09/20	Latitude	:
Date Completed	: 03/09/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: C. Lameman
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev. 7062	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0	7062	CL		CLAY WITH SAND, Soft, Brown, High Plasticity, Moist, No Staining, No Odor	95.8	
5	7057	SP		POORLY GRADED SAND, Brown-Tan, Fine Grained, Loose, Dry, No Odor, No Staining,	1,017	
10	7052	SP		POORLY GRADED SAND, Brown-Tan, Fine Grained, Loose, Dry, Strong Odor, No Staining,	719	40
15	7047				4,182	40
20	7042	CL		CLAY WITH SAND, Hard, Brown, High Plasticity, Strong Odor, No Staining	887	40
25	7037	SW		WELL GRADED SAND, Brown-Tan, Fine Grained, Loose, Dry, Strong Odor, No Staining,	1,402	20
30	7032	SP		POORLY GRADED SAND, Tan, Coarse Grained, Loose, Dry, Strong Odor, No Staining	3,672	NA
35	7027	SW		WELL GRADED SAND, Tan, Fine Grained, Loose, Dry, Strong Odor, No Staining	4,784	NA
40	7022				528.9	NA
45	7017				226.7	40
50	7012	SP		POORLY GRADED SAND, Tan, Medium to Coarse Grained, Dry, Slight Odor, No Staining	136.6	40
		SC		CLAY WITH SAND, Hard, High Plasticity, Brown-Tan, Slight Odor, No Staining		
55	7007	SC		WELL GRADED SAND WITH CLAY, Brown, Dry, Hard, Slight Odor, No Staining	325	40
		SS		SANDSTONE, Hard, Tan and Orange, Medium to Coarse Grained, Dry, No Odor, No Staining	29.0	40
60						



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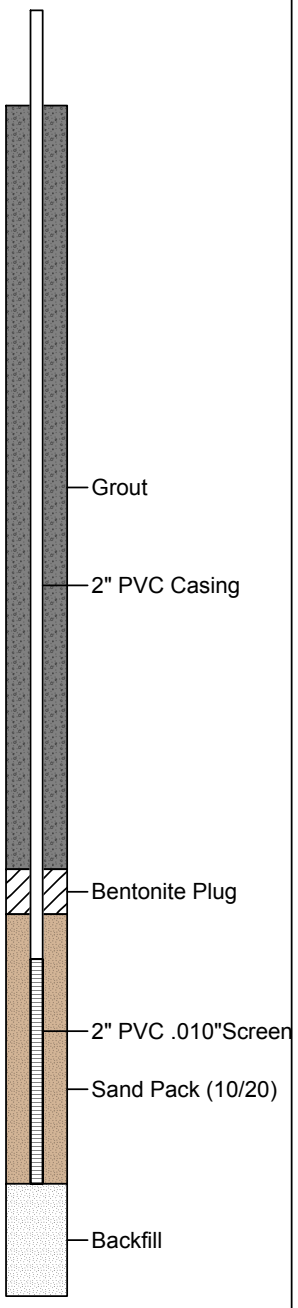
LOG OF: SB-3

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/09/20	Latitude	:
Date Completed	: 03/10/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: C. Lameman
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev. 7062	USCS	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0	7062	CL	CLAY WITH SAND, Soft, Brown, High Plasticity, Moist, No Staining, No Odor	40.6	40
5	7057				
10	7052			9.5	40
		CH	CLAY, Stiff, Brown, High Plasticity, No Odor, No Staining	1,811	40
15	7047	SW	WELL GRADED SAND, Tan, Loose, Fine Grained, Dry, Slight Odor, No Staining	4,086	40
20	7042				
25	7037	SW	WELL GRADED SAND, Tan, Loose, Fine Grained, Dry, Strong Odor, No Staining	2,195	40
30	7032	SP	POORLY GRADED SAND, Tan, Loose, Coarse Grained, Dry, Strong Odor, No Staining	3,268	40
35	7027			2,943	NA
40	7022			3,007	40
45	7017	SC	POORLY GRADED SAND WITH CLAY, Brown, Dense, Medium Grained, Moist, Strong Odor, No Staining	330.1	NA
		SP	POORLY GRADED SAND, Tan, Loose, Medium to Coarse Grained, Dry, Strong Odor, No Staining		
50	7012	SC	CLAY WITH SAND, Brown, Very Stiff, Fine Grained, Moist, Strong Odor, No Staining	10,035	40
		SP	POORLY GRADED SAND, Some Clay, Brown, Dense, Medium to Coarse Grained, Moist, Strong Odor, No Staining	3,065	40
55	7007	SS		2,149 3,958	40 NA
			SANDSTONE, Tan, Medium to Coarse Grained, Dry, Very Dense, Strong Odor, No Staining. Auger Refusal at 55 feet.		
60					



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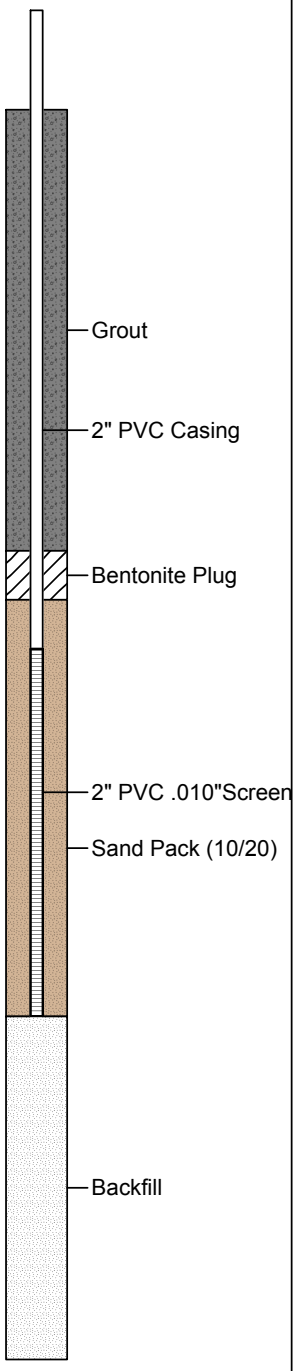
LOG OF: SB-4

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/10/20	Latitude	:
Date Completed	: 03/10/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: C. Lameman
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev. 7062	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0	7062	SC		CLAY WITH SAND, Soft, Brown, Fine Grained, Moist, Roots, No Odor, No Staining		
		SW		WELL GRADED SAND, Brown, Loose, Fine Grained, Moist, No Odor, No Staing	12.5	20
5	7057	SC		CLAY WITH SAND, Soft, Brown, High Plasticity, Fine Grained, Dry, No Odor, No Staining		
		SW		WELL GRADED SAND, Brown, Loose, Fine Grained, Moist, No Odor, No Staing	40.9	40
10	7052					
15	7047				56.8	40
20	7042	SC		CLAY WITH SAND, Soft, Brown, Fine Grained, Dry, No Odor, No Staining	67.4	40
25	7037	SP		POORLY GRADED SAND, Tan, Loose, Medium to Coarse Grained, Dry, No Odor, No Staining	312.9	NA
30	7032	SC		CLAY WITH SAND, Medium, Brown, High Plasticity, Fine Grained, Dry, Slight Odor, No Staining	289.9	NA
35	7027	SP		POORLY GRADED SAND, Tan, Loose, Medium Grained, Dry, Odor, No Staining	302.6	40
40	7022	SP		POORLY GRADED SAND, Tan, Loose, Coarse Grained, Dry, Odor, No Staining. Slow Advance to 44 feet.	398.7	NA
45	7017	SC		CLAY WITH SAND, Medium, Brown, High Plasticity, Fine Grained, Dry, Slight Odor, No Staining	155.7	40
50	7012	SP		POORLY GRADED SAND, Tan, Hard, Medium Grained, Moist, Strong Odor, No Staining.	203.4	NA
		SS		SANDSTONE, Tan and Orange, Hard, Medium to Coarse Grained, Dry, Very Dense, Odor, No Staining. Auger Refusal at 53 feet.	79.1	40
55						



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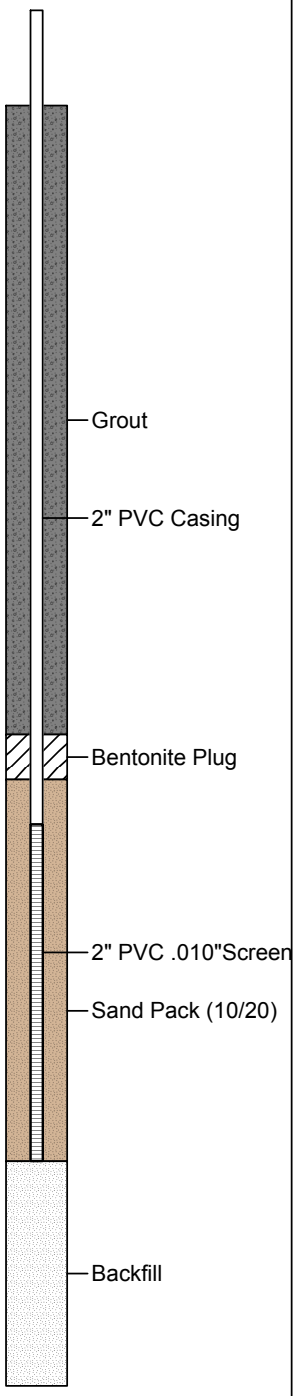
LOG OF: SB-5

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/11/20	Latitude	:
Date Completed	: 03/11/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: C. Lameman
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev. 7062	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0	7062	SC		CLAY WITH SAND, Soft, Brown, Fine Grained, Moist, Roots, No Odor, No Staining	3.0	60
5	7057	SC		CLAY WITH SAND, Stiff, Brown, Fine Grained, Dry, No Odor, No Staining	103.9	40
10	7052	SW		WELL GRADED SAND, Tan, Loose, Fine Grained, Dry, Slight Odor, No Staining	101.3	40
15	7047	SC		CLAY WITH SAND, Stiff, Brown, Fine Grained, Dry, Slight Odor, No Staining	88.0	40
20	7042	SP		POORLY GRADED SAND, Tan, Loose, Fine to Medium Grained, Dry, Slight Odor, No Staining	69.5	40
25	7037	SP		POORLY GRADED SAND, Tan, Loose, Coarse Grained, Dry, No Odor, No Staining	146.2	NA
30	7032	SP		POORLY GRADED SAND, Tan-Brown, Loose, Fine Grained, Dry, No Odor, No Staining	397.2	40
35	7027	SP		POORLY GRADED SAND, Tan-Brown, Dense, Coarse Grained, Dry, No Odor, No Staining	58.5	NA
40	7022	SP		POORLY GRADED SAND, Tan-Brown, Dense, Medium Grained, Dry, No Odor, No Staining	67.5	40
45	7017	SC		CLAY WITH SAND, Hard, Brown, High Plasticity, Fine Grained, Dry, Slight Odor, No Staining	259.6	40
50	7012	SP		POORLY GRADED SAND, Lens, Tan, Dense, Coarse Grained, Dry, No Odor, No Staining	18.0	40
55	7007	SC		CLAY WITH SAND, Hard, Brown, High Plasticity, Fine Grained, Dry, Slight Odor, No Staining		
60		SS		SANDSTONE, Tan and Orange, Very Dense, Coarse Grained, Dry, No Odor, No Staining	51.5	40



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LOG OF: SB-6

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/11/20	Latitude	:
Date Completed	: 03/12/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: C. Lameman
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0		CH		CLAY, Soft, Brown, Moist, No Odor, No Staining		
2		SW		WELL GRADED SAND, Brown, Fine Grained, Dry, No Odor, No Staining		
4		CH		CLAY, Soft, Brown, Moist, No Odor, No Staining	33.0	40
6		SP		POORLY GRADED SAND, Brown, Coarse Grained, Dry, No Odor, No Staining		
8		SC		CLAY WITH SAND, Stiff, Brown, Moist, Slight Odor, No Staining	46.8	40
10		SP		POORLY GRADED SAND, Brown, Medium Grained, Dry, No Odor, No Staining		
12		SC		CLAY WITH SAND, Stiff, Brown, High Plasticity, Fine Grained, Dry, No Odor, No Staining	63.3	40
14						
16						
18		SC		CLAY WITH SAND, Hard, Brown, High Plasticity, Fine Grained, Dry, No Odor, No Staining	119.8	40
20		SP		POORLY GRADED SAND, Tan, Fine to Medium Grained, Dry, Slight Odor, No Staining	17.7	40
22						
24						
26						
28		SP		POORLY GRADED SAND, Tan, Coarse Grained, Dry, No Odor, No Staining TOTAL DEPTH 29 FEET.	28.3	40
30						
32						

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LOG OF: SB-7

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/11/20	Latitude	:
Date Completed	: 03/16/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: E. Hubbert
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0		CH		CLAY, Hard, Brown, High Plasticity, Moist, No Odor, No Staining		
2		CH		CLAY, Hard, Brown, High Plasticity, Dry, No Odor, No Staining		
4		SC		CLAYEY SILTY SAND, Brown, Soft, Dry, Poorly Graded Sand, No Staining, No Odor	17.0	NA
8					29.7	40
14					82.7	40
18					171.3	40
24					58.3	NA
28		SW		WELL GRADED SAND, Brown, Coarse Grained, Soft, Dry, No Staining, No Odor	128.9	40
30		SM		SILTY SAND, Brown, Medium Stiff, Dry		
34		SS		SANDSTONE, Very Hard, Tan, Medium to Coarse Grained, Dry, No Staining, No Odor	29.4	40

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LOG OF: SB-8

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/16/20	Latitude	:
Date Completed	: 03/16/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: E. Hubbert
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0						
2		CH		CLAY, Stiff, Dark Brown, Dry, CaCO3 Deposits		
4		SP		POORLY GRADED SAND, Loose, Brown, Dry, No Staining, No Odor	28.1	40
6						
8						
10		SP		POORLY GRADED SAND, Medium Dense, Brown, Dry, No Staining, No Odor	17.2	40
12						
14					16.8	40
16						
18						
20				POORLY GRADED SAND, Dense, Brown, Dry, No Staining, No Odor	39.4	NA
22						
24		SP		POORLY GRADED SAND, Dense, Tan/Brown, Coarse Grained, Dry, No Staining, No Odor	21.9	NA
26						
28						
30		SS		SANDSTONE, Tan, Very Dense, Medium to Coarse Grained, Dry, No Staining, No Odor. TOTAL DEPTH AT 29 FEET.	33.4	40
32						

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LOG OF: SB-9

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/16/20	Latitude	:
Date Completed	: 03/16/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: E. Hubbert
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0		SW		WELL GRADED SAND, Brown, Loose, Fine to Medium Grained, Dry, No Staining, No Odor	54.9	40
10		CL		CLAY, Brown, Medium, CaCO3 deposits, Dry, No Staining, No Odor	15.8	40
12		SW		WELL GRADED SAND, Loose, Brown, Dry, No Staining, No Odor	19.0	NA
18		CL		CLAY, Brown, Medium, CaCO3 deposits, Roots, Dry, No Staining, No Odor	48.8	NA
20		SW		WELL GRADED SAND, Loose, Brown, Dry, No Staining, No Odor		
24		SW		WELL GRADED SAND, Loose, Tan, Coarse Grained, Dry, No Staining, No Odor	28.3	40
30					22.1	40

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LOG OF: SB-10

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/16/20	Latitude	:
Date Completed	: 03/16/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: E. Hubbert
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0						
2		SP		POORLY GRADED SILTY SAND, Loose, Brown, Roots, Fine Grained, Dry, No Staining, No Odor		
4					42.8	40
6		CL		CLAY, Medium, Brown, CaCO3 Deposits, Roots, No Staining, No Odor		
8					25.8	40
10		SP		POORLY GRADED SILTY SAND, Loose, Brown, Fine Grained, Roots, Dry, No Staining, No Odor		
12						
14					31.0	40
16						
18						
20					56.1	NA
22		SS		SANDSTONE, Weathered, Very Dense, Dry		
24		SP		POORLY GRADED SAND, Loose, Tan/Brown, Fine Grained, Roots, Dry, No Staining, No Odor	18.1	NA
26		SP		POORLY GRADED SAND, Tan, Dry, Coarse Grained, No Staining, No Odor		
28					48.6	40
30						

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LOG OF: SB-11

Harvest Midstream
Trunk S Release
NE1/4 SE1/4, Sec. 7, T25N, R3W
Rio Arriba County, New Mexico
N36.41180, -107.18085

Date Started	: 03/16/20	Latitude	:
Date Completed	: 03/16/20	Longitude	:
Hole Diameter	: 7.25 in.	Logged By	: E. Hubbert
Drilling Method	: C.M.E 75 H.S.A.		
Sampling Method	: 1.5" x 24" Split Spoon		

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Field Chlorides (mg/L)
0						
2		SP		POORLY GRADED SILTY SAND, Brown, Roots, CaCO3 Deposits, Dry, Medium Dense, No Staining, No Odor	12.0	40
4						
6						
8					7.3	40
10		SP		POORLY GRADED SILTY SAND, Brown, Roots, CaCO3 Deposits, Dry, Dense, No Staining, No Odor		
12						
14					15.5	40
16						
18						
20		SP		POORLY GRADED SAND, Brown, Roots, CaCO3 Deposits, Dry, Very Dense, No Staining, No Odor	80.2	NA
22		SP		POORLY GRADED SAND, Loose, Weathered Sandstone interbedded	53.7	NA
24						
26						
28					18.4	40
30						

NMOCD Site Assessment/Characterization, Remediation & Closure

Site Name:	**Trunk S Pipeline Release Location**
API #:	not applicable
Lat/Long:	36.41180 -107.18085
TRS:	NE/SE-7-25N-3W
Land Jurisdiction:	Private
County:	Rio Arriba
Determination made by:	David Reese, Environmental Scientist
Date:	7/29/2019

Wellhead Protection Area Assessment:

Determine the horizontal distance from all known water sources within 1/2 mile of the release including private and domestic water sources. Water sources are wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes. (NMAC 19.15.29.11A.3)

Water Source Type (well/spring/stock pond)	ID (if available)	Latitude	Longitude	Distance
NMOSE registered water well	SJ 01305	36.40979	-107.17622	0.29 mi
unregistered stock pond		36.40822	-107.17711	0.32 mi
unregistered stock pond		36.41501	-107.18651	0.38 mi
unregistered stock pond		36.41359	-107.17872	0.16 mi
unregistered stock pond		36.40696	-107.18029	0.34 mi

Distance to Nearest Significant Watercourse (NMAC 19.15.29.11A.4)

unnamed wash 360 ft to ENE that ultimately drains to Largo Canyon wash

Depth to Groundwater Determination (NMAC 19.15.29.11A.2)

Cathodic Report/Site Specific Hydrogeology	none available
Elevation Differential	approximately 10' higher than small wash 360' to ENE
Water Wells	285' to water according to SJ 01305 well record
Cathodic Report Nearby Wells	none available for nearby wells

Sensitive Receptor Determination

If a release occurs within the following areas, the RP must treat the release as if it occurred less than 50 ft to Groundwater (NMAC 19.15.29.12C.4):	Yes	No
<300' of any continuously flowing watercourse or any other significant watercourse	☑	☐
<200' of any lakebed, sinkhole or playa lake (measured from the Ordinary High Water Mark)	☐	☑
<300' of an occupied permanent residence, school, hospital, institution or church	☐	☑
<500' of a spring or private/domestic water well used by <5 households for domestic or stock watering purposes	☐	☑
<1000' of any water well or spring	☐	☑
within incorporated municipal boundaries or within a defined municipal fresh water well field	☐	☑
<300' of a wetland	☐	☑
within the area overlying a subsurface mine	☐	☑
within an unstable area	☐	☑
within a 100-year floodplain	☐	☑

Explain any 'Yes' Marks:

"YES" marks: Although separate washes are 360' to ENE and 405' to W from lat/long listed, excavation location and initial lab results indicate the release has also occurred within 300' of significant watercourses. "No" marks: Well SJ01305 is 1,530' to SE.

Actual Depth to Groundwater is: **≤50** ☐ **50-100** ☐ **>100** ☑

Treat Depth to Groundwater as if it's ≤ 50 ft?* Yes ☑ No ☐

	≤50	50-100	>100
Release Action Levels are... Benzene	**10**	**10**	**10**
BTEX (mg/kg)	**50**	**50**	**50**
8015 TPH (GRO/DRO) (mg/kg)	**Not Applicable**	**1,000**	**1,000**
8015 TPH (GRO/DRO/MRO) (mg/kg)	**100**	**2,500**	**2,500**
Chlorides (mg/kg)	**600**	**10,000**	**20,000**

NMAC 19.15.29.12 Table I. Release Action Levels are determined by the depth below bottom of pit to groundwater.

Supporting information is included with site ranking in the C-141 Release Notification.

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

John R. D'Antonio, Jr., P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

March 5, 2020

Harvest Four Corners, LLC
Attn: Kijun Hong
1755 Arroyo Dr.
Bloomfield, NM 87413

RE: Permit Approval for Monitoring Wells, SJ-4380 POD1-POD9; Harvest Midstream Trunk S Release Site; Rural Rio Arriba County, New Mexico

Greetings,

On February 18, 2020, the New Mexico Office of the State Engineer received an application for a permit for the installation of eight new monitoring wells, and use of one existing monitoring well for soil vapor extraction.

Enclosed is a copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page and in the attached Conditions of Approval.

Please be aware that there are deadlines to submit well records for all wells, new and existing. These deadlines can be found in the attached Conditions of Approval. A standardized plugging method has also been included in the Conditions of Approval for the future abandonment of the wells covered by this permit. This eliminates the need to submit a separate Well Plugging Plan of Operations for approval by the NMOSE prior to plugging, unless an alternate plugging method is proposed, required by a separate oversight agency, necessary due to incompatibility with actual conditions, or artesian conditions are encountered. The well and plugging records should be sent to the NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 383-4571.

Sincerely,

Miles Juett
Assistant Watermaster
Water Rights Division – District V

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4380 File
WATERS
Eddie Hubbert, Animas Environmental, via email: ehubbert@animasenvironmental.com

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – AZTEC OFFICE

OFFICIAL RECEIPT NUMBER: 5 - 6546 DATE: 2-18-2020 FILE NO.: tbd

TOTAL: 45.00 RECEIVED: Forty-five DOLLARS ☐ CASH: X CHECK NO.: #13456

PAYOR: Animas Environmental ADDRESS: P.O. Box 8

CITY: Farmington STATE: NM ZIP: 87499-0008 RECEIVED BY: JLW

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; **yellow** copy remains in district office; and **goldenrod** copy to accompany application being filed. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of the daily deposit.

A. Ground Water Filing Fees

___	1. Change of Ownership of Water Right	$ 2.00
___	2. Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3. Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4. Application for Replacement 72-12-1 Well	$ 75.00
___	5. Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6. Application for Stock Well/Temp. Use	$ 5.00
___	7. Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8. Declaration of Water Right	$ 1.00
___	9. Application for Supplemental Non 72-12-1 Well	$ 25.00
___	10. Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13. Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14. Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
X	15. Application for Test, Expl. Observ. Well	$ ~~5.00~~ x9
___	16. Application for Extension of Time	$ 25.00
___	17. Proof of Application to Beneficial Use	$ 25.00
___	18. Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1. Change of Ownership of a Water Right	$ 5.00
___	2. Declaration of Water Right	$ 10.00
___	3. Amended Declaration	$ 25.00
___	4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6. Application to Change Point of Diversion	$ 100.00
___	7. Application to Change Place and/or Purpose of Use	$ 100.00
___	8. Application to Appropriate	$ 25.00
___	9. Notice of Intent to Appropriate	$ 25.00
___	10. Application for Extension of Time	$ 50.00
___	11. Supplemental Well to a Surface Right	$ 100.00
___	12. Return Flow Credit	$ 100.00
___	13. Proof of Completion of Works	$ 25.00
___	14. Proof of Application of Water to Beneficial Use	$ 25.00
___	15. Water Development Plan	$ 100.00
___	16. Declaration of Livestock Water Impoundment	$ 10.00
___	17. Application for Livestock Water Impoundment	$ 10.00

C. Well Driller Fees

___	1. Application for Well Driller's License	$ 50.00
___	2. Application for Renewal of Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 25¢/copy $_____

___ Map(s) $_____

E. Certification $_____

F. *Credit Card Convenience Fee $_____

G. Other_____ $_____

Comments:

9 SVE-wells
@ Harvest Midstream
Trunk S release site

All fees are non-refundable.

File No. SJ-4380 POD1-9

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☒ Other(Describe): Soil Vapor Extraction
☐ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☐ Temporary Request - Requested Start Date: ~~2/12/2020~~ 3-9-2020 Requested End Date: 2/12/2022

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

1. APPLICANT(S)

Name: Harvest Four Corners, LLC ~~Kijun Hong~~	Name: Animas Environmental Services ~~Eddie Hubbert~~
Contact or Agent: Kijun Hong check here if Agent ☐	Contact or Agent: Eddie Hubbert check here if Agent ☒
Mailing Address: 1755 Arroyo Dr.	Mailing Address: 624 E. Comanche St.
City: Bloomfield	City: Farmington
State: NM Zip Code: 87413	State: NM Zip Code: 87401
Phone: 505-436-8457 ☐ Home ☐ Cell Phone (Work):	Phone: 505-564-2281 ☐ Home ☐ Cell Phone (Work):
E-mail (optional): khong@harvestmidstream.com	E-mail (optional): ehubbert@animasenvironmental.com

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STATE ENGINEER OFFICE AZTEC, NEW MEXICO

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No.: SJ-4380 POD1-9	Trn. No.:	Receipt No.: 5-6546
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date: 3-5-2021	

2. **WELL(S)** Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☒ ~~NM State Plane (NAD83) (Feet)~~
☒ ~~NM West Zone~~
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☒ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (If known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
(SJ-4380 POD1) SVE-1	-107.180850	36.411810	NW/4 NE/4 SE/4, Sec. 7, T25N, R3W ~~existing~~
(POD2) SVE-2	-107.180779	36.411803	" "
(POD3) SVE-3	-107.180942	36.411819	" "
(POD4) SVE-4	-107.180951	36.411755	" "
(POD5) SVE-5	-107.180842	36.411757	" "

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☒ **Yes** ☐ **No** **If yes, how many** 4

Other description relating well to common landmarks, streets, or other: Site also known as Harvest Midstream Trunk S Release site located approx. 0.5 mi. northwest of NM HWY 537 on Schmitz Ranch.

Well is on land owned by: Schmitz Ranch

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ **Yes** ☐ **No**
If yes, how many_____

Approximate depth of well (feet): 55 feet	Outside diameter of well casing (inches): 2-inch
Driller Name: Rodgers and Company	Driller License Number: WD#225

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Total depth of each well will not intersect the water table. All wells will be used for soil vapor extraction at this pipeline release site. There will be no consumptive use at any of these wells.

SVE-1 is an existing well which was mistakenly drilled without permit approval.

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STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: SJ-4380	Trn No.:

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☐ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ■ Include the reason for the monitoring well, and, ☒ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Kijun Hong
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
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ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 5th day of March 20 20, for the State Engineer,

John R. D'Antonio, Jr., P.E., State Engineer

By: Signature — Miles Juett, Print

Title: Assistant Watermaster
Print

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.: SJ-4380 POD1-9 | Trn No.:

NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a: ☐ Move-From Point of Diversion(s) ☒ Move-To Point of Diversion(s)	**b. Information on Attachment(s):** Number of points of diversion involved in the application: 9 Total number of pages attached to the application: 1

☐ **Surface Point of Diversion** **OR** ☒ **Well**

Name of ditch, acequia, or spring:	
Stream or water course:	
Tributary of:	

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)

NM State Plane (NAD83) (feet) NM West Zone ☐ NM Central Zone ☐ NM East Zone ☐	UTM (NAD83) (meters) Zone 13N ☐ Zone 12N ☐	☒ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format) ☒ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant

POD Number:	X or Longitude	Y or Latitude	Other Location Description:
(POD6) SVE-6	-107.180878	36.411895	NW/4 NE/4 SE/4, Sec. 7, T25N, R3W
POD Number: (POD7) SVE-7	X or Longitude -107.180784	Y or Latitude 36.411893	Other Location Description: " "
POD Number: (POD8) SVE-8	X or Longitude -107.180994	Y or Latitude 36.411863	Other Location Description: " "
POD Number: (POD9) SVE-9	X or Longitude -107.180873	Y or Latitude 36.411914	Other Location Description: " "
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:

2020 FEB 18 PM 3:58

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number: SJ-4380 POD1-9	Tm Number:
Trans Description (optional):	

NMOSE Permit to Drill a Well(s) With No Water Right
Conditions of Approval
SJ-4380 POD1 – POD9

The New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application approval (i.e., permit) is further subject to the following conditions of approval.

1. This permit is approved as follows:

Permittee(s):

Harvest Four Corners, LLC
1755 Arroyo Dr.
Bloomfield, NM 87413

Permit Number: SJ-4380

Application File Date: February 18, 2020

Priority: N/A

Source: Groundwater

Point(s) of Diversion: Nine points of diversion (POD), SJ-4380 POD1 through POD9 (Tables 1 and 2), will be used. The PODs consist of one existing and eight new monitoring wells that will be used for soil vapor extraction. The method for soil vapor extraction approved by this permit does not produce groundwater. The wells are all located at the Harvest Midstream Trucnk S Release site. The facility is located approx. 0.5 mi. northwest of NM HWY 537 on Schmitz Ranch land, in Rural Rio Arriba County, New Mexico. The PODs will be located within the NW/4 NE/4 SE/4 Section 7, Township 25 North, Range 3 West, NMPM, at the following approximate point locations (Lat/Long).

Table 1: Existing Monitoring Well

POD Name and Owner's Well Identification	Longitude (decimal degrees, W)	Latitude (decimal degrees, N)
SJ-4380 POD1 (SVE-1)	107.18085	36.41181

Table 2: New Monitoring Wells

POD Name and Owner's Well Identification	Longitude (decimal degrees, W)	Latitude (decimal degrees, N)
SJ-4380 POD2 (SVE-2)	107.180779	36.411803
SJ-4380 POD3 (SVE-3)	107.180942	36.411819
SJ-4380 POD4 (SVE-4)	107.180951	36.411755
SJ-4380 POD5 (SVE-5)	107.180842	36.411757
SJ-4380 POD6 (SVE-6)	107.180878	36.411895
SJ-4380 POD7 (SVE-7)	107.180784	36.411893
SJ-4380 POD8 (SVE-8)	107.180994	36.411863

SJ-4380 POD9 (SVE-9)	107.180873	36.411914

Purpose of Use: Groundwater monitoring and sampling, and Pollution Recovery

Place of Use: N/A

Amount of Water: N/A

2. No water shall be appropriated and beneficially used from any wells or borings approved under this permit.

3. No water shall be diverted from the well(s) except for initial well development and periodic sampling purposes. Upon completion of monitoring activities the well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited.

6. In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30 and 19.27.4.31 NMAC. However, pursuant to 72-12-12 NMSA 1978 and 19.27.4.8 NMAC, a driller's license is not required for the construction of a driven well with an outside casing diameter of 2⅜ inches or less and that does not require the use of a drill rig (e.g., auger) for installation. This exemption is not applicable to well plugging.

7. The permittee has not stated whether artesian conditions are likely to be encountered at the proposed well/borehole location(s). However, if artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

8. A Well Record documenting the as-built well construction and materials used shall be filed for each of the wells in accordance with Subsection N of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 30 days after completion of the well(s).** Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit. The required Well Record form is available at http://www.ose.state.nm.us/WR/forms.php.

9. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

10. When the permittee receives approval or direction to permanently abandon the well(s)/borehole(s) covered by this permit, plugging shall be performed by a New Mexico licensed well driller. The well(s)/borehole(s) shall be plugged pursuant to Subsection C of 19.27.4.30 NMAC using the following method, unless an alternate plugging method has been proposed by or on behalf of the well owner and approved by the NMOSE. If a well/borehole has encountered artesian conditions, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities concerning artesian wells. Additionally, if the following standardized plugging sealant is not appropriate for use due to incompatibility with the water quality or any soil and water contaminates encountered, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities.

    a. Obstructions in a well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

    b. Prior to plugging, calculate the theoretical volume of sealant needed for abandonment of the well/borehole based on the actual measured pluggable depth of the well/borehole and the volume factor for the casing/borehole diameter. Compare the actual volume of sealant placed in the well/borehole with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

    c. Portland Type I/II cement shall be used for the plugging sealant. The water mixed with the cement to create the plugging sealant shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. Up to a maximum of 6.0 gallons per 94-lb sack is acceptable to allow for greater pumpability.

       Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. If a bentonite additive is used, the following rates and mixing guidelines shall be followed. For a rate or a mixing procedure other than that provided below, the NMOSE District V office must be contacted for pre-approval. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of 5.2 gallons water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

    d. Placement of the sealant within the well/borehole shall be by pumping through a tremie pipe extended to near the bottom of the well/borehole and kept below the top of the slurry column (i.e., immersed in the slurry) as the well/borehole is plugged from bottom upwards in a manner that displaces the standing water column.

    e. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface may be filled with native soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

f. **Within 30 days after completion of well/borehole plugging, a complete Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well/boring plugged. The Well Plugging Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The required Plugging Record form is available at http://www.ose.state.nm.us/WR/forms.php.

11. In accordance with Subsection C of 19.27.4.30 NMAC, a well/borehole that does not encounter groundwater may be immediately plugged by filling with drill cuttings or clean native fill to within 10 feet of land surface and by plugging the remaining 10 feet to the land surface with a sealant approved by the Office of the State Engineer. A Plugging Record shall be filed with the State Engineer as described above.

12. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

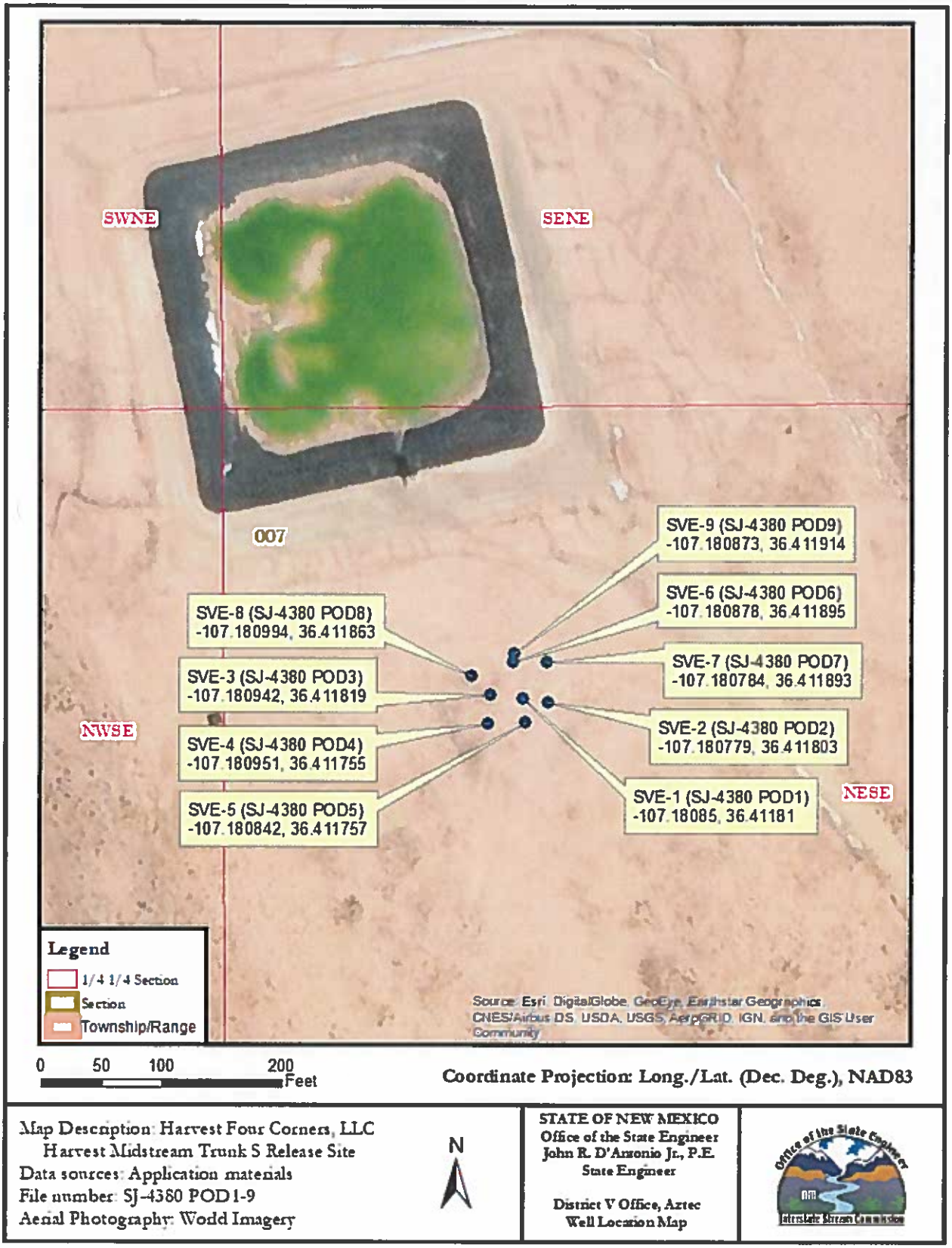
13. Pursuant to 72-12-3 NMSA 1978, the applicant has provided written documentation with the application, which the applicant claims as confirmation that access has been or will be granted for the aforementioned well(s) to be located on property owned by someone other than the well owner/applicant. NMOSE approval of this permit in no way infers the right of access to land not owned by the well owner/applicant.

14. The State Engineer retains jurisdiction of this permit.

The application for permitting one existing well and drilling eight new well(s) SJ-4380 POD1-POD9 without a water right, submitted on February 18, 2020 , is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

Witness my hand and seal this 5th day of March , A.D. 2020 .
John R. D'Antonio, Jr., P.E., State Engineer

By: _____
Miles Juett, Assistant Watermaster
District V Office, Water Rights Division


SWNE
SENE
007
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SVE-9 (SJ-4380 POD9)
-107.180873, 36.411914
SVE-6 (SJ-4380 POD6)
-107.180878, 36.411895
SVE-8 (SJ-4380 POD8)
-107.180994, 36.411863
SVE-7 (SJ-4380 POD7)
-107.180784, 36.411893
SVE-3 (SJ-4380 POD3)
-107.180942, 36.411819
SVE-2 (SJ-4380 POD2)
-107.180779, 36.411803
SVE-4 (SJ-4380 POD4)
-107.180951, 36.411755
SVE-1 (SJ-4380 POD1)
-107.18085, 36.41181
SVE-5 (SJ-4380 POD5)
-107.180842, 36.411757
Legend
1/4 1/4 Section
Section
Township/Range
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
0 50 100 200 Feet
Coordinate Projection: Long./Lat. (Dec. Deg.), NAD83
Map Description: Harvest Four Corners, LLC
Harvest Midstream Trunk S Release Site
Data sources: Application materials
File number: SJ-4380 POD1-9
Aerial Photography: Wodd Imagery
N
STATE OF NEW MEXICO
Office of the State Engineer
John R. D'Antonio Jr., P.E.
State Engineer
District V Office, Aztec
Well Location Map

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 08, 2019

Kijun Hong

Harvest
1755 Arroyo Dr.
Bloomfield, NM 87413
TEL:
FAX:

RE: Trunk S Pipeline Release OrderNo.: 1907148

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 9 sample(s) on 7/3/2019 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Floor @ 30'
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 1:20:00 PM
Lab ID: 1907148-001 **Matrix:** SOIL **Received Date:** 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	60		mg/Kg	20	7/3/2019 5:33:28 PM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	110	9.3		mg/Kg	1	7/5/2019 9:52:23 AM	46009
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/5/2019 9:52:23 AM	46009
Surr: DNOP	99.8	70-130		%Rec	1	7/5/2019 9:52:23 AM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	120	25		mg/Kg	5	7/4/2019 3:23:44 PM	46006
Surr: BFB	214	73.8-119	S	%Rec	5	7/4/2019 3:23:44 PM	46006
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.12		mg/Kg	5	7/4/2019 3:23:44 PM	46006
Toluene	0.61	0.25		mg/Kg	5	7/4/2019 3:23:44 PM	46006
Ethylbenzene	0.31	0.25		mg/Kg	5	7/4/2019 3:23:44 PM	46006
Xylenes, Total	5.4	0.49		mg/Kg	5	7/4/2019 3:23:44 PM	46006
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	5	7/4/2019 3:23:44 PM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Wall @ 15'
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 1:25:00 PM
Lab ID: 1907148-002 **Matrix:** SOIL **Received Date:** 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	60		mg/Kg	20	7/3/2019 5:45:52 PM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**BRM**
Diesel Range Organics (DRO)	1400	99		mg/Kg	10	7/5/2019 2:36:36 PM	46009
Motor Oil Range Organics (MRO)	ND	490	D	mg/Kg	10	7/5/2019 2:36:36 PM	46009
Surr: DNOP	0	70-130	S	%Rec	10	7/5/2019 2:36:36 PM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	16000	1000		mg/Kg	200	7/4/2019 3:46:26 PM	46006
Surr: BFB	169	73.8-119	S	%Rec	200	7/4/2019 3:46:26 PM	46006
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	40	0.50		mg/Kg	20	7/4/2019 9:43:58 AM	46006
Toluene	420	10		mg/Kg	200	7/4/2019 3:46:26 PM	46006
Ethylbenzene	66	1.0		mg/Kg	20	7/4/2019 9:43:58 AM	46006
Xylenes, Total	710	20		mg/Kg	200	7/4/2019 3:46:26 PM	46006
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	200	7/4/2019 3:46:26 PM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Surface @ 01'
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 1:30:00 PM
Lab ID: 1907148-003 **Matrix:** SOIL
Received Date: 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	4900	300		mg/Kg	100	7/5/2019 10:53:02 AM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/5/2019 10:40:14 AM	46009
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/5/2019 10:40:14 AM	46009
Surr: DNOP	100	70-130		%Rec	1	7/5/2019 10:40:14 AM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/4/2019 10:51:52 AM	46006
Surr: BFB	117	73.8-119		%Rec	1	7/4/2019 10:51:52 AM	46006
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	7/4/2019 10:51:52 AM	46006
Toluene	ND	0.048		mg/Kg	1	7/4/2019 10:51:52 AM	46006
Ethylbenzene	ND	0.048		mg/Kg	1	7/4/2019 10:51:52 AM	46006
Xylenes, Total	0.17	0.095		mg/Kg	1	7/4/2019 10:51:52 AM	46006
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	7/4/2019 10:51:52 AM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: PH01 @ 01'
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 1:35:00 PM
Lab ID: 1907148-004 **Matrix:** SOIL **Received Date:** 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	2300	150		mg/Kg	50	7/5/2019 11:05:27 AM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/5/2019 11:04:16 AM	46009
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/5/2019 11:04:16 AM	46009
Surr: DNOP	89.3	70-130		%Rec	1	7/5/2019 11:04:16 AM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/4/2019 11:14:30 AM	46006
Surr: BFB	107	73.8-119		%Rec	1	7/4/2019 11:14:30 AM	46006
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	7/4/2019 11:14:30 AM	46006
Toluene	ND	0.049		mg/Kg	1	7/4/2019 11:14:30 AM	46006
Ethylbenzene	ND	0.049		mg/Kg	1	7/4/2019 11:14:30 AM	46006
Xylenes, Total	ND	0.098		mg/Kg	1	7/4/2019 11:14:30 AM	46006
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	7/4/2019 11:14:30 AM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: PH 01 @ 05'
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 1:40:00 PM
Lab ID: 1907148-005 **Matrix:** SOIL
Received Date: 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	2200	59		mg/Kg	20	7/3/2019 6:23:06 PM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/5/2019 11:28:23 AM	46009
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/5/2019 11:28:23 AM	46009
Surr: DNOP	103	70-130		%Rec	1	7/5/2019 11:28:23 AM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/4/2019 11:37:05 AM	46006
Surr: BFB	107	73.8-119		%Rec	1	7/4/2019 11:37:05 AM	46006
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	7/4/2019 11:37:05 AM	46006
Toluene	ND	0.049		mg/Kg	1	7/4/2019 11:37:05 AM	46006
Ethylbenzene	ND	0.049		mg/Kg	1	7/4/2019 11:37:05 AM	46006
Xylenes, Total	ND	0.097		mg/Kg	1	7/4/2019 11:37:05 AM	46006
Surr: 4-Bromofluorobenzene	97.6	80-120		%Rec	1	7/4/2019 11:37:05 AM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: PH 02 @ 01'
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 1:45:00 PM
Lab ID: 1907148-006 **Matrix:** SOIL **Received Date:** 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	2400	150		mg/Kg	50	7/5/2019 11:17:51 AM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/5/2019 11:52:37 AM	46009
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/5/2019 11:52:37 AM	46009
Surr: DNOP	94.9	70-130		%Rec	1	7/5/2019 11:52:37 AM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/4/2019 11:59:40 AM	46006
Surr: BFB	104	73.8-119		%Rec	1	7/4/2019 11:59:40 AM	46006
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	7/4/2019 11:59:40 AM	46006
Toluene	ND	0.048		mg/Kg	1	7/4/2019 11:59:40 AM	46006
Ethylbenzene	ND	0.048		mg/Kg	1	7/4/2019 11:59:40 AM	46006
Xylenes, Total	ND	0.097		mg/Kg	1	7/4/2019 11:59:40 AM	46006
Surr: 4-Bromofluorobenzene	96.0	80-120		%Rec	1	7/4/2019 11:59:40 AM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: PH 02 @ 05'
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 1:50:00 PM
Lab ID: 1907148-007 **Matrix:** SOIL **Received Date:** 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	7/3/2019 6:47:54 PM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	7/5/2019 12:16:54 PM	46009
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/5/2019 12:16:54 PM	46009
Surr: DNOP	143	70-130	S	%Rec	1	7/5/2019 12:16:54 PM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/4/2019 12:22:18 PM	46006
Surr: BFB	103	73.8-119		%Rec	1	7/4/2019 12:22:18 PM	46006
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	7/4/2019 12:22:18 PM	46006
Toluene	ND	0.050		mg/Kg	1	7/4/2019 12:22:18 PM	46006
Ethylbenzene	ND	0.050		mg/Kg	1	7/4/2019 12:22:18 PM	46006
Xylenes, Total	ND	0.10		mg/Kg	1	7/4/2019 12:22:18 PM	46006
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	7/4/2019 12:22:18 PM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: UG 01
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 2:00:00 PM
Lab ID: 1907148-008 **Matrix:** SOIL **Received Date:** 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1300	60		mg/Kg	20	7/3/2019 7:00:18 PM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/5/2019 11:26:44 AM	46009
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/5/2019 11:26:44 AM	46009
Surr: DNOP	97.0	70-130		%Rec	1	7/5/2019 11:26:44 AM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/4/2019 12:44:57 PM	46006
Surr: BFB	107	73.8-119		%Rec	1	7/4/2019 12:44:57 PM	46006
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	7/4/2019 12:44:57 PM	46006
Toluene	ND	0.050		mg/Kg	1	7/4/2019 12:44:57 PM	46006
Ethylbenzene	ND	0.050		mg/Kg	1	7/4/2019 12:44:57 PM	46006
Xylenes, Total	ND	0.099		mg/Kg	1	7/4/2019 12:44:57 PM	46006
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	7/4/2019 12:44:57 PM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: UG 02
Project: Trunk S Pipeline Release
Collection Date: 7/2/2019 2:05:00 PM
Lab ID: 1907148-009 **Matrix:** SOIL **Received Date:** 7/3/2019 8:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	3300	150		mg/Kg	50	7/5/2019 11:30:16 AM	46014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/5/2019 11:48:50 AM	46009
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/5/2019 11:48:50 AM	46009
Surr: DNOP	94.7	70-130		%Rec	1	7/5/2019 11:48:50 AM	46009
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/4/2019 1:07:35 PM	46006
Surr: BFB	105	73.8-119		%Rec	1	7/4/2019 1:07:35 PM	46006
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	7/4/2019 1:07:35 PM	46006
Toluene	ND	0.050		mg/Kg	1	7/4/2019 1:07:35 PM	46006
Ethylbenzene	ND	0.050		mg/Kg	1	7/4/2019 1:07:35 PM	46006
Xylenes, Total	ND	0.10		mg/Kg	1	7/4/2019 1:07:35 PM	46006
Surr: 4-Bromofluorobenzene	96.5	80-120		%Rec	1	7/4/2019 1:07:35 PM	46006

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1907148**
08-Jul-19

Client: Harvest
Project: Trunk S Pipeline Release

Sample ID: **MB-46014**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **46014**	RunNo: **61134**							
Prep Date: **7/3/2019**	Analysis Date: **7/3/2019**	SeqNo: **2072944**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-46014**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **46014**	RunNo: **61134**							
Prep Date: **7/3/2019**	Analysis Date: **7/3/2019**	SeqNo: **2072945**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1907148**

08-Jul-19

Client: Harvest

Project: Trunk S Pipeline Release

Sample ID: **MB-45994**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45994**	RunNo: **61163**
Prep Date: **7/3/2019**	Analysis Date: **7/5/2019**	SeqNo: **2072907** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.3	70	130			

Sample ID: **MB-46009**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **46009**	RunNo: **61163**
Prep Date: **7/3/2019**	Analysis Date: **7/5/2019**	SeqNo: **2072908** 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	9.0		10.00		89.5	70	130			

Sample ID: **LCS-45994**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45994**	RunNo: **61163**
Prep Date: **7/3/2019**	Analysis Date: **7/5/2019**	SeqNo: **2072909** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		80.7	70	130			

Sample ID: **LCS-46009**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **46009**	RunNo: **61163**
Prep Date: **7/3/2019**	Analysis Date: **7/5/2019**	SeqNo: **2072910** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	63.9	124			
Surr: DNOP	5.4		5.000		109	70	130			

Sample ID: **1907148-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Floor @ 30'**	Batch ID: **46009**	RunNo: **61163**
Prep Date: **7/3/2019**	Analysis Date: **7/5/2019**	SeqNo: **2074197** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	140	9.8	48.88	106.5	77.8	57	142			
Surr: DNOP	4.6		4.888		94.3	70	130			

Sample ID: **1907148-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Floor @ 30'**	Batch ID: **46009**	RunNo: **61163**
Prep Date: **7/3/2019**	Analysis Date: **7/5/2019**	SeqNo: **2074198** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	150	10	49.85	106.5	92.0	57	142	5.29	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1907148**
08-Jul-19

Client: Harvest
Project: Trunk S Pipeline Release

Sample ID: **1907148-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Floor @ 30'** Batch ID: **46009** RunNo: **61163**
Prep Date: **7/3/2019** Analysis Date: **7/5/2019** SeqNo: **2074198** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		4.985		104	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1907148**

08-Jul-19

Client: Harvest

Project: Trunk S Pipeline Release

Sample ID: **MB-46006**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **46006**	RunNo: **61152**
Prep Date: **7/3/2019**	Analysis Date: **7/4/2019**	SeqNo: **2072252** 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		105	73.8	119			

Sample ID: **LCS-46006**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **46006**	RunNo: **61152**
Prep Date: **7/3/2019**	Analysis Date: **7/4/2019**	SeqNo: **2072253** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.4	80.1	123			
Surr: BFB	1200		1000		120	73.8	119			S

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1907148**

08-Jul-19

Client: Harvest

Project: Trunk S Pipeline Release

Sample ID: **MB-46006**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **46006**	RunNo: **61152**
Prep Date: **7/3/2019**	Analysis Date: **7/4/2019**	SeqNo: **2072290** 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	0.97		1.000		97.2	80	120			

Sample ID: **LCS-46006**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **46006**	RunNo: **61152**
Prep Date: **7/3/2019**	Analysis Date: **7/4/2019**	SeqNo: **2072291** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Harvest | Work Order Number: 1907148 | RcptNo: 1

Received By: Yazmine Garduno 7/3/2019 8:12:00 AM

Completed By: Yazmine Garduno 7/3/2019 9:12:08 AM

Reviewed By: DAD 7/3/19

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	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. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
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? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: LB 7/3/19

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			
2	3.9	Good	Yes			
3	7.8	Good	Yes			

Chain-of-Custody Record

Client: Harvest Four Corners, LLC

Mailing Address: 1755 Arroyo Dr
Bloomfield, NM 87413

Phone #: 505-632-4475

email or Fax#: Khong@harvestmidstream.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☒ EDD (Type) PDF

Turn-Around Time: results by EOD 7-5-19
☐ Standard ☒ Rush

Project Name: Trunk S Pipeline Release

Project #:

Project Manager: Kijun Hong
LTE-Danny Burns

Sampler: D. Burns

On Ice: ☒ Yes ☐ No

# of Coolers: 3 4.3°C + 0.5 CF = 4.8°C

Cooler Temp (including CF): 3.4°C + 0.5 CF = 3.9°C
7.3°C + 0.5 CF = 7.8°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1907148	BTEX / MTBE / TMB's (8021)	TPH:8015D GRO / DRO / MRO	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
7-2-19	1320	S	Floor @ 30'	1-4oz	cool	-001	X	X					X			
	1325		Wall @ 15'			-002										
	1330		Surface @ 01'			-003										
	1335		PH01 @ 01'			-004										
	1340		PH01 @ 05'			-005										
	1345		PH02 @ 01'			-006										
	1350		PH02 @ 05'			-007										
	1400		UG01			-008										
	1405		UG02			-009										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
7-2-19	17:05	D. Burns	Chantel Walker		7/2/19	1705
7/2/19	1816	Chantel Walker	Yale	courier	7/3/19	0812

Remarks:
cc: bherb@henv.com
dburns@henv.com

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 17, 2019

Elizabeth McNally

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX: (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 1911A22

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/21/2019 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

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB1@8'
Project: Harvest Midstream Trunk S
Collection Date: 11/19/2019 9:32:00 AM
Lab ID: 1911A22-001 **Matrix:** SOIL
Received Date: 11/21/2019 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/25/2019 5:35:32 PM	49000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/25/2019 12:55:07 PM	48972
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/25/2019 12:55:07 PM	48972
Surr: DNOP	94.2	70-130		%Rec	1	11/25/2019 12:55:07 PM	48972
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	11	4.8		mg/Kg	1	11/23/2019 1:01:16 AM	48965
Surr: BFB	122	77.4-118	S	%Rec	1	11/23/2019 1:01:16 AM	48965
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.054	0.024		mg/Kg	1	11/23/2019 1:01:16 AM	48965
Toluene	0.44	0.048		mg/Kg	1	11/23/2019 1:01:16 AM	48965
Ethylbenzene	0.090	0.048		mg/Kg	1	11/23/2019 1:01:16 AM	48965
Xylenes, Total	1.4	0.096		mg/Kg	1	11/23/2019 1:01:16 AM	48965
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	11/23/2019 1:01:16 AM	48965

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB1@15'
Project: Harvest Midstream Trunk S
Collection Date: 11/19/2019 12:38:00 PM
Lab ID: 1911A22-002 **Matrix:** SOIL **Received Date:** 11/21/2019 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Fluoride	3.7	1.5		mg/Kg	5	11/25/2019 5:47:57 PM	49000
Chloride	14	7.5		mg/Kg	5	11/25/2019 5:47:57 PM	49000
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	11/25/2019 5:47:57 PM	49000
Bromide	ND	1.5		mg/Kg	5	11/25/2019 5:47:57 PM	49000
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	11/25/2019 5:47:57 PM	49000
Sulfate	ND	7.5		mg/Kg	5	11/26/2019 8:52:36 PM	49047
RESISTIVITY AND EC SOIL						Analyst: **JRR**	
Conductivity	639	1.00		µmhos/c	1	12/2/2019 1:00:00 PM	49071
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Calcium	7300	250		mg/Kg	10	12/11/2019 5:28:18 PM	49088
Magnesium	8100	250		mg/Kg	10	12/11/2019 5:28:18 PM	49088
Potassium	3400	500		mg/Kg	10	12/11/2019 5:28:18 PM	49088
Sodium	870	250		mg/Kg	10	12/11/2019 5:28:18 PM	49088
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	3000	50		mg/Kg	5	11/27/2019 10:57:27 AM	48972
Motor Oil Range Organics (MRO)	ND	250	D	mg/Kg	5	11/27/2019 10:57:27 AM	48972
Surr: DNOP	125	70-130		%Rec	5	11/27/2019 10:57:27 AM	48972
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	13000	460		mg/Kg	100	11/25/2019 11:19:50 AM	48965
Surr: BFB	381	77.4-118	S	%Rec	100	11/25/2019 11:19:50 AM	48965
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	14	0.46		mg/Kg	20	11/23/2019 1:24:03 AM	48965
Toluene	180	4.6		mg/Kg	100	11/25/2019 11:19:50 AM	48965
Ethylbenzene	35	0.92		mg/Kg	20	11/23/2019 1:24:03 AM	48965
Xylenes, Total	580	9.2		mg/Kg	100	11/25/2019 11:19:50 AM	48965
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	100	11/25/2019 11:19:50 AM	48965

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB1@50'
Project: Harvest Midstream Trunk S
Collection Date: 11/19/2019 11:35:00 AM
Lab ID: 1911A22-003 **Matrix:** SOIL
Received Date: 11/21/2019 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/25/2019 6:12:46 PM	49000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	20	9.3		mg/Kg	1	11/25/2019 1:13:46 PM	48972
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/25/2019 1:13:46 PM	48972
Surr: DNOP	98.2	70-130		%Rec	1	11/25/2019 1:13:46 PM	48972
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	37	4.9		mg/Kg	1	11/23/2019 1:46:52 AM	48965
Surr: BFB	299	77.4-118	S	%Rec	1	11/23/2019 1:46:52 AM	48965
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.029	0.025		mg/Kg	1	11/23/2019 1:46:52 AM	48965
Toluene	0.17	0.049		mg/Kg	1	11/23/2019 1:46:52 AM	48965
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2019 1:46:52 AM	48965
Xylenes, Total	1.1	0.098		mg/Kg	1	11/23/2019 1:46:52 AM	48965
Surr: 4-Bromofluorobenzene	97.5	80-120		%Rec	1	11/23/2019 1:46:52 AM	48965

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

ANALYTICAL SUMMARY REPORT

December 04, 2019

Hall Environmental
4901 Hawkins St NE Ste D
Albuquerque, NM 87109-4372

Work Order: B19112287

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 11/26/2019 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B19112287-001	1911A22-002B, SB1 @ 15 Feet	11/19/19 12:38	11/26/19	Soil	Alkalinity, Water Extractable DI Water Soil Extract ASA10-3

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

Sonya Mallett
Soil Department Supervisor

Digitally signed by
Sonya Mallett
Date: 2019.12.04 13:49:24 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B19112287-001
Client Sample ID: 1911A22-002B, SB1 @ 15 Feet

Report Date: 12/04/19
Collection Date: 11/19/19 12:38
DateReceived: 11/26/19
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
WATER EXTRACTABLE CONSTITUENTS							
Alkalinity, 1:2	256	mg/kg		4		ASA10-3	12/03/19 15:13 / gie

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** B19112287 **Report Date:** 12/04/19

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASA10-3									Batch: 139748
Lab ID: LCS-139748	Laboratory Control Sample				Run: ORIONVERSASTARPRO_191				12/03/19 14:58
Alkalinity, 1:2	271	mg/kg	4.0	115	70	130			
Lab ID: B19112287-001A DUP	Sample Duplicate				Run: ORIONVERSASTARPRO_191				12/03/19 15:27
Alkalinity, 1:2	256	mg/kg	4.0				0.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Hall Environmental

B19112287

Login completed by: Briana G. Sangiuliano
Date Received: 11/26/2019

Reviewed by: BL2000\gmccartney
Received by: slm

Reviewed Date: 11/27/2019
Carrier name: Return-UPS NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	4.6°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

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

SUB CONTRACTOR	Bil-Energy	COMPANY	Energy Laboratories	PHONE	(800) 735-4489
ADDRESS	1120 South 27th Street			ACCOUNT #	
CITY, STATE, ZIP	Billings, MT 59107				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	1911A22-002B	SB1@15'	4OZGU	Soil	11/19/2019 12:38:00 PM	1	Alkalinity in Soil

B19112287

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you

Relinquished By		Date: 11/21/2019	Time: 4:30 PM	Received By	
Relinquished By		Date	Time	Received By	
Relinquished By		Date	Time	Received By	Date: 11/20/19 Time: 0840

TAT: Standard ☐ RUSH: Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED
HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples °C Attempt to Cool ?
Comments

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911A22**
17-Dec-19

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **MB-49000**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **49000**	RunNo: **64777**
Prep Date: **11/25/2019**	Analysis Date: **11/25/2019**	SeqNo: **2220067** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrite (As N)	ND	0.30								
Bromide	ND	0.30								
Nitrogen, Nitrate (As N)	ND	0.30								

Sample ID: **LCS-49000**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **49000**	RunNo: **64777**
Prep Date: **11/25/2019**	Analysis Date: **11/25/2019**	SeqNo: **2220069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.4	0.30	1.500	0	95.4	90	110			
Chloride	14	1.5	15.00	0	95.5	90	110			
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	92.6	90	110			
Bromide	7.3	0.30	7.500	0	97.5	90	110			
Nitrogen, Nitrate (As N)	7.6	0.30	7.500	0	101	90	110			

Sample ID: **MB-49047**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **49047**	RunNo: **64785**
Prep Date: **11/26/2019**	Analysis Date: **11/26/2019**	SeqNo: **2221557** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	1.5								

Sample ID: **LCS-49047**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **49047**	RunNo: **64785**
Prep Date: **11/26/2019**	Analysis Date: **11/26/2019**	SeqNo: **2221558** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	28	1.5	30.00	0	94.6	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911A22**

17-Dec-19

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-48972**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **48972**	RunNo: **64745**
Prep Date: **11/22/2019**	Analysis Date: **11/25/2019**	SeqNo: **2218776** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	63.9	124			
Surr: DNOP	4.6		5.000		91.3	70	130			

Sample ID: **MB-48972**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48972**	RunNo: **64745**
Prep Date: **11/22/2019**	Analysis Date: **11/25/2019**	SeqNo: **2218778** 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	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911A22**

17-Dec-19

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-48965**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **48965**	RunNo: **64725**
Prep Date: **11/21/2019**	Analysis Date: **11/22/2019**	SeqNo: **2217895** 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		101	77.4	118			

Sample ID: **LCS-48965**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **48965**	RunNo: **64725**
Prep Date: **11/21/2019**	Analysis Date: **11/22/2019**	SeqNo: **2217896** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	80	120			
Surr: BFB	1200		1000		115	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911A22**
17-Dec-19

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **MB-48965**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **48965**	RunNo: **64725**
Prep Date: **11/21/2019**	Analysis Date: **11/22/2019**	SeqNo: **2217930** 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	0.89		1.000		88.8	80	120			

Sample ID: **LCS-48965**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **48965**	RunNo: **64725**
Prep Date: **11/21/2019**	Analysis Date: **11/22/2019**	SeqNo: **2217931** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.8	80	120			
Toluene	0.90	0.050	1.000	0	89.6	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.1	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.1	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.0	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
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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911A22**

17-Dec-19

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-49088**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **49088**	RunNo: **65116**
Prep Date: **12/2/2019**	Analysis Date: **12/11/2019**	SeqNo: **2234329** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	25								
Magnesium	ND	25								
Potassium	ND	50								
Sodium	ND	25								

Sample ID: **LCS-49088**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **49088**	RunNo: **65116**
Prep Date: **12/2/2019**	Analysis Date: **12/11/2019**	SeqNo: **2234331** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2500	25	2500	0	100	80	120			
Magnesium	2400	25	2500	0	97.7	80	120			
Potassium	2400	50	2500	0	96.4	80	120			
Sodium	2400	25	2500	0	96.0	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
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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911A22**
17-Dec-19

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **1911A22-002ADUP** SampType: **DUP** TestCode: **Resistivity and eC Soil**
Client ID: **SB1@15'** Batch ID: **49071** RunNo: **64853**
Prep Date: **12/2/2019** Analysis Date: **12/2/2019** SeqNo: **2223523** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	683	1.00						6.62	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
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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **1911A22** RcptNo: **1**

Received By: **Yazmine Garduno** **11/21/2019 8:37:00 AM** Yazmine Garduno

Completed By: **Leah Baca** **11/21/2019 11:04:39 AM** Leah Baca

Reviewed By: 11/21/19

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	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. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
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? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: YG 11/21/19

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good				

Chain-of-Custody Record

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

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
Elizabeth McNally

Sampler: Eddie Hubbert
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 0.4-0.203 = 0.6

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1911422	BTEX (8021)	TPH (GRO/DRO/MRO) (8015)	Chlorides (300.0)	SM 2320B ALKALINITY	120.1 EC	SM 2540C TDS	CATION/ANION LIST	
10/19/19	932	Soil	SB1@8'	1-8oz 3-4oz jars	cool	-001	X	X	X	X	X	X	X	
10/19/19	12:38	Soil	SB1@15'	1-8oz 1-4oz	Cool	-002	X	X	X	X	X	X	X	
10/20/19	11:35	Soil	SB1@50'	1-8oz 1-4oz	Cool	-003	X	X	X	X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
10/20/19	1715				11/20/19	1715
11/20/19	1821			courier	11/21/19	0837

Remarks:
SB-1@15' also include cation/anion list (except TDS)

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 24, 2019

Elizabeth McNally

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 1911D02

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/28/2019 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 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

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1911D02**
Date Reported: **12/24/2019**

CLIENT: Animas Environmental Services
Client Sample ID: SB-1 @ 60'
Project: Harvest Midstream Trunk S
Collection Date: 11/26/2019 2:00:00 PM
Lab ID: 1911D02-001 **Matrix:** SOIL
Received Date: 11/28/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	12/5/2019 2:59:33 PM	49174
RESISTIVITY AND EC SOIL						Analyst: **JMT**	
Conductivity	643	1.00		µmhos/c	1	12/9/2019 3:01:00 PM	49221
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/3/2019 3:41:51 PM	49089
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/3/2019 3:41:51 PM	49089
Surr: DNOP	133	70-130	S	%Rec	1	12/3/2019 3:41:51 PM	49089
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/3/2019 10:33:53 AM	49082
Surr: BFB	83.0	77.4-118		%Rec	1	12/3/2019 10:33:53 AM	49082
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/3/2019 10:33:53 AM	49082
Toluene	ND	0.049		mg/Kg	1	12/3/2019 10:33:53 AM	49082
Ethylbenzene	ND	0.049		mg/Kg	1	12/3/2019 10:33:53 AM	49082
Xylenes, Total	ND	0.097		mg/Kg	1	12/3/2019 10:33:53 AM	49082
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/3/2019 10:33:53 AM	49082

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911D02**

24-Dec-19

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-49174**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **49174**	RunNo: **64987**
Prep Date: **12/5/2019**	Analysis Date: **12/5/2019**	SeqNo: **2228955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-49174**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **49174**	RunNo: **64987**
Prep Date: **12/5/2019**	Analysis Date: **12/5/2019**	SeqNo: **2228956** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.7	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911D02**

24-Dec-19

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-49089**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **49089**	RunNo: **64876**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2224924** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.9	63.9	124			
Surr: DNOP	4.1		5.000		82.7	70	130			

Sample ID: **MB-49089**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **49089**	RunNo: **64876**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2224925** 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		85.3	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911D02**

24-Dec-19

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **mb-49082**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **49082**	RunNo: **64903**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2225312** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.3	77.4	118			

Sample ID: **lcs-49082**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **49082**	RunNo: **64903**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2225313** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.2	80	120			
Surr: BFB	970		1000		96.8	77.4	118			

Sample ID: **1911d02-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB-1 @ 60'**	Batch ID: **49082**	RunNo: **64903**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2225315** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.65	0	99.8	69.1	142			
Surr: BFB	930		986.2		94.6	77.4	118			

Sample ID: **1911d02-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB-1 @ 60'**	Batch ID: **49082**	RunNo: **64903**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2225316** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.25	0	99.9	69.1	142	1.62	20	
Surr: BFB	930		969.9		96.2	77.4	118	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911D02**

24-Dec-19

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **mb-49082**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **49082**	RunNo: **64903**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2225359** Units: **mg/Kg**

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

Sample ID: **LCS-49082**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **49082**	RunNo: **64903**
Prep Date: **12/2/2019**	Analysis Date: **12/3/2019**	SeqNo: **2225360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.4	80	120			
Toluene	0.98	0.050	1.000	0	97.7	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.1	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911D02**
24-Dec-19

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **1911D02-001ADUP** SampType: **DUP** TestCode: **Resistivity and eC Soil**
Client ID: **SB-1 @ 60'** Batch ID: **49221** RunNo: **65034**
Prep Date: **12/9/2019** Analysis Date: **12/9/2019** SeqNo: **2230953** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	647	1.00						0.682	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
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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **1911D02** RcptNo: **1**

Received By: **Andy Freeman** **11/28/2019 10:00:00 AM**

Completed By: **Erin Melendrez** **11/30/2019 11:22:05 AM**

Reviewed By: DM 12/2/19

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	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. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
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? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: ENM 12/2/19

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

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush_____

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
Elizabeth McNally

Sampler: CL HEC EH

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.6°C

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1911D02	BTEX (8021)	TPH (GRO,DRO,MRO) (8015)	Chlorides (300.0)	SM 2320B	120.1	SM 2540C
a 11-26-19 11-27-19	14:00	Soil	SB-1 @ 60'	2-9oz jar 1-4oz jars	cool	-001	X	X	X	X	X	X

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/27/19	1015				11/27/19	1015
11/27/19	1803				11/28/19	1000

Remarks: Per Andy F. no SM2540C on Soil. -ENM 11/27/19 ENM 12/2/19

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 19, 2020

Eddie Hubbert

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 2003514

Dear Eddie Hubbert:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/11/2020 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-2@34'
Project: Harvest Midstream Trunk S
Collection Date: 3/9/2020 12:12:00 PM
Lab ID: 2003514-001 **Matrix:** SOIL
Received Date: 3/11/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/16/2020 12:29:22 PM	51120
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	64	9.5		mg/Kg	1	3/16/2020 4:30:03 PM	51095
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/16/2020 4:30:03 PM	51095
Surr: DNOP	101	55.1-146		%Rec	1	3/16/2020 4:30:03 PM	51095
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	12	5.0		mg/Kg	1	3/16/2020 9:48:21 PM	51093
Surr: BFB	163	66.6-105	S	%Rec	1	3/16/2020 9:48:21 PM	51093
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/16/2020 9:48:21 PM	51093
Toluene	ND	0.050		mg/Kg	1	3/16/2020 9:48:21 PM	51093
Ethylbenzene	ND	0.050		mg/Kg	1	3/16/2020 9:48:21 PM	51093
Xylenes, Total	0.18	0.10		mg/Kg	1	3/16/2020 9:48:21 PM	51093
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	3/16/2020 9:48:21 PM	51093

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-2@59'
Project: Harvest Midstream Trunk S
Collection Date: 3/9/2020 2:29:00 PM
Lab ID: 2003514-002 **Matrix:** SOIL
Received Date: 3/11/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/16/2020 1:06:24 PM	51120
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/16/2020 5:41:54 PM	51095
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/16/2020 5:41:54 PM	51095
Surr: DNOP	97.0	55.1-146		%Rec	1	3/16/2020 5:41:54 PM	51095
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/16/2020 11:23:05 PM	51093
Surr: BFB	84.7	66.6-105		%Rec	1	3/16/2020 11:23:05 PM	51093
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/16/2020 11:23:05 PM	51093
Toluene	ND	0.049		mg/Kg	1	3/16/2020 11:23:05 PM	51093
Ethylbenzene	ND	0.049		mg/Kg	1	3/16/2020 11:23:05 PM	51093
Xylenes, Total	ND	0.098		mg/Kg	1	3/16/2020 11:23:05 PM	51093
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	3/16/2020 11:23:05 PM	51093

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003514**

19-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-51120**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **51120**	RunNo: **67353**
Prep Date: **3/16/2020**	Analysis Date: **3/16/2020**	SeqNo: **2321543** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51120**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **51120**	RunNo: **67353**
Prep Date: **3/16/2020**	Analysis Date: **3/16/2020**	SeqNo: **2321544** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003514**

19-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-51095**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51095**	RunNo: **67317**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2321359** 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		109	55.1	146			

Sample ID: **LCS-51095**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51095**	RunNo: **67317**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2321360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	70	130			
Surr: DNOP	5.1		5.000		101	55.1	146			

Sample ID: **2003514-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SB-2@34'**	Batch ID: **51095**	RunNo: **67317**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2321362** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	86	9.5	47.71	63.93	46.7	47.4	136			S
Surr: DNOP	4.7		4.771		97.9	55.1	146			

Sample ID: **2003514-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SB-2@34'**	Batch ID: **51095**	RunNo: **67317**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2321363** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	86	9.3	46.30	63.93	48.1	47.4	136	0.0210	43.4	
Surr: DNOP	4.6		4.630		100	55.1	146	0	0	

Sample ID: **MB-51096**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51096**	RunNo: **67317**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321383** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		95.5	55.1	146			

Sample ID: **LCS-51096**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51096**	RunNo: **67317**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321384** 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003514**

19-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51096**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51096**	RunNo: **67317**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321384** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.2	55.1	146			

Sample ID: **MB-51124**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51124**	RunNo: **67317**
Prep Date: **3/16/2020**	Analysis Date: **3/17/2020**	SeqNo: **2323831** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.7		10.00		96.5	55.1	146			

Sample ID: **LCS-51124**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51124**	RunNo: **67317**
Prep Date: **3/16/2020**	Analysis Date: **3/17/2020**	SeqNo: **2323832** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.2	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003514**

19-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **mb-51097**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **51097**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320454** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	810		1000		80.6	66.6	105			

Sample ID: **lcs-51097**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51097**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320455** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		92.5	66.6	105			

Sample ID: **mb-51093**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **51093**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320477** 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		83.0	66.6	105			

Sample ID: **lcs-51093**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51093**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320478** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	84.5	80	120			
Surr: BFB	890		1000		89.2	66.6	105			

Sample ID: **2003514-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB-2@34'**	Batch ID: **51093**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320480** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	36	5.0	24.83	12.28	94.6	69.1	142			
Surr: BFB	1500		993.0		156	66.6	105			S

Sample ID: **2003514-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB-2@34'**	Batch ID: **51093**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320487** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	4.7	23.28	12.28	84.6	69.1	142	11.2	20	
Surr: BFB	1300		931.1		144	66.6	105	0	0	S

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003514**

19-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **mb-51119**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **51119**	RunNo: **67350**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2322850** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	740		1000		73.7	66.6	105			

Sample ID: **lcs-51119**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51119**	RunNo: **67350**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2322851** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	860		1000		86.3	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003514**
19-Mar-20

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **mb-51097**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **PBS**	Batch ID: **51097**	RunNo: **67331**							
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320543**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.86		1.000		85.8	80	120			

Sample ID: **LCS-51097**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **51097**	RunNo: **67331**							
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320544**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	80	120			

Sample ID: **mb-51093**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **PBS**	Batch ID: **51093**	RunNo: **67331**							
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320567**	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		90.1	80	120			

Sample ID: **LCS-51093**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **51093**	RunNo: **67331**							
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320568**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.9	80	120			
Toluene	0.94	0.050	1.000	0	94.1	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.0	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.9	80	120			

Sample ID: **2003514-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **SB-2@59'**	Batch ID: **51093**	RunNo: **67331**							
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320571**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.024	0.9515	0	83.1	78.5	119			
Toluene	0.83	0.048	0.9515	0	87.2	75.7	123			
Ethylbenzene	0.86	0.048	0.9515	0	90.0	74.3	126			
Xylenes, Total	2.6	0.095	2.854	0.02269	90.8	72.9	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003514**

19-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **2003514-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB-2@59'**	Batch ID: **51093**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/16/2020**	SeqNo: **2320571** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.87		0.9515		90.9	80	120			

Sample ID: **2003514-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB-2@59'**	Batch ID: **51093**	RunNo: **67331**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2320572** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	0.9862	0	83.2	78.5	119	3.75	20	
Toluene	0.86	0.049	0.9862	0	87.0	75.7	123	3.29	20	
Ethylbenzene	0.88	0.049	0.9862	0	88.9	74.3	126	2.32	20	
Xylenes, Total	2.7	0.099	2.959	0.02269	89.7	72.9	130	2.32	20	
Surr: 4-Bromofluorobenzene	0.88		0.9862		89.6	80	120	0	0	

Sample ID: **mb-51119**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **51119**	RunNo: **67350**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2322879** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		88.4	80	120			

Sample ID: **LCS-51119**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **51119**	RunNo: **67350**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2322880** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		95.0	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
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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2003514** RcptNo: 1

Received By: **Erin Melendrez** **3/11/2020 8:05:00 AM**

Completed By: **Yazmine Garduno** **3/11/2020 3:40:08 PM**

Reviewed By: YG 3/12/20

Chain of Custody

1. Is Chain of Custody sufficiently 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	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 ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
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? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted?

Checked by: JR 3/12/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good				

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush_____

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
Eddie Hubbert
Elizabeth McNally

Sampler: CL/EH

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.7-0(CF)=3.7°C

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2003514	BTEX (8021)	TPH (GRO,DRO,MRO) (8015)	Chlorides (300.0)	~~SM 2320B~~ CL	~~120.1~~ CL	~~SM 5310C~~ CL
3-9-20	12:12	Soil	SB-2 @ 34'	2- 4oz jars	cool	-001	X	X	X	X	X	X
3-9-20	14:29	Soil	SB-2 @ 59'	2- 4oz jars	cool	-002	X	X	X	X	X	X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/10/20	1508	BDuran	Christine Walsh		3/10/20	1508
3/10/20	1810	Christine Walsh		Via: Courier	3/11/20	0805

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 25, 2020

Elizabeth McNally

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX: (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 2003649

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/12/2020 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

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-3 @ 19'
Project: Harvest Midstream Trunk S
Collection Date: 3/9/2020 4:09:00 PM
Lab ID: 2003649-001 **Matrix:** SOIL **Received Date:** 3/12/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/19/2020 1:57:05 PM	51212
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	18	4.7		mg/Kg	1	3/23/2020 4:46:47 PM	51122
Surr: BFB	111	70-130		%Rec	1	3/23/2020 4:46:47 PM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	27	9.6		mg/Kg	1	3/17/2020 12:15:07 PM	51124
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/17/2020 12:15:07 PM	51124
Surr: DNOP	92.2	55.1-146		%Rec	1	3/17/2020 12:15:07 PM	51124
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.023		mg/Kg	1	3/23/2020 4:46:47 PM	51122
Toluene	ND	0.047		mg/Kg	1	3/23/2020 4:46:47 PM	51122
Ethylbenzene	ND	0.047		mg/Kg	1	3/23/2020 4:46:47 PM	51122
Xylenes, Total	0.53	0.094		mg/Kg	1	3/23/2020 4:46:47 PM	51122
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%Rec	1	3/23/2020 4:46:47 PM	51122
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	3/23/2020 4:46:47 PM	51122
Surr: Dibromofluoromethane	98.9	70-130		%Rec	1	3/23/2020 4:46:47 PM	51122
Surr: Toluene-d8	96.4	70-130		%Rec	1	3/23/2020 4:46:47 PM	51122

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-3 @ 49'
Project: Harvest Midstream Trunk S
Collection Date: 3/10/2020 8:49:00 AM
Lab ID: 2003649-002 **Matrix:** SOIL
Received Date: 3/12/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/19/2020 2:09:26 PM	51212
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	1900	47		mg/Kg	10	3/21/2020 2:40:42 AM	51122
Surr: BFB	113	70-130		%Rec	10	3/21/2020 2:40:42 AM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	370	9.9		mg/Kg	1	3/19/2020 12:19:19 AM	51124
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2020 12:19:19 AM	51124
Surr: DNOP	99.5	55.1-146		%Rec	1	3/19/2020 12:19:19 AM	51124
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	0.60	0.24		mg/Kg	10	3/21/2020 2:40:42 AM	51122
Toluene	15	0.47		mg/Kg	10	3/21/2020 2:40:42 AM	51122
Ethylbenzene	2.0	0.47		mg/Kg	10	3/21/2020 2:40:42 AM	51122
Xylenes, Total	45	0.95		mg/Kg	10	3/21/2020 2:40:42 AM	51122
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%Rec	10	3/21/2020 2:40:42 AM	51122
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	10	3/21/2020 2:40:42 AM	51122
Surr: Dibromofluoromethane	96.0	70-130		%Rec	10	3/21/2020 2:40:42 AM	51122
Surr: Toluene-d8	97.6	70-130		%Rec	10	3/21/2020 2:40:42 AM	51122

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-3 @ 55'
Project: Harvest Midstream Trunk S
Collection Date: 3/10/2020 9:40:00 AM
Lab ID: 2003649-003 **Matrix:** SOIL
Received Date: 3/12/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/19/2020 2:21:47 PM	51212
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/23/2020 5:15:24 PM	51122
Surr: BFB	106	70-130		%Rec	1	3/23/2020 5:15:24 PM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/17/2020 1:02:57 PM	51124
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/17/2020 1:02:57 PM	51124
Surr: DNOP	99.2	55.1-146		%Rec	1	3/17/2020 1:02:57 PM	51124
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	3/23/2020 5:15:24 PM	51122
Toluene	ND	0.049		mg/Kg	1	3/23/2020 5:15:24 PM	51122
Ethylbenzene	ND	0.049		mg/Kg	1	3/23/2020 5:15:24 PM	51122
Xylenes, Total	ND	0.097		mg/Kg	1	3/23/2020 5:15:24 PM	51122
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%Rec	1	3/23/2020 5:15:24 PM	51122
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	3/23/2020 5:15:24 PM	51122
Surr: Dibromofluoromethane	99.9	70-130		%Rec	1	3/23/2020 5:15:24 PM	51122
Surr: Toluene-d8	98.2	70-130		%Rec	1	3/23/2020 5:15:24 PM	51122

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-4 @ 39'
Project: Harvest Midstream Trunk S
Collection Date: 3/10/2020 1:11:00 PM
Lab ID: 2003649-004 **Matrix:** SOIL
Received Date: 3/12/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/19/2020 2:34:08 PM	51212
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/23/2020 5:43:55 PM	51122
Surr: BFB	103	70-130		%Rec	1	3/23/2020 5:43:55 PM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/17/2020 1:26:50 PM	51124
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/17/2020 1:26:50 PM	51124
Surr: DNOP	101	55.1-146		%Rec	1	3/17/2020 1:26:50 PM	51124
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	3/23/2020 5:43:55 PM	51122
Toluene	ND	0.049		mg/Kg	1	3/23/2020 5:43:55 PM	51122
Ethylbenzene	ND	0.049		mg/Kg	1	3/23/2020 5:43:55 PM	51122
Xylenes, Total	ND	0.098		mg/Kg	1	3/23/2020 5:43:55 PM	51122
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%Rec	1	3/23/2020 5:43:55 PM	51122
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	3/23/2020 5:43:55 PM	51122
Surr: Dibromofluoromethane	97.2	70-130		%Rec	1	3/23/2020 5:43:55 PM	51122
Surr: Toluene-d8	97.7	70-130		%Rec	1	3/23/2020 5:43:55 PM	51122

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-4 @ 53'
Project: Harvest Midstream Trunk S
Collection Date: 3/10/2020 2:25:00 PM
Lab ID: 2003649-005 **Matrix:** SOIL
Received Date: 3/12/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/19/2020 2:46:29 PM	51212
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2020 4:06:22 AM	51122
Surr: BFB	100	70-130		%Rec	1	3/21/2020 4:06:22 AM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/17/2020 1:50:48 PM	51124
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/17/2020 1:50:48 PM	51124
Surr: DNOP	97.1	55.1-146		%Rec	1	3/17/2020 1:50:48 PM	51124
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	3/21/2020 4:06:22 AM	51122
Toluene	ND	0.050		mg/Kg	1	3/21/2020 4:06:22 AM	51122
Ethylbenzene	ND	0.050		mg/Kg	1	3/21/2020 4:06:22 AM	51122
Xylenes, Total	ND	0.10		mg/Kg	1	3/21/2020 4:06:22 AM	51122
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%Rec	1	3/21/2020 4:06:22 AM	51122
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	3/21/2020 4:06:22 AM	51122
Surr: Dibromofluoromethane	96.3	70-130		%Rec	1	3/21/2020 4:06:22 AM	51122
Surr: Toluene-d8	102	70-130		%Rec	1	3/21/2020 4:06:22 AM	51122

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003649**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-51212**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **51212**	RunNo: **67421**
Prep Date: **3/19/2020**	Analysis Date: **3/19/2020**	SeqNo: **2326742** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51212**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **51212**	RunNo: **67421**
Prep Date: **3/19/2020**	Analysis Date: **3/19/2020**	SeqNo: **2326743** 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003649**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51100**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51100**	RunNo: **67313**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321410** 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			

Sample ID: **MB-51100**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51100**	RunNo: **67313**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321412** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.4	55.1	146			

Sample ID: **MB-51124**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51124**	RunNo: **67317**
Prep Date: **3/16/2020**	Analysis Date: **3/17/2020**	SeqNo: **2323831** 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	9.7		10.00		96.5	55.1	146			

Sample ID: **LCS-51124**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51124**	RunNo: **67317**
Prep Date: **3/16/2020**	Analysis Date: **3/17/2020**	SeqNo: **2323832** 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	70	130			
Surr: DNOP	4.7		5.000		94.2	55.1	146			

Sample ID: **MB-51159**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51159**	RunNo: **67371**
Prep Date: **3/17/2020**	Analysis Date: **3/18/2020**	SeqNo: **2324944** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		94.9	55.1	146			

Sample ID: **LCS-51159**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51159**	RunNo: **67371**
Prep Date: **3/17/2020**	Analysis Date: **3/18/2020**	SeqNo: **2324945** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.6	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003649**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51201**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51201**	RunNo: **67313**
Prep Date: **3/18/2020**	Analysis Date: **3/20/2020**	SeqNo: **2326279** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		77.7	55.1	146			

Sample ID: **MB-51201**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51201**	RunNo: **67313**
Prep Date: **3/18/2020**	Analysis Date: **3/20/2020**	SeqNo: **2326281** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		86.0	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003649**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **lcs-51122**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2324955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.4	70	130			
Toluene	1.1	0.050	1.000	0	107	70	130			
Ethylbenzene	1.1	0.050	1.000	0	109	70	130			
Xylenes, Total	3.3	0.10	3.000	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.7	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID: **mb-51122**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2324956** 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: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.5	70	130			
Surr: Toluene-d8	0.52		0.5000		103	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003649**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **lcs-51122**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2325012** 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	87.3	70	130			
Surr: BFB	500		500.0		100	70	130			

Sample ID: **mb-51122**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2325013** 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	490		500.0		98.4	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2003649** RcptNo: 1

Received By: **Yazmine Garduno** **3/12/2020 8:30:00 AM**

Completed By: **Erin Melendrez** **3/13/2020 2:41:57 PM**

Reviewed By: DAD 3/16/20

Chain of Custody

1. Is Chain of Custody sufficiently 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 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 ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
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? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SR 3/16/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good				
2	3.7	Good				

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush_____

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
Eddie Hubbert
Elizabeth McNally

Sampler:
On Ice: ☑ Yes ☐ No
# of Coolers: 2
Cooler Temp(including CF): 3.5+0.1=3.6
3.6+0.1=3.7

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2003049	BTEX (8021)	TPH (GRO,DRO,MRO) (8015)	Chlorides (300.0)	SM 2320B	120.1	SM 2540C
3-9-20	16:09	Soil	SB-3 @ 19'	2/3 - 4oz jars	cool	-001	X	X	X			
3-10-20	8:49	Soil	SB-3 @ 49'	"	"	-002	X	X	X			
3-10-20	9:40	Soil	SB-3 @ 55'	"	"	-003	X	X	X			
3-10-20	13:11	Soil	SB-4 @ 39'	2-4oz jars	cool	-004	X	X	X			
3-10-20	1425	Soil	SB-4 @ 53'	"	"	-005	X	X	X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/11/20	1647				3/11/20	1647
3/11/20	1804			courier	3/12/20	0830

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 25, 2020

Eddie Hubbert

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX: (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 2003651

Dear Eddie Hubbert:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/13/2020 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-5 @ 34'
Project: Harvest Midstream Trunk S
Collection Date: 3/11/2020 11:08:00 AM
Lab ID: 2003651-001 **Matrix:** SOIL
Received Date: 3/13/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/19/2020 3:23:31 PM	51212
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2020 4:34:52 AM	51122
Surr: BFB	98.8	70-130		%Rec	1	3/21/2020 4:34:52 AM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/17/2020 2:14:49 PM	51124
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/17/2020 2:14:49 PM	51124
Surr: DNOP	99.0	55.1-146		%Rec	1	3/17/2020 2:14:49 PM	51124
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	3/21/2020 4:34:52 AM	51122
Toluene	ND	0.049		mg/Kg	1	3/21/2020 4:34:52 AM	51122
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2020 4:34:52 AM	51122
Xylenes, Total	ND	0.099		mg/Kg	1	3/21/2020 4:34:52 AM	51122
Surr: 1,2-Dichloroethane-d4	80.1	70-130		%Rec	1	3/21/2020 4:34:52 AM	51122
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	3/21/2020 4:34:52 AM	51122
Surr: Dibromofluoromethane	93.4	70-130		%Rec	1	3/21/2020 4:34:52 AM	51122
Surr: Toluene-d8	101	70-130		%Rec	1	3/21/2020 4:34:52 AM	51122

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-5 @ 59'
Project: Harvest Midstream Trunk S
Collection Date: 3/11/2020 1:09:00 PM
Lab ID: 2003651-002 **Matrix:** SOIL
Received Date: 3/13/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/19/2020 4:00:35 PM	51212
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2020 5:03:28 AM	51122
Surr: BFB	95.6	70-130		%Rec	1	3/21/2020 5:03:28 AM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/17/2020 2:38:55 PM	51124
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/17/2020 2:38:55 PM	51124
Surr: DNOP	97.9	55.1-146		%Rec	1	3/17/2020 2:38:55 PM	51124
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	3/21/2020 5:03:28 AM	51122
Toluene	ND	0.048		mg/Kg	1	3/21/2020 5:03:28 AM	51122
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2020 5:03:28 AM	51122
Xylenes, Total	ND	0.096		mg/Kg	1	3/21/2020 5:03:28 AM	51122
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%Rec	1	3/21/2020 5:03:28 AM	51122
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	3/21/2020 5:03:28 AM	51122
Surr: Dibromofluoromethane	93.5	70-130		%Rec	1	3/21/2020 5:03:28 AM	51122
Surr: Toluene-d8	98.0	70-130		%Rec	1	3/21/2020 5:03:28 AM	51122

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003651**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-51212**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **51212**	RunNo: **67421**
Prep Date: **3/19/2020**	Analysis Date: **3/19/2020**	SeqNo: **2326742** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51212**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **51212**	RunNo: **67421**
Prep Date: **3/19/2020**	Analysis Date: **3/19/2020**	SeqNo: **2326743** 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003651**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51100**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51100**	RunNo: **67313**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321410** 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			

Sample ID: **MB-51100**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51100**	RunNo: **67313**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321412** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.4	55.1	146			

Sample ID: **MB-51124**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51124**	RunNo: **67317**
Prep Date: **3/16/2020**	Analysis Date: **3/17/2020**	SeqNo: **2323831** 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	9.7		10.00		96.5	55.1	146			

Sample ID: **LCS-51124**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51124**	RunNo: **67317**
Prep Date: **3/16/2020**	Analysis Date: **3/17/2020**	SeqNo: **2323832** 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	70	130			
Surr: DNOP	4.7		5.000		94.2	55.1	146			

Sample ID: **MB-51159**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51159**	RunNo: **67371**
Prep Date: **3/17/2020**	Analysis Date: **3/18/2020**	SeqNo: **2324944** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		94.9	55.1	146			

Sample ID: **LCS-51159**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51159**	RunNo: **67371**
Prep Date: **3/17/2020**	Analysis Date: **3/18/2020**	SeqNo: **2324945** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.6	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003651**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51201**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51201**	RunNo: **67313**
Prep Date: **3/18/2020**	Analysis Date: **3/20/2020**	SeqNo: **2326279** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		77.7	55.1	146			

Sample ID: **MB-51201**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51201**	RunNo: **67313**
Prep Date: **3/18/2020**	Analysis Date: **3/20/2020**	SeqNo: **2326281** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		86.0	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003651**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **lcs-51122** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **LCSS** Batch ID: **51122** RunNo: **67409**

Prep Date: **3/16/2020** Analysis Date: **3/18/2020** SeqNo: **2324955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.4	70	130			
Toluene	1.1	0.050	1.000	0	107	70	130			
Ethylbenzene	1.1	0.050	1.000	0	109	70	130			
Xylenes, Total	3.3	0.10	3.000	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.7	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID: **mb-51122** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **51122** RunNo: **67409**

Prep Date: **3/16/2020** Analysis Date: **3/18/2020** SeqNo: **2324956** 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: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.5	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003651**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **lcs-51122**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2325012** 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	87.3	70	130			
Surr: BFB	500		500.0		100	70	130			

Sample ID: **mb-51122**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2325013** 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	490		500.0		98.4	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2003651** RcptNo: 1

Received By: **Juan Rojas** **3/13/2020 8:10:00 AM**

Completed By: **Erin Melendrez** **3/13/2020 2:55:23 PM**

Reviewed By: DAD 3/16/20

Chain of Custody

1. Is Chain of Custody sufficiently 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	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 ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
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? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 3/16/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good				
2	3.7	Good				

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush_____

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
Eddie Hubbert
Elizabeth McNally

Sampler: CL

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.1-0.1=1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2003051	BTEX (8021)	TPH (GRO,DRO,MRO) (8015)	Chlorides (300.0)	SM 2320B	120.1	SM 2540C
3-11-20	11:08	Soil	SB-5 @ 34'	2-4oz jars	cool	-001	X	X	X			
3-11-20	13:09	Soil	SB-5 @ 59'	2-4oz jars	cool	-002	X	X	X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/12/20	1314			Walk	3/12/20	1314
3/12/20	1840			courier	3/13/20	8:10

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 25, 2020

Eddie Hubbert

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX: (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 2003679

Dear Eddie Hubbert:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/14/2020 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-6 @ 19'
Project: Harvest Midstream Trunk S
Collection Date: 3/11/2020 3:20:00 PM
Lab ID: 2003679-001 **Matrix:** SOIL
Received Date: 3/14/2020 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	59		mg/Kg	20	3/22/2020 9:52:10 AM	51249
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2020 5:31:57 AM	51122
Surr: BFB	95.4	70-130		%Rec	1	3/21/2020 5:31:57 AM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/19/2020 5:53:08 AM	51152
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2020 5:53:08 AM	51152
Surr: DNOP	96.8	55.1-146		%Rec	1	3/19/2020 5:53:08 AM	51152
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	3/21/2020 5:31:57 AM	51122
Toluene	ND	0.049		mg/Kg	1	3/21/2020 5:31:57 AM	51122
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2020 5:31:57 AM	51122
Xylenes, Total	ND	0.099		mg/Kg	1	3/21/2020 5:31:57 AM	51122
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%Rec	1	3/21/2020 5:31:57 AM	51122
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	3/21/2020 5:31:57 AM	51122
Surr: Dibromofluoromethane	95.1	70-130		%Rec	1	3/21/2020 5:31:57 AM	51122
Surr: Toluene-d8	98.6	70-130		%Rec	1	3/21/2020 5:31:57 AM	51122

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-6 @ 29'
Project: Harvest Midstream Trunk S
Collection Date: 3/12/2020 8:23:00 AM
Lab ID: 2003679-002 **Matrix:** SOIL
Received Date: 3/14/2020 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/22/2020 10:04:32 AM	51249
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2020 6:00:24 AM	51122
Surr: BFB	97.2	70-130		%Rec	1	3/21/2020 6:00:24 AM	51122
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/19/2020 6:16:56 AM	51152
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2020 6:16:56 AM	51152
Surr: DNOP	95.3	55.1-146		%Rec	1	3/19/2020 6:16:56 AM	51152
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	3/21/2020 6:00:24 AM	51122
Toluene	ND	0.049		mg/Kg	1	3/21/2020 6:00:24 AM	51122
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2020 6:00:24 AM	51122
Xylenes, Total	ND	0.098		mg/Kg	1	3/21/2020 6:00:24 AM	51122
Surr: 1,2-Dichloroethane-d4	88.4	70-130		%Rec	1	3/21/2020 6:00:24 AM	51122
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	1	3/21/2020 6:00:24 AM	51122
Surr: Dibromofluoromethane	94.1	70-130		%Rec	1	3/21/2020 6:00:24 AM	51122
Surr: Toluene-d8	97.1	70-130		%Rec	1	3/21/2020 6:00:24 AM	51122

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003679**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-51249**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **51249**	RunNo: **67482**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2328900** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51249**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **51249**	RunNo: **67482**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2328901** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003679**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51100**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51100**	RunNo: **67313**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321410** 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			

Sample ID: **MB-51100**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51100**	RunNo: **67313**
Prep Date: **3/13/2020**	Analysis Date: **3/17/2020**	SeqNo: **2321412** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.4	55.1	146			

Sample ID: **LCS-51152**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51152**	RunNo: **67313**
Prep Date: **3/17/2020**	Analysis Date: **3/19/2020**	SeqNo: **2325138** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.6	70	130			
Surr: DNOP	4.1		5.000		81.4	55.1	146			

Sample ID: **MB-51152**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51152**	RunNo: **67313**
Prep Date: **3/17/2020**	Analysis Date: **3/19/2020**	SeqNo: **2325139** 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	55.1	146			

Sample ID: **LCS-51201**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51201**	RunNo: **67313**
Prep Date: **3/18/2020**	Analysis Date: **3/20/2020**	SeqNo: **2326279** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		77.7	55.1	146			

Sample ID: **MB-51201**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51201**	RunNo: **67313**
Prep Date: **3/18/2020**	Analysis Date: **3/20/2020**	SeqNo: **2326281** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		86.0	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003679**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **lcs-51122** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **LCSS** Batch ID: **51122** RunNo: **67409**

Prep Date: **3/16/2020** Analysis Date: **3/18/2020** SeqNo: **2324955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.4	70	130			
Toluene	1.1	0.050	1.000	0	107	70	130			
Ethylbenzene	1.1	0.050	1.000	0	109	70	130			
Xylenes, Total	3.3	0.10	3.000	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.7	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID: **mb-51122** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **51122** RunNo: **67409**

Prep Date: **3/16/2020** Analysis Date: **3/18/2020** SeqNo: **2324956** 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: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.5	70	130			
Surr: Toluene-d8	0.52		0.5000		103	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003679**

25-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **lcs-51122**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2325012** 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	87.3	70	130			
Surr: BFB	500		500.0		100	70	130			

Sample ID: **mb-51122**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51122**	RunNo: **67409**
Prep Date: **3/16/2020**	Analysis Date: **3/18/2020**	SeqNo: **2325013** 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	490		500.0		98.4	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2003679** RcptNo: 1

Received By: **Erin Melendrez** **3/14/2020 8:15:00 AM**

Completed By: **Erin Melendrez** **3/14/2020 11:16:24 AM**

Reviewed By: JR 3/16/20

Chain of Custody

1. Is Chain of Custody sufficiently 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	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 ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
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? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted?

Checked by: DAD 3/16/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good				
2	0.5	Good				

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush_____

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
~~Eddie Hubbert~~
Elizabeth McNally

Sampler: CL

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): 3.6+0.1(CF)=3.7°C
0.4+0.1(CF)=0.5°C

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX (8021)	TPH (GRO,DRO,MRO) (8015)	Chlorides (300.0)	SM 2320B	120.1	SM 2540C
3-11-20	15:20	Soil	SB-6 @ 19'	2/3 - 4oz jars	2-cool	-001	X	X	X			
3-12-20	8:23	Soil	SB-6 @ 29'	2-4oz jars	2-cool	-002	X	X	X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/13/20	1200		Christa Waele		3/13/20	1206
3/13/20	1815	BDuran		Courier	3/14/20	0815

Remarks:

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

Christa Waele

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 26, 2020

Elizabeth McNally

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 2003860

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 10 sample(s) on 3/17/2020 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-7@34'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 10:00:00 AM
Lab ID: 2003860-001 **Matrix:** SOIL **Received Date:** 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	59		mg/Kg	20	3/22/2020 2:23:46 PM	51249
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/23/2020 3:35:24 PM	51243
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/23/2020 3:35:24 PM	51243
Surr: DNOP	94.9	55.1-146		%Rec	1	3/23/2020 3:35:24 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2020 12:28:29 AM	51229
Surr: BFB	97.2	66.6-105		%Rec	1	3/22/2020 12:28:29 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	3/22/2020 12:28:29 AM	51229
Toluene	ND	0.049		mg/Kg	1	3/22/2020 12:28:29 AM	51229
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2020 12:28:29 AM	51229
Xylenes, Total	ND	0.099		mg/Kg	1	3/22/2020 12:28:29 AM	51229
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	3/22/2020 12:28:29 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-7@19'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 9:20:00 AM
Lab ID: 2003860-002 **Matrix:** SOIL **Received Date:** 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	3/22/2020 2:36:07 PM	51249
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/23/2020 4:47:00 PM	51243
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/23/2020 4:47:00 PM	51243
Surr: DNOP	95.8	55.1-146		%Rec	1	3/23/2020 4:47:00 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 12:52:05 AM	51229
Surr: BFB	103	66.6-105		%Rec	1	3/22/2020 12:52:05 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/22/2020 12:52:05 AM	51229
Toluene	ND	0.048		mg/Kg	1	3/22/2020 12:52:05 AM	51229
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 12:52:05 AM	51229
Xylenes, Total	0.16	0.096		mg/Kg	1	3/22/2020 12:52:05 AM	51229
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	3/22/2020 12:52:05 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-8@19'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 11:10:00 AM
Lab ID: 2003860-003 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	310	60		mg/Kg	20	3/22/2020 2:48:27 PM	51249
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	3/23/2020 5:10:52 PM	51243
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/23/2020 5:10:52 PM	51243
Surr: DNOP	96.9	55.1-146		%Rec	1	3/23/2020 5:10:52 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 1:15:39 AM	51229
Surr: BFB	97.1	66.6-105		%Rec	1	3/22/2020 1:15:39 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/22/2020 1:15:39 AM	51229
Toluene	ND	0.048		mg/Kg	1	3/22/2020 1:15:39 AM	51229
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 1:15:39 AM	51229
Xylenes, Total	ND	0.096		mg/Kg	1	3/22/2020 1:15:39 AM	51229
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	3/22/2020 1:15:39 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-8@29'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 11:35:00 AM
Lab ID: 2003860-004 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/22/2020 8:44:17 AM	51251
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/23/2020 5:34:44 PM	51243
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/23/2020 5:34:44 PM	51243
Surr: DNOP	95.8	55.1-146		%Rec	1	3/23/2020 5:34:44 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 1:39:15 AM	51229
Surr: BFB	95.8	66.6-105		%Rec	1	3/22/2020 1:39:15 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/22/2020 1:39:15 AM	51229
Toluene	ND	0.048		mg/Kg	1	3/22/2020 1:39:15 AM	51229
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 1:39:15 AM	51229
Xylenes, Total	ND	0.096		mg/Kg	1	3/22/2020 1:39:15 AM	51229
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	3/22/2020 1:39:15 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-9@19'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 1:00:00 PM
Lab ID: 2003860-005 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/22/2020 9:21:30 AM	51251
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/23/2020 5:58:29 PM	51243
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/23/2020 5:58:29 PM	51243
Surr: DNOP	93.1	55.1-146		%Rec	1	3/23/2020 5:58:29 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2020 2:02:52 AM	51229
Surr: BFB	93.6	66.6-105		%Rec	1	3/22/2020 2:02:52 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	3/22/2020 2:02:52 AM	51229
Toluene	ND	0.049		mg/Kg	1	3/22/2020 2:02:52 AM	51229
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2020 2:02:52 AM	51229
Xylenes, Total	ND	0.098		mg/Kg	1	3/22/2020 2:02:52 AM	51229
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	3/22/2020 2:02:52 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-9@29'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 1:20:00 PM
Lab ID: 2003860-006 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/22/2020 9:33:55 AM	51251
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/23/2020 6:22:14 PM	51243
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/23/2020 6:22:14 PM	51243
Surr: DNOP	96.6	55.1-146		%Rec	1	3/23/2020 6:22:14 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 2:26:23 AM	51229
Surr: BFB	92.8	66.6-105		%Rec	1	3/22/2020 2:26:23 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/22/2020 2:26:23 AM	51229
Toluene	ND	0.048		mg/Kg	1	3/22/2020 2:26:23 AM	51229
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 2:26:23 AM	51229
Xylenes, Total	ND	0.097		mg/Kg	1	3/22/2020 2:26:23 AM	51229
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	3/22/2020 2:26:23 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-10@19'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 2:15:00 PM
Lab ID: 2003860-007 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/22/2020 9:46:19 AM	51251
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/23/2020 7:55:47 PM	51243
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/23/2020 7:55:47 PM	51243
Surr: DNOP	83.4	55.1-146		%Rec	1	3/23/2020 7:55:47 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2020 2:49:53 AM	51229
Surr: BFB	92.8	66.6-105		%Rec	1	3/22/2020 2:49:53 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/22/2020 2:49:53 AM	51229
Toluene	ND	0.049		mg/Kg	1	3/22/2020 2:49:53 AM	51229
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2020 2:49:53 AM	51229
Xylenes, Total	ND	0.097		mg/Kg	1	3/22/2020 2:49:53 AM	51229
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	3/22/2020 2:49:53 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-10@29'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 2:35:00 PM
Lab ID: 2003860-008 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/22/2020 9:58:44 AM	51251
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/23/2020 8:20:07 PM	51243
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/23/2020 8:20:07 PM	51243
Surr: DNOP	86.3	55.1-146		%Rec	1	3/23/2020 8:20:07 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 3:13:26 AM	51229
Surr: BFB	97.7	66.6-105		%Rec	1	3/22/2020 3:13:26 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/22/2020 3:13:26 AM	51229
Toluene	ND	0.048		mg/Kg	1	3/22/2020 3:13:26 AM	51229
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 3:13:26 AM	51229
Xylenes, Total	ND	0.096		mg/Kg	1	3/22/2020 3:13:26 AM	51229
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	3/22/2020 3:13:26 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-11@19'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 3:40:00 PM
Lab ID: 2003860-009 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	3/22/2020 10:11:08 AM	51251
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/23/2020 8:44:22 PM	51243
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/23/2020 8:44:22 PM	51243
Surr: DNOP	91.0	55.1-146		%Rec	1	3/23/2020 8:44:22 PM	51243
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2020 3:36:58 AM	51229
Surr: BFB	97.2	66.6-105		%Rec	1	3/22/2020 3:36:58 AM	51229
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	3/22/2020 3:36:58 AM	51229
Toluene	ND	0.049		mg/Kg	1	3/22/2020 3:36:58 AM	51229
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2020 3:36:58 AM	51229
Xylenes, Total	0.11	0.099		mg/Kg	1	3/22/2020 3:36:58 AM	51229
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	3/22/2020 3:36:58 AM	51229

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SB-11@29'
Project: Harvest Midstream Trunk S
Collection Date: 3/16/2020 3:50:00 PM
Lab ID: 2003860-010 **Matrix:** SOIL
Received Date: 3/17/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	61		mg/Kg	20	3/22/2020 10:48:23 AM	51251
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 2:23:05 AM	51242
Surr: BFB	106	70-130		%Rec	1	3/22/2020 2:23:05 AM	51242
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/23/2020 9:08:40 PM	51243
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/23/2020 9:08:40 PM	51243
Surr: DNOP	90.1	55.1-146		%Rec	1	3/23/2020 9:08:40 PM	51243
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	3/22/2020 2:23:05 AM	51242
Toluene	ND	0.048		mg/Kg	1	3/22/2020 2:23:05 AM	51242
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 2:23:05 AM	51242
Xylenes, Total	ND	0.097		mg/Kg	1	3/22/2020 2:23:05 AM	51242
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	3/22/2020 2:23:05 AM	51242
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	3/22/2020 2:23:05 AM	51242
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/22/2020 2:23:05 AM	51242
Surr: Toluene-d8	99.6	70-130		%Rec	1	3/22/2020 2:23:05 AM	51242

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003860**

26-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-51249**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **51249**	RunNo: **67482**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2328900** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51249**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **51249**	RunNo: **67482**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2328901** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Sample ID: **MB-51251**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **51251**	RunNo: **67489**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2329146** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51251**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **51251**	RunNo: **67489**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2329147** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003860**

26-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51240**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51240**	RunNo: **67492**
Prep Date: **3/20/2020**	Analysis Date: **3/23/2020**	SeqNo: **2329264** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.4	55.1	146			

Sample ID: **MB-51240**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51240**	RunNo: **67492**
Prep Date: **3/20/2020**	Analysis Date: **3/23/2020**	SeqNo: **2329265** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.7		10.00		97.4	55.1	146			

Sample ID: **MB-51243**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51243**	RunNo: **67488**
Prep Date: **3/20/2020**	Analysis Date: **3/23/2020**	SeqNo: **2329303** 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	9.0		10.00		89.5	55.1	146			

Sample ID: **LCS-51243**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51243**	RunNo: **67488**
Prep Date: **3/20/2020**	Analysis Date: **3/23/2020**	SeqNo: **2329304** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.7	70	130			
Surr: DNOP	4.5		5.000		89.5	55.1	146			

Sample ID: **2003860-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SB-7@34'**	Batch ID: **51243**	RunNo: **67488**
Prep Date: **3/20/2020**	Analysis Date: **3/23/2020**	SeqNo: **2330207** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.1	45.50	0	94.0	47.4	136			
Surr: DNOP	4.3		4.550		95.2	55.1	146			

Sample ID: **2003860-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SB-7@34'**	Batch ID: **51243**	RunNo: **67488**
Prep Date: **3/20/2020**	Analysis Date: **3/23/2020**	SeqNo: **2330208** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.7	48.40	0	91.3	47.4	136	3.33	43.4	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003860**
26-Mar-20

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **2003860-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SB-7@34'** Batch ID: **51243** RunNo: **67488**
Prep Date: **3/20/2020** Analysis Date: **3/23/2020** SeqNo: **2330208** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		4.840		91.2	55.1	146	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003860**

26-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **lcs-51229**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51229**	RunNo: **67473**
Prep Date: **3/19/2020**	Analysis Date: **3/21/2020**	SeqNo: **2328341** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.0	80	120			
Surr: BFB	1100		1000		108	66.6	105			S

Sample ID: **mb-51229**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **51229**	RunNo: **67473**
Prep Date: **3/19/2020**	Analysis Date: **3/21/2020**	SeqNo: **2328342** 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	930		1000		93.1	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003860**

26-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51229**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **51229**	RunNo: **67473**
Prep Date: **3/19/2020**	Analysis Date: **3/21/2020**	SeqNo: **2328368** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.2	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.5	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID: **mb-51229**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **51229**	RunNo: **67473**
Prep Date: **3/19/2020**	Analysis Date: **3/21/2020**	SeqNo: **2328369** Units: **mg/Kg**

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

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003860**
26-Mar-20

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **mb-51242** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **51242** RunNo: **67487**
Prep Date: **3/20/2020** Analysis Date: **3/22/2020** SeqNo: **2329072** 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: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.2	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.49		0.5000		97.6	70	130			

Sample ID: **lcs-51242** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS** Batch ID: **51242** RunNo: **67487**
Prep Date: **3/20/2020** Analysis Date: **3/22/2020** SeqNo: **2329073** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.9	70	130			
Toluene	0.90	0.050	1.000	0	90.4	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.1	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.47		0.5000		94.7	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003860**

26-Mar-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **mb-51242**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51242**	RunNo: **67487**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2329193** 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	540		500.0		108	70	130			

Sample ID: **lcs-51242**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51242**	RunNo: **67487**
Prep Date: **3/20/2020**	Analysis Date: **3/22/2020**	SeqNo: **2329194** 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	70	130			
Surr: BFB	530		500.0		107	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2003860** RcptNo: 1

Received By: **Isaiah Ortiz** **3/17/2020 11:40:00 AM** I-OK

Completed By: **Yazmine Garduno** **3/18/2020 2:48:50 PM** Yazmine Garduno

Reviewed By: JR 3/19/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

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 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 ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
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? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good				

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
Elizabeth McNally

Sampler: E. Hubbert

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.3-0 (+) 0.3 °C

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2003860	BTEX (8021)	TPH (GRO,DRO,MRO) (8015)	Chlorides (300.0)	SM 2320B	120.1	SM 2540C
3/16/20	1000	Soil	SB-7 @ 34'	3-4oz jars	cool	-001	X	X	X			
3/16/20	920	Soil	SB-7 @ 19'	2-4oz	cool	-002	X	X	X			
3/16/20	1110	Soil	SB-8 @ 19'	2-4oz	cool	-003	X	X	X			
3/16/20	1135	Soil	SB-8 @ 29'	2-4oz	cool	-004	X	X	X			
3/16/20	1300	Soil	SB-9 @ 19'	2-4oz	cool	-005	X	X	X			
3/16/20	1320	Soil	SB-9 @ 29'	2-4oz	cool	-006	X	X	X			
3/16/20	1415	Soil	SB-10 @ 19'	2-4oz	cool	-007	X	X	X			
3/16/20	1435	Soil	SB-10 @ 29'	2-4oz	cool	-008	X	X	X			
3/16/20	1540	Soil	SB-11 @ 19'	2-4oz	cool	-009	X	X	X			
3/16/20	1550	Soil	SB-11 @ 29'	2-4oz	cool	-010	X	X	X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/17/20	1140			client	3/17/20	1140
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 07, 2020

Eddie Hubbert

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: Harvest Midstream Trunk S OrderNo.: 2003897

Dear Eddie Hubbert:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/19/2020 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 02, 2020.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2003897**
Date Reported: **5/7/2020**

CLIENT: Animas Environmental Services
Client Sample ID: Stockpile
Project: Harvest Midstream Trunk S
Collection Date: 3/18/2020 10:04:00 AM
Lab ID: 2003897-001 **Matrix:** SOIL
Received Date: 3/19/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	5.8	1.5		mg/Kg	5	3/24/2020 9:19:08 PM	51305
Chloride	180	7.5		mg/Kg	5	3/24/2020 9:19:08 PM	51305
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	3/24/2020 9:19:08 PM	51305
Bromide	ND	1.5		mg/Kg	5	3/24/2020 9:19:08 PM	51305
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	3/24/2020 9:19:08 PM	51305
Sulfate	72	7.5		mg/Kg	5	3/24/2020 9:19:08 PM	51305
RESISTIVITY AND EC SOIL						Analyst: **JMT**	
Conductivity	1420	100		µmhos/c	1	3/24/2020 4:31:00 PM	51284
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Calcium	6600	130		mg/Kg	5	3/27/2020 12:47:13 PM	51352
Magnesium	5400	130		mg/Kg	5	3/27/2020 8:13:03 AM	51352
Potassium	2400	260		mg/Kg	5	3/27/2020 12:47:13 PM	51352
Sodium	860	130		mg/Kg	5	3/27/2020 12:47:13 PM	51352

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Upgradient @ 1'
Project: Harvest Midstream Trunk S
Collection Date: 3/18/2020 10:12:00 AM
Lab ID: 2003897-002 **Matrix:** SOIL
Received Date: 3/19/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	ND	1.5		mg/Kg	5	3/24/2020 10:08:32 PM	51305
Chloride	2600	150		mg/Kg	100	3/26/2020 12:28:51 AM	51305
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	3/24/2020 10:08:32 PM	51305
Bromide	13	1.5		mg/Kg	5	3/24/2020 10:08:32 PM	51305
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	3/24/2020 10:08:32 PM	51305
Sulfate	21	7.5		mg/Kg	5	3/24/2020 10:08:32 PM	51305
RESISTIVITY AND EC SOIL						Analyst: **JMT**	
Conductivity	4800	100		µmhos/c	1	3/24/2020 4:31:00 PM	51284
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Calcium	2900	130		mg/Kg	5	3/27/2020 12:48:44 PM	51352
Magnesium	4200	130		mg/Kg	5	3/27/2020 8:14:36 AM	51352
Potassium	2400	250		mg/Kg	5	3/27/2020 12:48:44 PM	51352
Sodium	2900	130		mg/Kg	5	3/27/2020 12:48:44 PM	51352

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Upgradient @ 5'
Project: Harvest Midstream Trunk S
Collection Date: 3/18/2020 10:18:00 AM
Lab ID: 2003897-003 **Matrix:** SOIL
Received Date: 3/19/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	3.8	1.5		mg/Kg	5	3/24/2020 10:33:12 PM	51305
Chloride	1300	75		mg/Kg	50	3/26/2020 12:41:12 AM	51305
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	3/24/2020 10:33:12 PM	51305
Bromide	6.6	1.5		mg/Kg	5	3/24/2020 10:33:12 PM	51305
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	3/24/2020 10:33:12 PM	51305
Sulfate	48	7.5		mg/Kg	5	3/24/2020 10:33:12 PM	51305
RESISTIVITY AND EC SOIL						Analyst: **JMT**	
Conductivity	3140	100		µmhos/c	1	3/24/2020 4:31:00 PM	51284
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Calcium	7700	120		mg/Kg	5	3/27/2020 12:50:08 PM	51352
Magnesium	5100	120		mg/Kg	5	3/27/2020 8:16:08 AM	51352
Potassium	2100	240		mg/Kg	5	3/27/2020 12:50:08 PM	51352
Sodium	550	120		mg/Kg	5	3/27/2020 12:50:08 PM	51352

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Background @ 1'
Project: Harvest Midstream Trunk S
Collection Date: 3/18/2020 10:23:00 AM
Lab ID: 2003897-004 **Matrix:** SOIL
Received Date: 3/19/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	ND	1.5		mg/Kg	5	3/24/2020 10:57:54 PM	51305
Chloride	310	30		mg/Kg	20	3/24/2020 11:10:14 PM	51305
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	3/24/2020 10:57:54 PM	51305
Bromide	ND	1.5		mg/Kg	5	3/24/2020 10:57:54 PM	51305
Nitrogen, Nitrate (As N)	1.6	1.5		mg/Kg	5	3/24/2020 10:57:54 PM	51305
Sulfate	ND	7.5		mg/Kg	5	3/24/2020 10:57:54 PM	51305
RESISTIVITY AND EC SOIL						Analyst: **JMT**	
Conductivity	1550	100		µmhos/c	1	3/24/2020 4:31:00 PM	51284
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Calcium	3200	130		mg/Kg	5	3/27/2020 12:51:39 PM	51352
Magnesium	4000	130		mg/Kg	5	3/27/2020 8:17:41 AM	51352
Potassium	1800	260		mg/Kg	5	3/27/2020 12:51:39 PM	51352
Sodium	710	130		mg/Kg	5	3/27/2020 12:51:39 PM	51352

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Background @ 3'
Project: Harvest Midstream Trunk S
Collection Date: 3/18/2020 10:34:00 AM
Lab ID: 2003897-005 **Matrix:** SOIL
Received Date: 3/19/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	1.7	1.5		mg/Kg	5	3/24/2020 11:47:17 PM	51305
Chloride	340	30		mg/Kg	20	3/24/2020 11:59:37 PM	51305
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	3/24/2020 11:47:17 PM	51305
Bromide	ND	1.5		mg/Kg	5	3/24/2020 11:47:17 PM	51305
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	3/24/2020 11:47:17 PM	51305
Sulfate	ND	7.5		mg/Kg	5	3/24/2020 11:47:17 PM	51305
RESISTIVITY AND EC SOIL						Analyst: **JMT**	
Conductivity	1530	100		µmhos/c	1	3/24/2020 4:31:00 PM	51284
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Calcium	9300	120		mg/Kg	5	3/27/2020 12:57:28 PM	51352
Magnesium	4700	120		mg/Kg	5	3/27/2020 8:19:14 AM	51352
Potassium	2000	250		mg/Kg	5	3/27/2020 12:57:28 PM	51352
Sodium	440	120		mg/Kg	5	3/27/2020 12:57:28 PM	51352

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

ANALYTICAL SUMMARY REPORT

May 07, 2020

Hall Environmental
4901 Hawkins St NE Ste D
Albuquerque, NM 87109-4372

Work Order: B20031868

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 5 samples for Hall Environmental on 3/25/2020 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B20031868-001	2003897-001B, Stockpile	03/18/20 10:04	03/25/20	Soil	Alkalinity, Water Extractable pH, 1:X Water Extractable DI Water Soil Extract ASA10-3
B20031868-002	2003897-002B, Upgradient @ 1 Foot	03/18/20 10:12	03/25/20	Soil	Same As Above
B20031868-003	2003897-003B, Upgradient @ 5 Feet	03/18/20 10:18	03/25/20	Soil	Same As Above
B20031868-004	2003897-004B, Background @ 1 Foot	03/18/20 10:23	03/25/20	Soil	Same As Above
B20031868-005	2003897-005B, Background @ 3 Feet	03/18/20 10:34	03/25/20	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By: Cindy Rohrer
Laboratory Manager

Digitally signed by
Cindy Rohrer
Date: 2020.05.07 08:13:33 -06:00

CLIENT: Hall Environmental
Project: Not Indicated
Work Order: B20031868

Revised Date: 05/07/20
Report Date: 04/01/20

CASE NARRATIVE

Revised Date: 5/7/2020

The pH of the sample extract prior to alkalinity titration was was added to all samples per the client's request.

The report has been revised and replaces any previously issued report in its entirety.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B20031868-001
Client Sample ID: 2003897-001B, Stockpile

Revised Date: 05/07/20
Report Date: 04/01/20
Collection Date: 03/18/20 10:04
DateReceived: 03/25/20
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
WATER EXTRACTABLE CONSTITUENTS							
pH, 1:2	8.3	s.u.		0.1		ASA10-3	03/31/20 11:43 / gie
Alkalinity, 1:2	202	mg/kg		4		ASA10-3	03/31/20 11:43 / gie

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B20031868-002
Client Sample ID: 2003897-002B, Upgradient @ 1 Foot

Revised Date: 05/07/20
Report Date: 04/01/20
Collection Date: 03/18/20 10:12
DateReceived: 03/25/20
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
WATER EXTRACTABLE CONSTITUENTS							
pH, 1:2	7.0	s.u.		0.1		ASA10-3	03/31/20 11:59 / gie
Alkalinity, 1:2	23	mg/kg		4		ASA10-3	03/31/20 11:59 / gie

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B20031868-003
Client Sample ID: 2003897-003B, Upgradient @ 5 Feet

Revised Date: 05/07/20
Report Date: 04/01/20
Collection Date: 03/18/20 10:18
DateReceived: 03/25/20
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
WATER EXTRACTABLE CONSTITUENTS							
pH, 1:2	7.6	s.u.		0.1		ASA10-3	03/31/20 12:05 / gie
Alkalinity, 1:2	56	mg/kg		4		ASA10-3	03/31/20 12:05 / gie

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B20031868-004
Client Sample ID: 2003897-004B, Background @ 1 Foot

Revised Date: 05/07/20
Report Date: 04/01/20
Collection Date: 03/18/20 10:23
DateReceived: 03/25/20
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
WATER EXTRACTABLE CONSTITUENTS							
pH, 1:2	7.3	s.u.		0.1		ASA10-3	03/31/20 12:13 / gie
Alkalinity, 1:2	32	mg/kg		4		ASA10-3	03/31/20 12:13 / gie

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B20031868-005
Client Sample ID: 2003897-005B, Background @ 3 Feet

Revised Date: 05/07/20
Report Date: 04/01/20
Collection Date: 03/18/20 10:34
DateReceived: 03/25/20
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
WATER EXTRACTABLE CONSTITUENTS							
pH, 1:2	8.0	s.u.		0.1		ASA10-3	03/31/20 12:20 / gie
Alkalinity, 1:2	94	mg/kg		4		ASA10-3	03/31/20 12:20 / gie

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 05/07/20

Client: Hall Environmental

Work Order: B20031868

Report Date: 04/01/20

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **ASA10-3**										nalytical Run: ORIONVERSASTARPRO_200331B
Lab ID: **ICV**	Initial Calibration Verification Standard									03/31/20 09:34
pH, 1:2		8.00	s.u.	0.10	100	98	102			
Method: **ASA10-3**										Batch: 143215
Lab ID: **LCS-143215**	Laboratory Control Sample					Run: ORIONVERSASTARPRO_200				03/31/20 11:36
Alkalinity, 1:2		252	mg/kg	4.0	107	70	130			
Lab ID: **B20031868-001A DUP**	Sample Duplicate					Run: ORIONVERSASTARPRO_200				03/31/20 11:51
Alkalinity, 1:2		202	mg/kg	4.0				0.0	30	
Lab ID: **B20031868-001A DUP**	Sample Duplicate					Run: ORIONVERSASTARPRO_200				03/31/20 11:51
pH, 1:2		8.30	s.u.	0.10						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

Work Order Receipt Checklist

Hall Environmental

B20031868

Login completed by: Leslie S. Cadreau
Date Received: 3/25/2020
Reviewed by: BL2000\darcy
Received by: qej
Reviewed Date: 3/27/2020
Carrier name: Return-UPS NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☐	No ☑	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	3.2°C Blue Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

Sample 2003897-001B was received with a crack in the container. The sample contents were transferred to a new container.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

SUB CONTRACTOR	**Bil-Energy**	COMPANY	**Energy Laboratories**	PHONE **(800) 735-4489**	FAX **(406) 252-6069**
ADDRESS	**1120 South 27th Street**			ACCOUNT #	EMAIL
CITY, STATE, ZIP	**Billings, MT 59107**				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2003897-001B	Stockpile	4OZGU	Soil	3/18/2020 10:04:00 AM	1	Alkalinity
2	2003897-002B	Upgradient @ 1'	4OZGU	Soil	3/18/2020 10:12:00 AM	1	Alkalinity
3	2003897-003B	Upgradient @ 5'	4OZGU	Soil	3/18/2020 10:18:00 AM	1	Alkalinity
4	2003897-004B	Background @ 1'	4OZGU	Soil	3/18/2020 10:23:00 AM	1	Alkalinity
5	2003897-005B	Background @ 3'	4OZGU	Soil	3/18/2020 10:34:00 AM	1	Alkalinity

B200318608

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports Please e-mail results to lab@hallenvironmental.com Please return all coolers and blue ice Thank you

Relinquished By		Date 3/19/2020	Time 4:02 PM	Received By		Date	Time
Relinquished By		Date	Time	Received By		Date	Time
Relinquished By		Date	Time	Received By	Laurence Jones	3/19/2020	09:30

TAT Standard RUSH Next BD 2nd BD 3rd BD

REPORT TRANSMITTAL DESIRED

HARDCOPY (extra cost) FAX EMAIL ONLINE

FOR LAB USE ONLY

Temp of samples °C Attempt to Cool ?

Comments

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003897**

07-May-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **MB-51305** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **51305** RunNo: **67533**

Prep Date: **3/24/2020** Analysis Date: **3/24/2020** SeqNo: **2331634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrite (As N)	ND	0.30								
Bromide	ND	0.30								
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Sample ID: **LCS-51305** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **51305** RunNo: **67533**

Prep Date: **3/24/2020** Analysis Date: **3/24/2020** SeqNo: **2331635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.6	0.30	1.500	0	108	90	110			
Chloride	14	1.5	15.00	0	93.9	90	110			
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	94.4	90	110			
Bromide	7.2	0.30	7.500	0	96.3	90	110			
Nitrogen, Nitrate (As N)	7.3	0.30	7.500	0	96.7	90	110			
Sulfate	29	1.5	30.00	0	95.6	90	110			

Sample ID: **2003897-001AMS** SampType: **ms** TestCode: **EPA Method 300.0: Anions**

Client ID: **Stockpile** Batch ID: **51305** RunNo: **67533**

Prep Date: **3/24/2020** Analysis Date: **3/24/2020** SeqNo: **2331646** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	6.3	1.5	1.500	5.836	34.1	15	125			
Nitrogen, Nitrite (As N)	2.8	1.5	3.000	0	92.2	80.6	104			
Bromide	7.8	1.5	7.500	0	105	88.2	107			
Nitrogen, Nitrate (As N)	7.7	1.5	7.500	0	102	76	118			

Sample ID: **2003897-001AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**

Client ID: **Stockpile** Batch ID: **51305** RunNo: **67533**

Prep Date: **3/24/2020** Analysis Date: **3/24/2020** SeqNo: **2331647** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	6.2	1.5	1.500	5.836	23.5	15	125	2.52	20	
Nitrogen, Nitrite (As N)	2.8	1.5	3.000	0	92.8	80.6	104	0.732	20	
Bromide	7.8	1.5	7.500	0	104	88.2	107	0.698	20	
Nitrogen, Nitrate (As N)	7.7	1.5	7.500	0	102	76	118	0.0852	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
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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003897**

07-May-20

Client: Animas Environmental Services

Project: Harvest Midstream Trunk S

Sample ID: **LCS-51352**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **51352**	RunNo: **67628**
Prep Date: **3/26/2020**	Analysis Date: **3/27/2020**	SeqNo: **2334733** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2500	25	2500	0	102	80	120			
Magnesium	2700	25	2500	0	107	80	120			

Sample ID: **MB-51352**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51352**	RunNo: **67628**
Prep Date: **3/26/2020**	Analysis Date: **3/27/2020**	SeqNo: **2334735** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	25								
Magnesium	ND	25								

Sample ID: **MB-51352**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51352**	RunNo: **67628**
Prep Date: **3/26/2020**	Analysis Date: **3/27/2020**	SeqNo: **2334788** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	ND	50								
Sodium	39	25								

Sample ID: **LCS-51352**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **51352**	RunNo: **67628**
Prep Date: **3/26/2020**	Analysis Date: **3/27/2020**	SeqNo: **2334789** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	2500	50	2500	0	98.6	80	120			
Sodium	2600	25	2500	0	103	80	120			B

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003897**
07-May-20

Client: Animas Environmental Services
Project: Harvest Midstream Trunk S

Sample ID: **2003897-002ADUP** SampType: **DUP** TestCode: **Resistivity and eC Soil**
Client ID: **Upgradient @ 1'** Batch ID: **51284** RunNo: **67543**
Prep Date: **3/24/2020** Analysis Date: **3/24/2020** SeqNo: **2331433** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	4530	100						5.75	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
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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2003897** RcptNo: **1**

Received By: **Yazmine Garduno** **3/19/2020 8:00:00 AM**

Completed By: **Juan Rojas** **3/19/2020 11:45:05 AM**

Reviewed By: JR 3/19/20

Chain of Custody

1. Is Chain of Custody sufficiently 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 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 bottles checked for pH: 3/19/20 (<2 or >12 unless noted)

    Adjusted?
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
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? (If no, notify customer for authorization.) Yes ☑ No ☐

    Checked by:

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good				

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box8
Farmington, NM 87499-0008

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name:
Harvest Midstream Trunk S

Project #:

Project Manager:
Eddie Hubbert
Elizabeth McNally

Sampler: CL
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 2.3-0.3=2.0

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2003897	BTEX (8021)	TPH (GRO,DRO,MRO) (8015)	Chlorides (300.0)	SM 2320B Alkalinity	120.1	SM 2540C Cation/Anion List
3-18-20	10:04	Soil	Stockpile	1-9oz jar 3-4oz jars	cool cool	-001			X	X	X	X
	10:12		Upgradient @ 1'	1-9oz jar 1-4oz jar	2-cool	-002			X	X	X	X
	10:18		Upgradient @ 5'			-003			X	X	X	X
	10:23		Background @ 1'			-004			X	X	X	X
	10:34		Background @ 5'3'			-005			X	X	X	X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Remarks:
3/18/20	1618		Christine Walker		3/18/20	1618	
3/18/20	1910	Christine Walker		courier	3/19/20	0800	

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.

Sustainable Technologies

for a sustainable future

Assembly instructions

Solar Vapor Extraction System

By Sustainable Technologies

1800 Orion St. Ste. 101
Alameda, CA 945501
(510) 523-1122
www.sustech.cc

Sustainable Technologies

VARISUN

The Solar pump skid can be forklifted from the side and the back.

Sustainable Technologies

Removing shipping struts

Remove loose pieces of steel strut (you will need them later). Remove the struts that hold the front and back wings for shipping

Sustainable Technologies

VARISUN

Now you are ready to mount the braces on the back wing and lift the wings.

The braces will hold the wings up.

Front Wing:

Release the 3/8” bolts that are holding the wing for transport. Push the wing up until it is on the same plane as the other panels. Bolt down the brace to the front legs just above the cross members.

Back Wing:

CAUTION!! BE CAREFUL RISK OF CRASHING

- Use the provided long struts(104”) for the back wing braces.
- The braces are mounted to the “L” brackets, on the back of the wing; using (2)- 3/8” SS bolts an nuts each.

Front Wing is up

Sustainable Technologies

Solar

- Use a Material Lift or Forklift to lift back wing in place.
- Place forks under wing. Lift and move back to keep lift from hitting the solar panels.
- Lift very slowly watching the forks.

Sustainable Technologies

When the wing is high enough; attach the long braces to the back of wing(104” long).(picture below)

Bolt to the wings using (2)3/8”x1” SS bolts and cone nuts each. Always use a split washer and a flat washer.

Sustainable Technologies

Back wing lifted; braces hanging

Braces in position

Wing Brace bolting detail

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Install the 27” horizontal supports to the back wing braces; as shown in the picture

Sustainable Technologies

Control Panels

Lock the back wing hinges using 2 remaining braces. (that were bolted to the back Post for transport).

Use 3/8” x 1” bolts with unitstrut nuts.

FACE TO THE SOUTH!

We are done with the rack.

Sustainable Technologies

Electrical Connections

Solar Electrical Connections:

DC Connections: For systems with more than one POD

1-Attached VDC Liquid Tight Conduit to Pod #2 using one hole strap existing on the rail
2-Connect the MC-4 connectors, Terminate Ground wire in ground lug in Pod #2.

3- Install PV auxiliary Ground bar close to Solar control panel. Connect AWG # 8 Green or bare to the ground bar in the control panel ground bar.

Sustainable Technologies

Start UP

Vapor Extraction System Start up:

1. The ON OFF switch should be in the OFF position.
2. Push PV fuses IN_ S-1 & S-2. (if they are not already)
3- Turn DC disconnect ON inside the panel. The controllers should turn ON.
The LDC displays will blink.
3. Pull out E STOP switch.
4. Turn Blower switch to AUTO.
Turn Pump HoA to AUTO(if equipped)
the Blower should Run.
Pushing the Data bottom on the controller will show the running Amps, Voltage, frequency and Power
The VariSun controls will run the blower as fast as there is power available.
Frequency: 10 to 60 Hz.
AMPs: 4.6 HP Blower FLA 12 amps
Volts: 20 to 230 VAC

Sustainable Technologies

for a sustainable future

Call if you have any questions:

510-523-1122

1800 Orion St Suite 101 Alameda, CA 94501
510 523-1122 phone / 510 523-1123 fax
·License #772329 A, C-10, HAZ, HIC, 8(a), MBE, SBE,

Thank you