ENSOLUM

December 11, 2025

New Mexico Oil Conservation Division
New Mexico Energy, Minerals, and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: **Remediation Work Plan**
Salty Dog SWD 1
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: nAPP2430352742

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Work Plan* to address a historical release associated with the below grade tank (BGT) discovered at the Salty Dog Salt Water Disposal (SWD) 1 facility (Site). The Site is located on private land in Unit B, Section 1, Township 29 North, Range 15 West in within the municipal boundaries of the Town of Kirtland, San Juan County, New Mexico.

SITE BACKGROUND

On July 23, 2024, Hilcorp began to decommission on-site infrastructure which included a BGT. To satisfy BGT closure requirements per the Site closure plan submitted by Hilcorp on Form C-144 (dated May 15, 2023), one 5-point composite sample was collected from beneath the BGT following removal and analyzed for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and xylenes (BTEX), and chloride. This sample (Bottom Comp 7') contained TPH concentrations exceeding all applicable closure criteria in *Table I Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed* of Title 19, Chapter 15, Part 17 of the New Mexico Administrative Code (NMAC). Based on subsequent delineation sample results described below, the volume of the release was estimated to be greater than 5 barrels and a *Notification of Release* was submitted to the New Mexico Oil Conservation Division (NMOCD) on October 29, 2024. The NMOCD has assigned the Site Incident Number nAPP2430352742.

SITE CHARACTERIZATION

The Site is located on private land within the municipal boundaries of the Town of Kirtland, New Mexico. As part of the site characterization, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 12 and 13 of the New Mexico Administrative Code (NMAC). This information is further discussed below.

GEOLOGY AND HYDROGEOLOGY

The geology underlying the Site is the Late Cretaceous Fruitland Formation-Kirtland Shale. These two formations are difficult to distinguish and are often treated as a single unit (Stone, et. al., 1983). The Fruitland Formation consists of interbedded sandy shale, carbonaceous shale, clayey sandstone, coal,

and sandstone." The Kirtland Shale is characterized by a lower shale member, a middle sandstone member, and an upper shale member. These combined units' thickness ranges from 100 feet to 2,000 feet. Water bearing units within the Fruitland Formation-Kirtland Shale are largely untested and display variable hydrologic properties dependent on location (Stone, et. al., 1983). These formations contain the main coal reserves within the San Juan Basin. The primary aquifer within these formations typically yields small quantities of water and is not widely used for domestic and/or livestock supply. The Fruitland Formation-Kirtland Shale is underlain by the Pictured Cliffs Formation.

POTENTIAL SENSITIVE RECEPTORS

Potential nearby receptors were assessed through desktop reviews of United States Geological Survey (USGS) topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, New Mexico Office of the State Engineer (NMOSE) database, aerial photographs, and site-specific observations.

The depth of groundwater was established with a dry boring advanced to 51.5 feet below ground surface (bgs) at the Site (Appendix A). Boring BH02 was advanced to 51.5 feet bgs and the boring was left open for approximately 72 hours to allow for any potential groundwater present to recharge into the open hole. Ensolum revisited the Site on October 24, 2024 to assess the presence or absence of water in the boring, at which time it was confirmed no groundwater had accumulated within the noted timeframe using an oil/water interface probe. As such, groundwater was confirmed to be deeper than 51.5 feet bgs at the Site. This boring indicates the shallowest groundwater is greater than 50 feet bgs in this area. No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile from the Site.

The nearest significant watercourse to the Site is Stevens Arroyo, located approximately 0.5 miles northwest of the Site. In addition, the Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland. Of note, three evaporation ponds and two raw water ponds associated with the adjacent San Juan River Gas Plant were formerly located just north of the Site. It is reported these ponds were removed in the 1990s and are not classified as surface water bodies and/or wetlands. The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area not designated as medium, high, or critical potential karst by the Bureau of Land Management). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. A Site receptor map is shown on Figure 1.

SITE CLOSURE CRITERIA

Based on the information presented above and in accordance with the *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 NMAC), the following contaminants of concern (COC) and closure criteria should be applied to the Site.

- Chloride: 10,000 milligrams per kilogram (mg/kg)
- TPH as a combination of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO): 2,500 mg/kg
- A combination of GRO and DRO: 1,000 mg/kg
- A combination of benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 mg/kg
- Benzene: 10 mg/kg

However, because the Site is located within the Town of Kirtland, New Mexico municipal boundaries, the Town of Kirtland has requested that the most stringent closure criteria be applied to the Site, as listed below:

- Chloride: 600 milligrams per kilogram (mg/kg)
- Total Petroleum Hydrocarbons (TPH) as a combination of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO): 100 mg/kg
- A combination of BTEX: 50 mg/kg
- Benzene: 10 mg/kg

SITE INVESTIGATION ACTIVITIES

To investigate potential impacts, Hilcorp retained Ensolum to perform delineation activities at the Site. On August 8, 2024, initial investigation efforts were performed utilizing a backhoe to advance four potholes (PH01 through PH04) in close proximity to the former BGT location (shown on Figure 2). Soil was field screened for the presence of organic vapors using a calibrated photoionization detector (PID) and chloride concentrations with Hach® chloride QuanTab® test strips during the delineation effort and at least two samples from each pothole were collected for laboratory analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH following EPA Method 8015M/D, and chloride following EPA Method 300.

Based on elevated TPH results detected during the initial effort, eight additional potholes (PH05 through PH13) were advanced on September 4 and September 19, 2024. These potholes were advanced using an excavator to depths up to the maximum reach of the equipment of 18 feet bgs. During the investigation, an Ensolum geologist assessed the soil for petroleum hydrocarbon staining and odors. Soil samples were field screened in the same manner as described above. Based on field screening results, at least two soil samples were collected from each pothole directly into laboratory-provided jars and immediately placed on ice. Soil samples were collected from depth intervals indicating the greatest observed contamination based on field screening results and from the terminal depth of the boring. Samples were submitted for laboratory analysis of BTEX, TPH, and chloride using the methods described above.

In addition, eight hand auger locations (HA01 through HA08) were advanced up to 4 feet bgs on November 21 and December 19, 2024, to further delineate the release and assess potential naturally occurring chloride concentrations present at the Site. During hand auguring activities, an Ensolum geologist field screened using a PID and chloride test strips as described above. Soil samples were collected from depth intervals indicating the greatest concentrations based on field screening results and from the terminal depth of the boring. Soil samples were collected directly into laboratory-provided jars and immediately placed on ice. Samples were submitted laboratory analysis of TPH, BTEX, and/or chloride.

Laboratory analytical results from delineation activities are summarized in Table 1 and on Figures 2 and 3. Complete laboratory analytical reports are attached as Appendix B. Photographs taken during delineation activities are included in Appendix C.

DRILLING AND DEPTH TO WATER DETERMINATION

Based on the initial field screening and pothole sample results, drilling was required to determine depth to water at the Site and confirm delineation results near the former BGT. Drilling activities took place between October 21 to October 23, 2024 utilizing a hollow-stem auger drill rig operated by Enviro-Drill, Inc. A total of three borings (BH01 through BH03) were advanced to depths between 26 feet and 51.5 feet bgs. BH01 encountered shallow refusal at 26.5 feet bgs and was subsequently not sampled. BH02 was advanced to assess depth to groundwater and was advanced to 51.5 feet bgs. Lastly, boring

BH03 was advanced through the previously excavated BGT footprint to vertically delineate soil impacts near pothole PH01. Soil samples were collected from 20 feet to 21.5 feet bgs and 26 feet to 26.5 feet bgs from this boring for laboratory analysis.

During drilling, an Ensolum geologist logged lithology and field screened in the manner described above. Soil samples were collected from depth intervals indicating the greatest impacts based on field screening results and from the terminal depth of boring BH03. Soil samples were collected directly into laboratory-provided jars and immediately placed on ice. Samples were also submitted for laboratory analysis of TPH, BTEX, and chloride. Concentrations of these constituents did not exceed the NMOCD Table I Closure Criteria at the terminal depth and confirms vertical delineation at the Site.

Pothole, boring, and hand auger locations are presented on Figures 2 and 3 and analytical results are summarized in Table 1. Field boring logs and drillers logs are included in Appendix A.

BACKGROUND SOIL SAMPLING RESULTS AND UPDATED CLOSURE CRITERIA

Elevated chloride concentrations at the Site appear to be attributed to three former evaporation ponds and two raw-water ponds located north and northwest of the Site, associated with the adjacent San Juan River Gas Plant. Given these historical sources and their potential to contribute non–release-related chloride to shallow soils, a statistical framework is required to separate background conditions from release-derived impacts. Accordingly, the development of statistically defensible Background Threshold Values (BTVs) is necessary to differentiate naturally occurring or existing concentrations from potential releases.

A BTV is a statistically derived upper-bound concentration, typically expressed as an Upper Tolerance Limit (UTL), that defines the upper range of naturally occurring background concentrations for a given constituent. BTVs derived from a vetted background dataset are recognized by the EPA and the Interstate Technology & Regulatory Council (ITRC) as acceptable estimates of background concentrations and compliance limits (USEPA, 2015; ITRC, 2022). Analytical results at or below the BTV are interpreted as consistent with background conditions, whereas exceedances (considering spatial context and co-occurring hydrocarbons) are evaluated as potentially release-related.

Statistical analyses were conducted using EPA ProUCL Version 5.2 (USEPA, 2022). ProUCL provides a structured decision framework for environmental datasets that include non-detect values, skewed distributions, and heterogeneous geologic conditions. For each constituent, the BTV was established using a 95 % UTL with 95% coverage, consistent with EPA and ITRC guidance. A UTL is a statistical upper bound intended to contain a specified proportion of the background population (e.g., 95%) with a specified level of confidence (e.g., 95%). In environmental applications, the UTL represents the concentration below which the true background population is expected to fall.

Mathematically, a one-sided normal UTL is defined as:

$$UTL = x + K \cdot s$$

Where:

- x = sample mean
- S = sample standard deviation
- K = tolerance factor determined by sample size, confidence level, and distribution

UTLs are preferred over simple percentiles because they incorporate the uncertainty inherent in environmental datasets and provide a conservative, statistically defensible threshold when comparing Site data to background conditions.

Chloride concentrations from hand-auger borings HA02 through HA08 were selected to represent background conditions based on their off-pad locations and wide spatial distribution (Figure 3). The background dataset (n = 12) included 10 detected and 2 non-detect values. Prior to statistical analysis, the dataset was screened for outliers using Dixon's test, which identified no statistically significant outliers. Goodness-of-fit (GOF) testing indicated that the detected data were normally distributed at the 1 percent (%) significance level, with a mean of 1,878 mg/kg and a standard deviation of 2,192 mg/kg. The large standard deviation relative to the mean indicates substantial variability in chloride concentrations and highlights the need for a statistically robust method to define the upper limit of naturally occurring conditions. A BTV was therefore developed to represent this upper limit.

Given the dataset size and presence of limited non-detects, ProUCL technical guidance recommends using a Kaplan–Meier (KM) based UTL under an assumed Normal distribution to appropriately estimate upper limits while retaining distributional structure. Accordingly, a one-sided 95% KM–Normal UTL of 7,098 mg/kg was selected as the Site-specific chloride BTV. This UTL provides at least 95% coverage of the background population with 95% confidence and incorporates censored data in a statistically defensible manner.

The background dataset for the Site exhibits high natural variability, as reflected by a standard deviation that exceeds the mean. In such cases, a higher UTL is expected and appropriate because the UTL must encompass the full natural range of chloride concentrations present in background soils. Therefore, the elevated UTL reflects natural variation and represents the true statistical behavior of the background population. Detailed ProUCL BTV calculations are provided in Appendix D.

Alternative models (gamma, lognormal, and nonparametric) were evaluated but produced substantially higher and less representative UTLs and were therefore excluded from consideration. The 95% KM–Normal UTL of 7,098 mg/kg is the most appropriate and conservative estimate of background chloride concentration for use in evaluating compliance with NMOCD Closure Criteria, consistent with statistical guidance provided in USEPA (2015) and the background evaluation framework outlined by ITRC (2022).

PROPOSED REMEDIATION ACTIVITIES

Based on the activities and analytical results described above, TPH impacted soil resulting from the historical impacts identified during BGT removal have been laterally and vertically delineated. Additionally, chloride concentrations detected in all delineation samples were below the established Site background concentration. Based on the soil sampling results described above, it is estimated impacted soil is present at the Site between the ground surface up to a depth of approximately 14 feet bgs. Analytical results also indicate impacted soil is located in the approximate area shown on Figure 2 with an approximate areal extent of 2,800 square feet. Based on these estimates, approximately 1,450 cubic yards of impacted soil are present at the Site.

Hilcorp proposes to excavate impacted soil at the Site to achieve the applicable NMOCD Closure Criteria or background concentrations. Soil will be excavated and transported off-Site for treatment at the Envirotech landfarm in San Juan County, New Mexico. Once field screening indicates impacted soil has been removed, 5-point composite soil samples will be collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a resealable plastic bag and homogenizing the samples by thoroughly mixing. Samples will be collected for analysis of BTEX, TPH, and chloride constituents for confirmation sampling using the analytical methods described above. Once confirmed impacted soil has been removed, the excavation will be backfilled with clean imported soil and recontoured to match pre-existing conditions at the Site.

REFERENCES

Interstate Technology & Regulatory Council (ITRC), 2022. Upper Limits Used to Estimate Background Threshold Values. Soil Background and Risk Assessment (SBR-1).

Stone, W., Lyford, F., Frenzel, P., Mizell, N., & Padgett, E. (1983). Hydrogeology and Water Resources of San Juan Basin, New Mexico. New Mexico Bureau of Mines & Mineral Resources.

USEPA, 2015. ProUCL Technical Guide, Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations, U.S. Environmental Protection Agency, Office of Research and Development, Washington, DC, (EPA/600/R-07/041).

USEPA, 2022. ProUCL: Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations. Version 5.2.

We appreciate the opportunity to provide this work plan to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,

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Attachments:

Figure 1: Site Receptor Map
Figure 2: Soil Sample Analytical Results
Figure 3: Background Soil Sample Analytical Results

Table 1: Soil Sample Analytical Results

Appendix A: Depth to Water Determination and Field Boring Logs
Appendix B: Laboratory Analytical Reports
Appendix C: Photographic Log
Appendix D: ProUCL Background Threshold Value (BTV) Calculations

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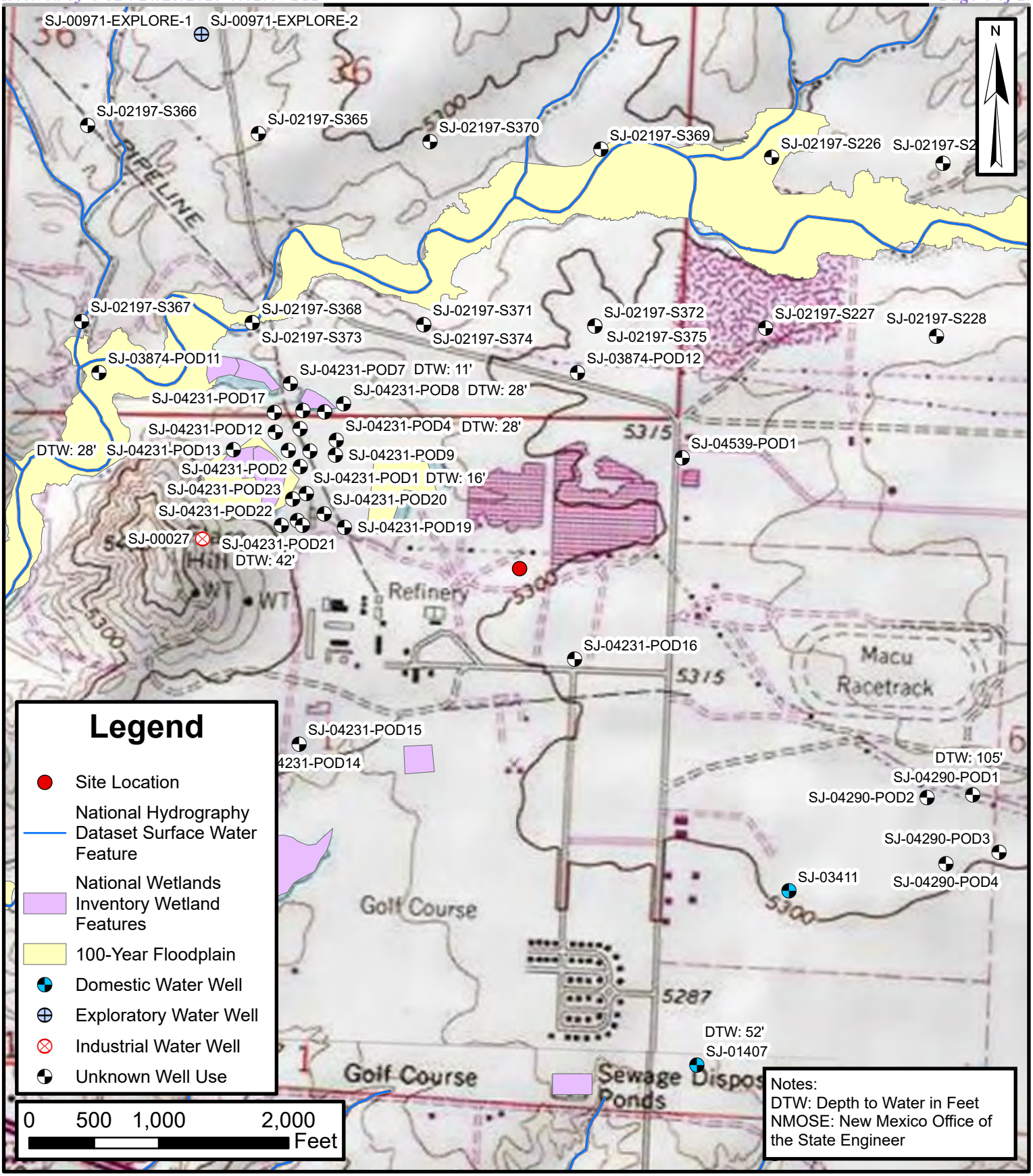
FIGURES



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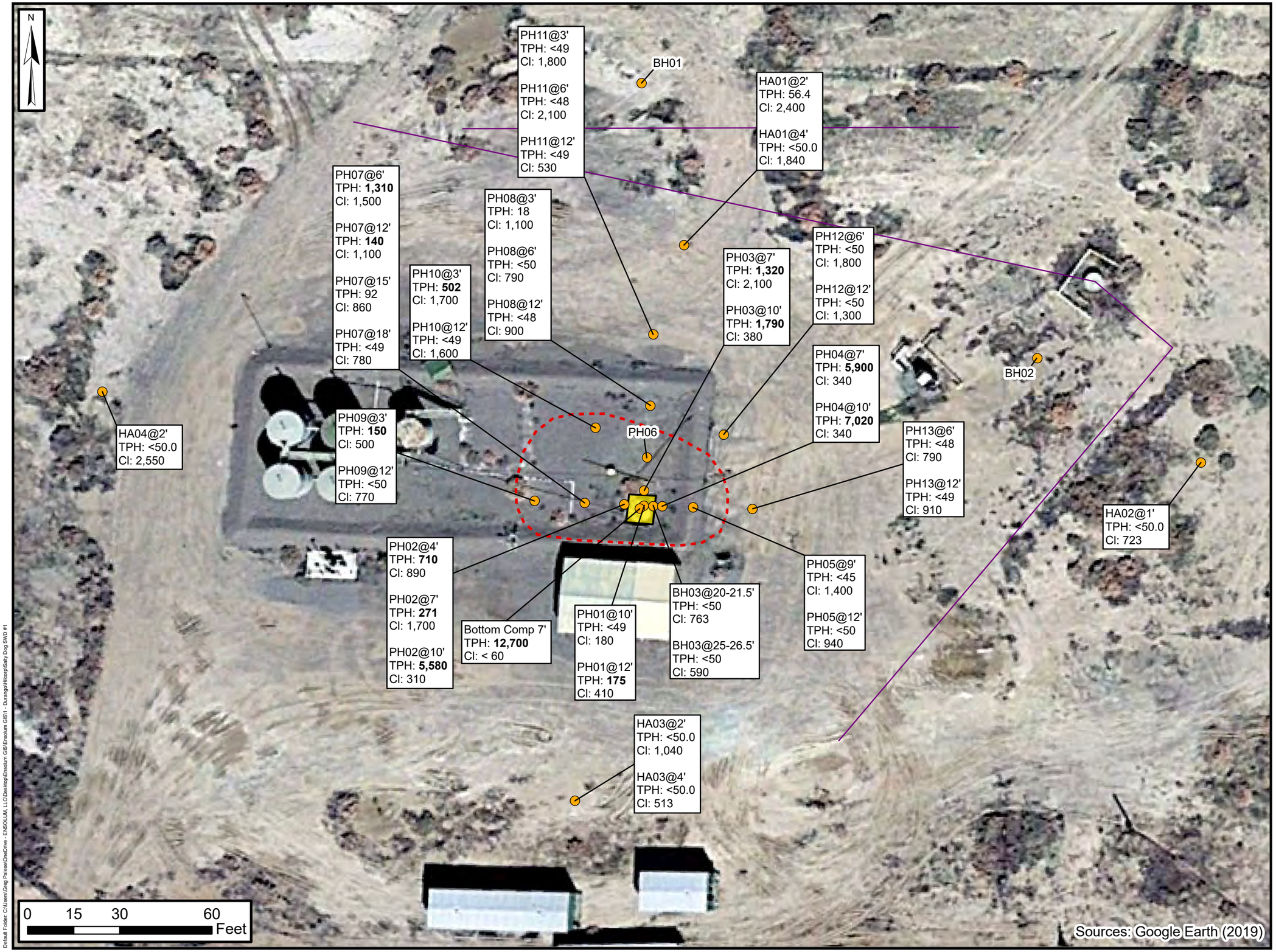
Site Receptor Map

Salty Dog SWD 1
Hilcorp Energy Company

36.760242, -108.364499
San Juan County, New Mexico

FIGURE
1



Legend

- Sample Location
- Pipeline Line Utility
- Bellow Grade Tank Cellar
- Approximate Excavation Extent

Notes:
TPH: Total Petroleum Hydrocarbons milligrams per kilogram (mg/Kg)
Cl: Chloride (mg/Kg)
< : Indicates Result is below Laboratory Reporting Limit
Bold: Indicates Results Exceed NMOCD Closure Criteria
NMOCD: New Mexico Oil Conservation Division

Soil Sample Analytical Results

Salty Dog SWD 1
Hilcorp Energy Company

36.760242, -108.364499
San Juan County, New Mexico

Figure 2

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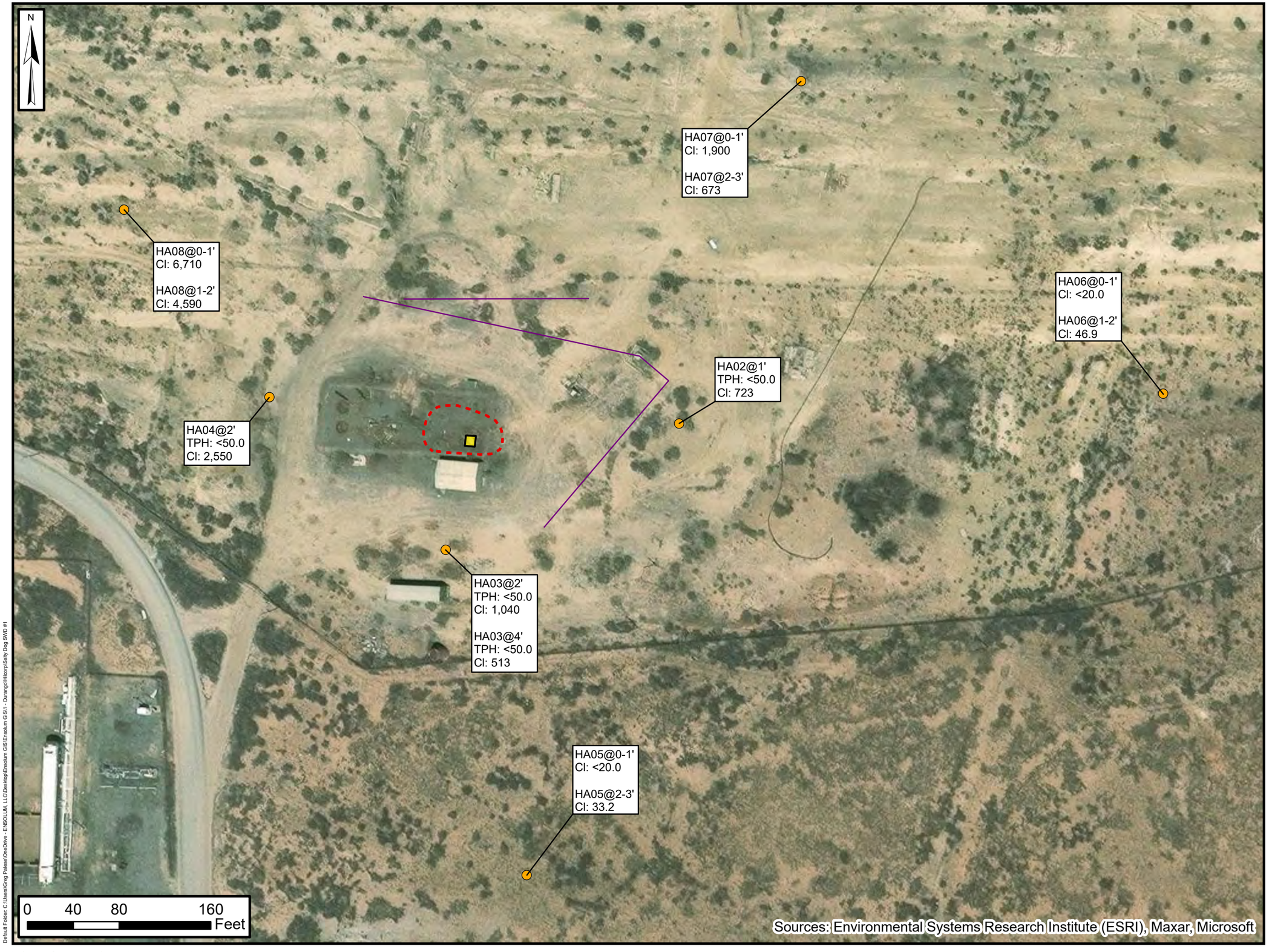

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Legend

- Background Soil Sample Locations
- Pipeline Line Utility
- Bellow Grade Tank Cellar
- Approximate Excavation Extent

Notes:
Cl: Chloride in milligrams per kilogram (mg/Kg)
< : Indicates Result is below Laboratory Reporting Limit

Background Soil Sample Analytical Results

Salty Dog SWD 1
Hilcorp Energy Company

36.760242, -108.364499
San Juan County, New Mexico

Figure 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Salty Dog SWD 1
Hilcorp Energy Company
San Juan County, New Mexico

Sample Identification	Date	Depth (feet bgs)	PID (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			NE	**10**	NE	NE	NE	**50**	NE	NE	NE	**100**	**7,098 (1)**
Bottom Comp 7'	7/23/2024	7'	--	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	1,700	11,000	**12,700**	<60
PH01 @ 10'	8/8/2024	10'	0.1	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.8	<49	<49	180
PH01 @ 12'	9/4/2024	12'	0.3	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	35	140	**175**	410
PH02 @ 4'	8/8/2024	4'	11.2	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	150	560	**710**	890
PH02 @ 7'	8/8/2024	7'	1.9	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	51	220	**271**	1,700 F2
PH02 @ 10'	8/8/2024	10'	0.8	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	780	4,800	**5,580**	310
PH03 @ 4'	8/8/2024	4'	1.4	--	--	--	--	--	--	--	--	--	--
PH03 @ 7'	8/8/2024	7'	2.5	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	320	1,000	**1,320**	2,100
PH03 @ 10'	8/8/2024	10'	12.2	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	490	1,300	**1,790**	380
PH04 @ 4'	8/8/2024	4'	0.1	--	--	--	--	--	--	--	--	--	--
PH04 @ 7'	8/8/2024	7'	0.4	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	1,200	4,700	**5,900**	340
PH04 @ 10'	8/8/2024	10'	0.7	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	920	6,100	**7,020**	340
PH05 @ 9'	9/4/2024	9'	0.1	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.0	<45	<45	1,400
PH05 @ 12'	9/4/2024	12'	0.7	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.9	<50	<50	940
PH07 @ 6'	9/4/2024	6'	2.7	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	430	880	**1,310**	1,500
PH07 @ 12'	9/4/2024	12'	2.5	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	45	95	**140**	1,100
PH07 @ 15'	9/19/2024	15'	7.9	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	31	61	92	860
PH07 @ 18'	9/19/2024	18'	2.6	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<49	780
PH08 @ 3'	9/4/2024	3'	1.3	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	18	<48	18	1,100
PH08 @ 6'	9/4/2024	6'	1.6	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.9	<50	<50	790
PH08 @ 12'	9/4/2024	12'	0.7	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.5	<48	<48	900
PH09 @ 3'	9/19/2024	3'	1.9	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	150	<490 D	**150**	500
PH09 @ 12'	9/19/2024	12'	2.4	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.9	<50	<50	770
PH10 @ 3'	9/19/2024	3'	8.4	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	92	410	**502**	1,700
PH10 @ 12'	9/19/2024	12'	1.7	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.8	<49	<49	1,600
PH11 @ 3'	9/19/2024	3'	3.3	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.9	<49	<49	1,800 F1
PH11 @ 6'	9/19/2024	6'	9.4	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.7	<48	<48	2,100
PH11 @ 12'	9/19/2024	12'	2.2	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.8	<49	<49	530
PH12 @ 6'	9/19/2024	6'	15.1	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.9	<50	<50	1,800
PH12 @ 12'	9/19/2024	12'	0.4	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<10	<50	<50	1,300
PH13 @ 6'	9/19/2024	6'	12.7	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.6	<48	<48	790
PH13 @ 12'	9/19/2024	12'	1.7	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.9	<49	<49	910
BH03 @ 20-21.5'	10/22/2024	20-21.5'	0.5	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	763
BH03 @ 25-26.5'	10/22/2024	25-26.5'	0.5	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	590

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Salty Dog SWD 1
Hilcorp Energy Company
San Juan County, New Mexico

Sample Identification	Date	Depth (feet bgs)	PID (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			NE	**10**	NE	NE	NE	**50**	NE	NE	NE	**100**	**7,098 (1)**
HA01 @ 2'	11/21/2024	2'	1.5	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	56.4	56.4	2,400
HA01 @ 4'	11/21/2024	4'	1.2	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	1,840
HA02 @1'	11/21/2024	1'	1.1	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	723
HA03 @ 2'	11/21/2024	2'	2.7	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	1,040
HA03 @ 4'	11/21/2024	4'	3.4	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	513
HA04 @ 2'	11/21/2024	2'	2.9	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	2,550
HA05 @ 0-1'	12/19/2024	0-1'	0.2	-	-	-	-	-	-	-	-	-	<20.0
HA05 @ 2-3'	12/19/2024	2-3'	0.8	-	-	-	-	-	-	-	-	-	33.2
HA06 @ 0-1'	12/19/2024	0-1'	0.2	-	-	-	-	-	-	-	-	-	<20.0
HA06 @ 1-2'	12/19/2024	1-2'	0.8	-	-	-	-	-	-	-	-	-	46.9
HA07 @ 0-1'	12/19/2024	0-1'	5.4	-	-	-	-	-	-	-	-	-	1,900
HA07 @ 2-3'	12/19/2024	2-3'	2.0	-	-	-	-	-	-	-	-	-	673
HA08 @ 0-1'	12/19/2024	0-1'	6.0	-	-	-	-	-	-	-	-	-	6,710
HA08 @ 1-2'	12/19/2024	1-2'	5.2	-	-	-	-	-	-	-	-	-	4,590

Notes:

(1): Background concentration
bgs: Below ground surface
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
F1: MS and/or MSD recovery exceeds control limits
F2: MS/MSD RPD exceeds control limits
mg/kg: Milligrams per kilogram
NE: Not Established
NMOCD: New Mexico Oil Conservation Division
PID: Photoionization detector
ppm: Parts per million
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
MRO: Motor Oil/Lube Oil Range Organics
TPH: Total Petroleum Hydrocarbon
': Feet
< : Indicates result less than the stated laboratory reporting limit (RL)
*Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table I Closure Criteria for Soils Impacted by a Release*
- : Not Analyzed

ENSOLUM

APPENDIX A

Depth to Water Determination and Field Boring Logs

ENSOLUM

	Client: HEC	BOREHOLE ID: BH01
	Project Name: Salty Dog #1 BGT	
	Project Location: 36.760096, -108.363714	
	Project Manager: S. Hyde	Date: 10/21/24
Project No.:	Borehole Diameter:	Ground Surface Elevation:
Drilling Company: EnvrioDrill	Casing Diameter: NA	Top of Casing Elevation:
Driller: Rodney & Tyler	Well Materials: NA	Latitude: See above/Field Map
Drilling Equip:	Surface Completion: NA	Longitude:
Logged By: S. Mahaney	Drilling Method: HSA	Total Depth:

DEPTH (FEET)	SAMPLE INTERVAL	SPT BLOW COUNT	RECOVERY (%)	PID (PPM)	MOISTURE	USCS	GEOLOGIC DESCRIPTION	WELL COMPLETION
0							Note: 18 in split spoon sampled @ end of each 5' interval	
1								
2								
3			No Recovery					
4								
5							> Rock in shoe	
6								
7								
8								
9								
10	10-11.5					CL	> Hard dry, yellow brown, silty clay with very fine sand, high plasticity, dry, no odor	
11								
12								
13								
14								
15	15-16.5							
16						ML	> soft, brown, ~~silty~~ sandy (fine) silt, no plasticity	
17						CL	→ high plasticity clay @ 16" with oxd/red. laminations, dry, no odor	
18								
19								
20	20-21.5							
21							> Hard silty clay, high plasticity in upper half with a little higher silt in lower, oxidation staining throughout, dry, no odor	
22								
23								
24								
25								

Page:

ENSOLUM

	Client:	BOREHOLE ID	BH01
	Project Name:		
	Project Location:		
	Project Manager:	Date:	10/21/24 1300
Project No.:	Borehole Diameter:	Ground Surface Elevation:	
Drilling Company:	Casing Diameter:	Top of Casing Elevation:	
Driller:	Well Materials:	Latitude:	
Drilling Equip:	Surface Completion:	Longitude:	
Logged By:	Drilling Method:	Total Depth:	

DEPTH (FEET)	SAMPLE INTERVAL	SPT BLOW COUNT	RECOVERY (%)	PID (PPM)	MOISTURE	USCS	GEOLOGIC DESCRIPTION	WELL COMPLETION
25								
26		25.0-26.5				ML	Dark brown with black organics present, hard laminated sandy (very fine) silt, no plasticity, oxidation staining no odor, dry	
27								
28							Bottom — No GW encountered	
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								

Page:

ENSOLUM

	Client: HEC	BOREHOLE ID BH02
	Project Name: Salty Dog #1 BGT	
	Project Location: 36.760096, -108.363714	
	Project Manager: S. Hyde	Date: 10/21/24 1430
Project No.:	Borehole Diameter:	Ground Surface Elevation:
Drilling Company: EnvrioDrill	Casing Diameter: NA	Top of Casing Elevation:
Driller:	Well Materials: NA	Latitude:
Drilling Equip:	Surface Completion: NA	Longitude:
Logged By:	Drilling Method: HSA	Total Depth:

DEPTH (FEET)	SAMPLE INTERVAL	SPT BLOW COUNT	RECOVERY (%)	PID (PPM)	MOISTURE	USCS	GEOLOGIC DESCRIPTION	WELL COMPLETION
5	5-6.5'		100			ML	> sandy (fine) silt with minor clay, yellowbrown, non plastic, soft, dry, mottled oxy/red staining	
10	10-11.5		100			ML/CL	> same as above (sand silt). Clay layer encountered @ 11' bgs Hard high plasticity brown clay with white nodules/grains, no odor & dry	
15	15-16.5		100			CL	> Hard brown clay with silt, low to moderate plasticity, dry no mottled appearance as above. visible salt crystalization No oder	
20	20-21.5		50			ML	> Hard sandy silt, no plasticity, dry, gray/w oxidation staining and laminated texture no odor & dry	

Page:

ENSOLUM

	Client:	BOREHOLE ID	BH02
	Project Name:		
	Project Location:	Date:	10/21/24
	Project Manager:		
Project No.:	Borehole Diameter:	Ground Surface Elevation:	
Drilling Company:	Casing Diameter:	Top of Casing Elevation:	
Driller:	Well Materials:	Latitude:	
Drilling Equip:	Surface Completion:	Longitude:	
Logged By:	Drilling Method:	Total Depth:	

DEPTH (FEET)	SAMPLE INTERVAL	SPT BLOW COUNT	RECOVERY (%)	PID (PPM)	MOISTURE	USCS	GEOLOGIC DESCRIPTION	WELL COMPLETION
25								
26		25-26.5	30			ML	> hard silt with laminated texture, oxidation staining yellow/tan, medium to hard density dry no odor	
27								
28								
29						ML		
30			hard drilling			GP	> same as above hard silt. contact @ ~31' bgs with grey well consolidated/tight ~~sandstone~~ hard clay with gravel poorly sorted cobble - granular, dry, no odor.	
31		30-31.5	30					
32								
33								
34						ML		
35		35-36.5	hard drilling			GP	> [redacted], slight odor in grey silt well cemented/hard (lower half) dry, upper half - clayey silt brown, slight plasticity, hard, dry, no odor	
36			100					
37								
38								
39						GP	> same as grey above	
40			hard drilling					
41		40-41.5	100%					
42								
43								
44			hard drilling			GP	> same as above	
45		45-46.5	50%					
46								
47								
48								
49								
50		50-51.5	hard drilling				> Same siltstone as above	
51								

Page: - Bottom

ENSOLUM	Client: HEC	BOREHOLE ID
	Project Name: Salty Dog #1 BGT	BH03
	Project Location: 36.760096, -108.363714	
	Project Manager: S. Hyde	Date: 10/22/24
Project No.:	Borehole Diameter:	Ground Surface Elevation:
Drilling Company: EnvrioDrill	Casing Diameter: NA	Top of Casing Elevation:
Driller:	Well Materials: NA	Latitude:
Drilling Equip:	Surface Completion: NA	Longitude:
Logged By:	Drilling Method: HSA	Total Depth:

DEPTH (FEET)	SAMPLE INTERVAL	SPT BLOW COUNT	RECOVERY (%)	PID (PPM)	MOISTURE	USCS	GEOLOGIC DESCRIPTION	WELL COMPLETION
0–18							Backfill; No screening or sampling	
20								
21	20-21.5'	100					Dark brown friable silt with oxidation staining with minor clay, moderate plasticity to friable, laminated texture in silt, dry, no odor	

ENSOLUM

	Client:	BOREHOLE ID: BH03
	Project Name:	
	Project Location:	
	Project Manager:	Date:
Project No.:	Borehole Diameter:	Ground Surface Elevation:
Drilling Company:	Casing Diameter:	Top of Casing Elevation:
Driller:	Well Materials:	Latitude:
Drilling Equip:	Surface Completion:	Longitude:
Logged By:	Drilling Method:	Total Depth:

DEPTH (FEET)	SAMPLE INTERVAL	SPT BLOW COUNT	RECOVERY (%)	PID (PPM)	MOISTURE	USCS	GEOLOGIC DESCRIPTION	WELL COMPLETION
25								
26		25-26.5					Massive sandy silt. fine sand, yellow/tan with oxidation staining, hard, dry no odor.	
27								
28							—Bottom—	
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								

DAILY DRILLING REPORT

JOB COMPLETED ☐ YES ☑ NO

NO. JOBS THIS DAY 1

Client Ensolum Date 10-21-24 Start: 7:00 End: 6:00

Project Salty Dog SWD + BGT Job No. 23424 468

Location San Juan County City Bloomfield NM

Project Type: ☐ Contract ☐ WT ☐ Enviro ☑ Geotech ☐ Labor Only ☐ Other

DRILLING

CLIENT HOLE NO.	DRILL DEPTH FROM –	DRILL DEPTH TO –	PERCOLATION	BIT SIZE	BIT TYPE	NO. OF SAMPLES RING	SPLIT	CA	BN
1	0	25-1							
2	0	45-1							
FOOTAGE DRILLED		DRILL RATE PER HOUR			TOTAL SAMPLES				

FORMATION DRILLED AND DEPTH

- ☑ SAND
- ☑ SILT
- ☑ CLAY
- ☐ CALICHE
- ☑ GRAVEL
- ☐ COBBLES
- ☑ MEDIUM SOFT
- ☑ MEDIUM HARD
- ☐ EXTREMELY HARD
- ☐ REFUSAL

GROUNDWATER TABLE ENCOUNTERED ☐ YES ☐ NO

GROUNDWATER DEPTH

FUNCTION	SERVICE PERFORMED	QTY.	RATE	CHARGE
262	MAKE READY / DECONTAMINATION – BEFORE / AFTER JOB	1.5		
212	MOBILIZE / DEMOBILIZE EQUIPMENT	4.0		
212	DRILLING INCLUDES: SAFETY MEETING			
	DRILL OPERATIONS	5.0		
	REAMING HOLE(S)			
	MOVING BETWEEN SITE(S)			
	GROUTING, HOURS ____ FEET ____			
	SITE CLEANUP			
212	MISCELLANEOUS LABOR INCLUDES: DECONTAMINATION SERVICES			
	MOVING DRUMS			
	CREW TRAVEL WITHOUT RIG	.5		
212	LABORER			
212	WELL INSTALLATION			
212	WELL DEVELOPMENT			
212	WELL ABANDONMENT			
250	STANDBY & DELAYS (EXPLAIN)			
212	CREW OVERTIME			
–	PER DIEM			
212	MEAL / MISC. BREAKS (DOT REQUIRED)			
278	CREW BREAK			
276	PERMITS / REPORTS			
277	SUPERVISORY TIME			

RENTALS / SUPPLIES	QTY.	RATE	CHARGE
SUPPORT VEHICLE / TRAILER	1		
GENERATOR			
TRAILER(S)			
CORING MACHINE / SAW CUT			
BULLET TEETH			
PORTLAND CEMENT	2		
PRE-MIX			
ASPHALT			
VISQUEEN			
DRUMS	4		
BRASS SLEEVES, SIZE:			
PVC CASING IN. X 5 FT.			
PVC CASING IN. X 10 FT.			
SCREEN .0 ____ 0 SLOT IN. X 5 FT.			
SCREEN .0 ____ 0 SLOT IN. X 10 FT.			
TOP LOCKING CAP			
BOTTOM CAP			
SAND-SACKS, GRADE NO.:			
WELL VAULT, SIZE: IN.			
BENTONITE PELLETS, PAILS:			
BENTONITE POWDER, SACKS:	2		
JACK HAMMER			
AIR COMPRESSOR, SIZE:			

REMARKS:

MAN-HOUR ALLOCATION	HOURS
OPERATOR Rod B	11.0
ASSISTANT Tyler H	11.0
LABORER	

EQUIPMENT	UNIT NO.	STARTING MILEAGE	ENDING MILEAGE	TOTAL MILES	RATE	CHARGE
RIG	1158					
SUPPORT VEHICLE	1084					

RIG / TRUCK DOWN TIME, HOURS (EXPLAIN BELOW)

DAMAGED OR LOST EQUIPMENT:

– SIGNATURE APPROVING WORK CONTENT –

CLIENT SIGNATURE:

P.O./W.O./JOB NO.:

White – Invoicing; Yellow – Client

Enviro-Drill

E10 – 1994

DAILY DRILLING REPORT

JOB COMPLETED ☐ YES ☐ NO

NO. JOBS THIS DAY

Client ENSOLUM Date 10.22.24 Start: 7:00 End: 3:00

Project SALTY DOG SWD BGT Job No. 468

Location _____ City KIRTLAND

Project Type: ☐ Contract ☐ WT ☐ Enviro ☐ Geotech ☐ Labor Only ☐ Other _____

DRILLING

CLIENT HOLE NO.	DRILL DEPTH FROM –	DRILL DEPTH TO –	PERCOLATION	BIT SIZE	BIT TYPE	NO. OF SAMPLES RING	SPLIT	CA	BN
2	45	50							
3	0	25							

FORMATION DRILLED AND DEPTH

☐ SAND
☐ SILT
☐ CLAY
☐ CALICHE
☐ GRAVEL
☐ COBBLES
☐ MEDIUM SOFT
☐ MEDIUM HARD
☐ EXTREMELY HARD
☐ REFUSAL

GROUNDWATER TABLE ENCOUNTERED ☐ YES ☒ NO

GROUNDWATER DEPTH

FOOTAGE DRILLED | DRILL RATE PER HOUR | TOTAL SAMPLES

FUNCTION	SERVICE PERFORMED	QTY.	RATE	CHARGE
262	MAKE READY / DECONTAMINATION – BEFORE / AFTER JOB	.5		
212	MOBILIZE / DEMOBILIZE EQUIPMENT	.5		
212	DRILLING INCLUDES: SAFETY MEETING			
	DRILL OPERATIONS	4.5		
	REAMING HOLE(S)			
	MOVING BETWEEN SITE(S)			
	GROUTING, HOURS ____ FEET ____			
	SITE CLEANUP			
212	MISCELLANEOUS LABOR INCLUDES: DECONTAMINATION SERVICES			
	MOVING DRUMS			
	CREW TRAVEL WITHOUT RIG	.5		
212	LABORER			
212	WELL INSTALLATION			
212	WELL DEVELOPMENT			
212	WELL ABANDONMENT			
250	STANDBY & DELAYS (EXPLAIN)	2.0		
212	CREW OVERTIME			
–	PER DIEM			
212	MEAL / MISC. BREAKS (DOT REQUIRED)			
278	CREW BREAK			
278	PERMITS / REPORTS			
277	SUPERVISORY TIME			

REMARKS: NO GROUNDWATER ENCOUNTERED.

MAN-HOUR ALLOCATION	HOURS
OPERATOR	
ASSISTANT	
LABORER	

— SIGNATURE APPROVING WORK CONTENT —

CLIENT SIGNATURE: _____

P.O./W.O./JOB NO.: _____

RENTALS / SUPPLIES	QTY.	RATE	CHARGE
SUPPORT VEHICLE / TRAILER	1		
GENERATOR			
TRAILER(S)			
CORING MACHINE / SAW CUT			
BULLET TEETH			
PORTLAND CEMENT	2		
PRE-MIX			
ASPHALT			
VISQUEEN			
DRUMS	1		
BRASS SLEEVES, SIZE:			
PVC CASING IN. X 5 FT.			
PVC CASING IN. X 10 FT.			
SCREEN .0 ____ 0 SLOT IN. X 5 FT.			
SCREEN .0 ____ 0 SLOT IN. X 10 FT.			
TOP LOCKING CAP			
BOTTOM CAP			
SAND-SACKS, GRADE NO.:			
WELL VAULT, SIZE: IN.			
BENTONITE PELLETS, PAILS:			
BENTONITE POWDER, SACKS:	1		
JACK HAMMER			
AIR COMPRESSOR, SIZE:			

EQUIPMENT	UNIT NO.	STARTING MILEAGE	ENDING MILEAGE	TOTAL MILES	RATE	CHARGE
RIG	1113					
SUPPORT VEHICLE	1084					

RIG / TRUCK DOWN TIME, HOURS (EXPLAIN BELOW)

DAMAGED OR LOST EQUIPMENT: _____

DAILY DRILLING REPORT

JOB COMPLETED ☐ YES ☐ NO

NO. JOBS THIS DAY: 3

Client: Ensolum Date: 10-23-24 Start: 7:20 End: 12:20

Project: Salty Dog SWD & BGT Job No. 22-824 468

Location: San Juan County City: Kirtland NM

Project Type: ☐ Contract ☐ WT ☐ Enviro ☐ Geotech ☐ Labor Only ☐ Other ______

DRILLING

CLIENT HOLE NO.	DRILL DEPTH FROM –	DRILL DEPTH TO –	PERCOLATION	BIT SIZE	BIT TYPE	NO. OF SAMPLES: RING	SPLIT	CA	BN

FORMATION DRILLED AND DEPTH: ☐ SAND ☐ SILT ☐ CLAY ☐ CALICHE ☐ GRAVEL ☐ COBBLES ☐ MEDIUM SOFT ☐ MEDIUM HARD ☐ EXTREMELY HARD ☐ REFUSAL

GROUNDWATER TABLE ENCOUNTERED ☐ YES ☐ NO

GROUNDWATER DEPTH: ______

FOOTAGE DRILLED: ______ DRILL RATE PER HOUR: ______ TOTAL SAMPLES: ______

FUNCTION	SERVICE PERFORMED	QTY.	RATE	CHARGE
262	MAKE READY / DECONTAMINATION – BEFORE / AFTER JOB	1.0		
212	MOBILIZE / DEMOBILIZE EQUIPMENT	4.0		
212	DRILLING INCLUDES:			
	SAFETY MEETING			
	DRILL OPERATIONS			
	REAMING HOLE(S)			
	MOVING BETWEEN SITE(S)			
	GROUTING, HOURS ____ FEET ____			
	SITE CLEANUP			
212	MISCELLANEOUS LABOR INCLUDES:			
	DECONTAMINATION SERVICES			
	MOVING DRUMS			
	CREW TRAVEL WITHOUT RIG			
212	LABORER			
212	WELL INSTALLATION			
212	WELL DEVELOPMENT			
212	WELL ABANDONMENT			
250	STANDBY & DELAYS (EXPLAIN)			
212	CREW OVERTIME			
–	PER DIEM			
212	MEAL / MISC. BREAKS (DOT REQUIRED)			
278	CREW BREAK			
276	PERMITS / REPORTS			
277	SUPERVISORY TIME			

RENTALS / SUPPLIES	QTY.	RATE	CHARGE
SUPPORT VEHICLE / TRAILER	1		
GENERATOR			
TRAILER(S)			
CORING MACHINE / SAW CUT			
BULLET TEETH			
PORTLAND CEMENT			
PRE-MIX			
ASPHALT			
VISQUEEN			
DRUMS			
BRASS SLEEVES, SIZE:			
PVC CASING IN. X 5 FT.			
PVC CASING IN. X 10 FT.			
SCREEN .0___0 SLOT IN. X 5 FT.			
SCREEN .0___0 SLOT IN. X 10 FT.			
TOP LOCKING CAP			
BOTTOM CAP			
SAND-SACKS, GRADE NO.:			
WELL VAULT, SIZE: IN.			
BENTONITE PELLETS, PAILS:			
BENTONITE POWDER, SACKS:			
JACK HAMMER			
AIR COMPRESSOR, SIZE:			

EQUIPMENT	UNIT NO.	STARTING MILEAGE	ENDING MILEAGE	TOTAL MILES	RATE	CHARGE
RIG	1113					
SUPPORT VEHICLE	1084					

RIG / TRUCK DOWN TIME, HOURS (EXPLAIN BELOW)

DAMAGED OR LOST EQUIPMENT: ______

REMARKS: ______

MAN-HOUR ALLOCATION		HOURS
OPERATOR	Rod B	5.0
ASSISTANT	Tyler H	5.0
LABORER		

– SIGNATURE APPROVING WORK CONTENT –

CLIENT SIGNATURE: [signature]

P.O./W.O./JOB NO.: ______

White – Invoicing; Yellow – Client

Enviro-Drill

E… ©08/28/00

DIRECTION
253 deg(T)

36.76031°N
108.36392°W

ACCURACY 4 m
DATUM WGS84

Ss2

2024-10-24
12:52:13-06:00

ENSOLUM

APPENDIX B

Laboratory Analytical Results

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 7/31/2024 2:39:06 PM

JOB DESCRIPTION

Salty Dog SWD #001

JOB NUMBER

885-8503-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
7/31/2024 2:39:06 PM

Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #001

Laboratory Job ID: 885-8503-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy Job ID: 885-8503-1
Project/Site: Salty Dog SWD #001

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: Salty Dog SWD #001

Job ID: 885-8503-1

Job ID: 885-8503-1 Eurofins Albuquerque

Job Narrative
885-8503-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 7/24/2024 6:25 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.1°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method 8015D_DRO: The following sample required a dilution due to the nature of the sample matrix: Bottom Comp 7' (885-8503-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #001

Job ID: 885-8503-1

Client Sample ID: Bottom Comp 7'

Date Collected: 07/23/24 09:40
Date Received: 07/24/24 06:25

Lab Sample ID: 885-8503-1

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		07/25/24 11:50	07/27/24 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*07/25/24 11:50*	*07/27/24 02:56*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		07/25/24 11:50	07/27/24 02:56	1
Ethylbenzene	ND		0.047		mg/Kg		07/25/24 11:50	07/27/24 02:56	1
Toluene	ND		0.047		mg/Kg		07/25/24 11:50	07/27/24 02:56	1
Xylenes, Total	ND		0.095		mg/Kg		07/25/24 11:50	07/27/24 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*48 - 145*	*07/25/24 11:50*	*07/27/24 02:56*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1700**		920		mg/Kg		07/25/24 17:22	07/29/24 21:43	100
Motor Oil Range Organics [C28-C40]	**11000**		4600		mg/Kg		07/25/24 17:22	07/29/24 21:43	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*D S1-*	*62 - 134*	*07/25/24 17:22*	*07/29/24 21:43*	*100*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		07/26/24 08:31	07/26/24 15:57	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #001

Job ID: 885-8503-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-9166/1-A
Matrix: Solid
Analysis Batch: 9320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9166

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		07/25/24 11:50	07/26/24 18:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*35 - 166*	*07/25/24 11:50*	*07/26/24 18:13*	*1*

Lab Sample ID: LCS 885-9166/2-A
Matrix: Solid
Analysis Batch: 9320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9166

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	21.1		mg/Kg		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*202*	*S1+*	*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-9166/1-A
Matrix: Solid
Analysis Batch: 9321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9166

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		07/25/24 11:50	07/26/24 18:13	1
Ethylbenzene	ND		0.050		mg/Kg		07/25/24 11:50	07/26/24 18:13	1
Toluene	ND		0.050		mg/Kg		07/25/24 11:50	07/26/24 18:13	1
Xylenes, Total	ND		0.10		mg/Kg		07/25/24 11:50	07/26/24 18:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*48 - 145*	*07/25/24 11:50*	*07/26/24 18:13*	*1*

Lab Sample ID: LCS 885-9166/3-A
Matrix: Solid
Analysis Batch: 9321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9166

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.900		mg/Kg		90	70 - 130		
Ethylbenzene			1.00	0.905		mg/Kg		91	70 - 130		
m&p-Xylene			2.00	1.80		mg/Kg		90	70 - 130		
o-Xylene			1.00	0.910		mg/Kg		91	70 - 130		
Toluene			1.00	0.894		mg/Kg		89	70 - 130		
Xylenes, Total			3.00	2.71		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*48 - 145*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #001

Job ID: 885-8503-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-9219/1-A
Matrix: Solid
Analysis Batch: 9331

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9219

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		07/25/24 17:22	07/29/24 20:53	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		07/25/24 17:22	07/29/24 20:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*122*		*62 - 134*	*07/25/24 17:22*	*07/29/24 20:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-9230/1-A
Matrix: Solid
Analysis Batch: 9280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9230

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		07/26/24 08:31	07/26/24 12:34	1

Lab Sample ID: LCS 885-9230/2-A
Matrix: Solid
Analysis Batch: 9280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9230

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	27.0		mg/Kg		90	90 - 110		

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #001

Job ID: 885-8503-1

GC VOA

Prep Batch: 9166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8503-1	Bottom Comp 7'	Total/NA	Solid	5030C	
MB 885-9166/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-9166/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-9166/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 9320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8503-1	Bottom Comp 7'	Total/NA	Solid	8015M/D	9166
MB 885-9166/1-A	Method Blank	Total/NA	Solid	8015M/D	9166
LCS 885-9166/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	9166

Analysis Batch: 9321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8503-1	Bottom Comp 7'	Total/NA	Solid	8021B	9166
MB 885-9166/1-A	Method Blank	Total/NA	Solid	8021B	9166
LCS 885-9166/3-A	Lab Control Sample	Total/NA	Solid	8021B	9166

GC Semi VOA

Prep Batch: 9219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8503-1	Bottom Comp 7'	Total/NA	Solid	SHAKE	
MB 885-9219/1-A	Method Blank	Total/NA	Solid	SHAKE	

Analysis Batch: 9331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8503-1	Bottom Comp 7'	Total/NA	Solid	8015M/D	9219
MB 885-9219/1-A	Method Blank	Total/NA	Solid	8015M/D	9219

HPLC/IC

Prep Batch: 9230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8503-1	Bottom Comp 7'	Total/NA	Solid	300_Prep	
MB 885-9230/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-9230/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 9280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8503-1	Bottom Comp 7'	Total/NA	Solid	300.0	9230
MB 885-9230/1-A	Method Blank	Total/NA	Solid	300.0	9230
LCS 885-9230/2-A	Lab Control Sample	Total/NA	Solid	300.0	9230

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-8503-1
Project/Site: Salty Dog SWD #001

Client Sample ID: Bottom Comp 7'
Lab Sample ID: 885-8503-1
Date Collected: 07/23/24 09:40
Matrix: Solid
Date Received: 07/24/24 06:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9166	JP	EET ALB	07/25/24 11:50
Total/NA	Analysis	8015M/D		1	9320	RA	EET ALB	07/27/24 02:56
Total/NA	Prep	5030C			9166	JP	EET ALB	07/25/24 11:50
Total/NA	Analysis	8021B		1	9321	RA	EET ALB	07/27/24 02:56
Total/NA	Prep	SHAKE			9219	DH	EET ALB	07/25/24 17:22
Total/NA	Analysis	8015M/D		100	9331	KR	EET ALB	07/29/24 21:43
Total/NA	Prep	300_Prep			9230	RC	EET ALB	07/26/24 08:31
Total/NA	Analysis	300.0		20	9280	RC	EET ALB	07/26/24 15:57

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy
Job ID: 885-8503-1
Project/Site: Salty Dog SWD #001

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp

Mailing Address:

Phone #:

email or Fax#: brandon.sinclair@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard (5day) ☐ Rush

Project Name: Salty Dog SWD #001

Project #:

Project Manager: Mitch Killough

Sampler: Brandon Sinclair

On Ice: ☒ Yes ☐ No (Yogi)

# of Coolers: 1

Cooler Temp (including CF): 4.1 ± 0 = 4.1 (°C)

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

885-8503 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)
7-23	940	soil	Bottom Comp 7'	4 oz jar	cool	1	✓	✓					✓			

Remarks:

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
7/23/24	1643				7/23/24	1613
7/23/24		Kristen Walters		Via: courier	7/24/24	6 25

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.

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-8503-1

Login Number: 8503 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 8/31/2024 10:03:08 PM

JOB DESCRIPTION

Salty Dog SWD

JOB NUMBER

885-9544-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
8/31/2024 10:03:08 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
Designee for
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Laboratory Job ID: 885-9544-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

HPLC/IC

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: Salty Dog SWD

Job ID: 885-9544-1

Job ID: 885-9544-1 Eurofins Albuquerque

Job Narrative
885-9544-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 8/9/2024 6:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method 8015D_DRO: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 885-10121 and analytical batch 885-10172 recovered outside control limits for the following analytes: Diesel Range Organics [C10-C28]. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015D_DRO: The following samples were diluted due to the nature of the sample matrix PH02@10' (885-9544-4) and PH04@10' (885-9544-10). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8015D_DRO: The following samples required a dilution due to the nature of the sample matrix: PH02@4' (885-9544-2), PH03@7' (885-9544-6), PH03@10' (885-9544-7) and PH04@7' (885-9544-9). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH01@10'

Date Collected: 08/08/24 14:15
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-1

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		08/12/24 10:39	08/13/24 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*08/12/24 10:39*	*08/13/24 20:49*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		08/12/24 10:39	08/13/24 20:49	1
Ethylbenzene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 20:49	1
Toluene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 20:49	1
Xylenes, Total	ND		0.099		mg/Kg		08/12/24 10:39	08/13/24 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*08/12/24 10:39*	*08/13/24 20:49*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*+	9.8		mg/Kg		08/12/24 15:45	08/13/24 12:29	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		08/12/24 15:45	08/13/24 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*08/12/24 15:45*	*08/13/24 12:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**180**		60		mg/Kg		08/12/24 17:05	08/13/24 16:42	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH02@4'

Date Collected: 08/08/24 14:25
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-2

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		08/12/24 10:39	08/13/24 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*08/12/24 10:39*	*08/13/24 21:59*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		08/12/24 10:39	08/13/24 21:59	1
Ethylbenzene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 21:59	1
Toluene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 21:59	1
Xylenes, Total	ND		0.10		mg/Kg		08/12/24 10:39	08/13/24 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*	*08/12/24 10:39*	*08/13/24 21:59*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**150**		94		mg/Kg		08/19/24 14:25	08/20/24 10:27	10
Motor Oil Range Organics [C28-C40]	**560**		470		mg/Kg		08/19/24 14:25	08/20/24 10:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*S1- D*	*62 - 134*	*08/19/24 14:25*	*08/20/24 10:27*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**890**		60		mg/Kg		08/12/24 17:05	08/13/24 16:58	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH02@7'

Date Collected: 08/08/24 15:10
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-3

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		08/12/24 10:39	08/13/24 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*08/12/24 10:39*	*08/13/24 23:10*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		08/12/24 10:39	08/13/24 23:10	1
Ethylbenzene	ND		0.048		mg/Kg		08/12/24 10:39	08/13/24 23:10	1
Toluene	ND		0.048		mg/Kg		08/12/24 10:39	08/13/24 23:10	1
Xylenes, Total	ND		0.096		mg/Kg		08/12/24 10:39	08/13/24 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*08/12/24 10:39*	*08/13/24 23:10*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**51**		9.7		mg/Kg		08/20/24 12:52	08/21/24 13:57	1
Motor Oil Range Organics [C28-C40]	**220**		48		mg/Kg		08/20/24 12:52	08/21/24 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*	*08/20/24 12:52*	*08/21/24 13:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**	**F2**	60		mg/Kg		08/12/24 17:05	08/13/24 17:13	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH02@10'

Date Collected: 08/08/24 14:35
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-4

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		08/12/24 10:39	08/13/24 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*08/12/24 10:39*	*08/13/24 23:33*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		08/12/24 10:39	08/13/24 23:33	1
Ethylbenzene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 23:33	1
Toluene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 23:33	1
Xylenes, Total	ND		0.099		mg/Kg		08/12/24 10:39	08/13/24 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*48 - 145*	*08/12/24 10:39*	*08/13/24 23:33*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**780**		190		mg/Kg		08/16/24 12:02	08/16/24 18:00	20
Motor Oil Range Organics [C28-C40]	**4800**		970		mg/Kg		08/16/24 12:02	08/16/24 18:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*S1- D*	*62 - 134*	*08/16/24 12:02*	*08/16/24 18:00*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**310**		60		mg/Kg		08/12/24 17:05	08/13/24 17:58	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH03@7'

Date Collected: 08/08/24 14:45
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-6

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		08/12/24 10:39	08/13/24 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*08/12/24 10:39*	*08/13/24 23:57*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		08/12/24 10:39	08/13/24 23:57	1
Ethylbenzene	ND		0.049		mg/Kg		08/12/24 10:39	08/13/24 23:57	1
Toluene	ND		0.049		mg/Kg		08/12/24 10:39	08/13/24 23:57	1
Xylenes, Total	ND		0.097		mg/Kg		08/12/24 10:39	08/13/24 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*	*08/12/24 10:39*	*08/13/24 23:57*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**320**		190		mg/Kg		08/16/24 12:02	08/20/24 13:00	20
Motor Oil Range Organics [C28-C40]	**1000**		970		mg/Kg		08/16/24 12:02	08/20/24 13:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*D S1-*	*62 - 134*	*08/16/24 12:02*	*08/20/24 13:00*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2100**		150		mg/Kg		08/12/24 17:05	08/14/24 11:04	50

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH03@10'

Date Collected: 08/08/24 14:48
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-7

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		08/12/24 10:39	08/14/24 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*08/12/24 10:39*	*08/14/24 00:20*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		08/12/24 10:39	08/14/24 00:20	1
Ethylbenzene	ND		0.048		mg/Kg		08/12/24 10:39	08/14/24 00:20	1
Toluene	ND		0.048		mg/Kg		08/12/24 10:39	08/14/24 00:20	1
Xylenes, Total	ND		0.097		mg/Kg		08/12/24 10:39	08/14/24 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*48 - 145*	*08/12/24 10:39*	*08/14/24 00:20*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**490**		200		mg/Kg		08/16/24 12:02	08/20/24 13:30	20
Motor Oil Range Organics [C28-C40]	**1300**		990		mg/Kg		08/16/24 12:02	08/20/24 13:30	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*D S1-*	*62 - 134*	*08/16/24 12:02*	*08/20/24 13:30*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**380**		60		mg/Kg		08/12/24 17:05	08/13/24 19:29	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH04@7'

Date Collected: 08/08/24 14:55
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-9

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		08/12/24 10:39	08/14/24 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*08/12/24 10:39*	*08/14/24 00:43*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		08/12/24 10:39	08/14/24 00:43	1
Ethylbenzene	ND		0.048		mg/Kg		08/12/24 10:39	08/14/24 00:43	1
Toluene	ND		0.048		mg/Kg		08/12/24 10:39	08/14/24 00:43	1
Xylenes, Total	ND		0.096		mg/Kg		08/12/24 10:39	08/14/24 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*48 - 145*	*08/12/24 10:39*	*08/14/24 00:43*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1200**		190		mg/Kg		08/16/24 12:02	08/20/24 14:01	20
Motor Oil Range Organics [C28-C40]	**4700**		970		mg/Kg		08/16/24 12:02	08/20/24 14:01	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*D S1-*	*62 - 134*	*08/16/24 12:02*	*08/20/24 14:01*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**340**		60		mg/Kg		08/12/24 17:05	08/13/24 19:44	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH04@10'

Date Collected: 08/08/24 15:00
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-10

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		08/12/24 10:39	08/14/24 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*08/12/24 10:39*	*08/14/24 01:07*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		08/12/24 10:39	08/14/24 01:07	1
Ethylbenzene	ND		0.049		mg/Kg		08/12/24 10:39	08/14/24 01:07	1
Toluene	ND		0.049		mg/Kg		08/12/24 10:39	08/14/24 01:07	1
Xylenes, Total	ND		0.098		mg/Kg		08/12/24 10:39	08/14/24 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*08/12/24 10:39*	*08/14/24 01:07*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**920**		190		mg/Kg		08/16/24 12:02	08/16/24 19:31	20
Motor Oil Range Organics [C28-C40]	**6100**		970		mg/Kg		08/16/24 12:02	08/16/24 19:31	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*S1- D*	*62 - 134*	*08/16/24 12:02*	*08/16/24 19:31*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**340**		60		mg/Kg		08/12/24 17:05	08/13/24 19:59	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-10075/1-A
Matrix: Solid
Analysis Batch: 10255

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10075

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		08/12/24 10:39	08/13/24 19:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*08/12/24 10:39*	*08/13/24 19:39*	*1*

Lab Sample ID: LCS 885-10075/2-A
Matrix: Solid
Analysis Batch: 10255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10075

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.0		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*207*		*35 - 166*

Lab Sample ID: 885-9544-1 MS
Matrix: Solid
Analysis Batch: 10255

Client Sample ID: PH01@10'
Prep Type: Total/NA
Prep Batch: 10075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		24.9	25.7		mg/Kg		103	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*215*		*35 - 166*

Lab Sample ID: 885-9544-1 MSD
Matrix: Solid
Analysis Batch: 10255

Client Sample ID: PH01@10'
Prep Type: Total/NA
Prep Batch: 10075

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.9	24.1		mg/Kg		97	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*206*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-10075/1-A
Matrix: Solid
Analysis Batch: 10256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10075

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		08/12/24 10:39	08/13/24 19:39	1
Ethylbenzene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 19:39	1
Toluene	ND		0.050		mg/Kg		08/12/24 10:39	08/13/24 19:39	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-10075/1-A
Matrix: Solid
Analysis Batch: 10256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10075

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10		mg/Kg		08/12/24 10:39	08/13/24 19:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*48 - 145*	*08/12/24 10:39*	*08/13/24 19:39*	*1*

Lab Sample ID: LCS 885-10075/3-A
Matrix: Solid
Analysis Batch: 10256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10075

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.841		mg/Kg		84	70 - 130		
Ethylbenzene			1.00	0.783		mg/Kg		78	70 - 130		
m&p-Xylene			2.00	1.56		mg/Kg		78	70 - 130		
o-Xylene			1.00	0.752		mg/Kg		75	70 - 130		
Toluene			1.00	0.791		mg/Kg		79	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*48 - 145*

Lab Sample ID: 885-9544-2 MS
Matrix: Solid
Analysis Batch: 10256

Client Sample ID: PH02@4'
Prep Type: Total/NA
Prep Batch: 10075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		1.00	0.876		mg/Kg		88	70 - 130		
Ethylbenzene	ND		1.00	0.829		mg/Kg		83	70 - 130		
m&p-Xylene	ND		2.00	1.65		mg/Kg		81	70 - 130		
o-Xylene	ND		1.00	0.790		mg/Kg		79	70 - 130		
Toluene	ND		1.00	0.839		mg/Kg		83	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*

Lab Sample ID: 885-9544-2 MSD
Matrix: Solid
Analysis Batch: 10256

Client Sample ID: PH02@4'
Prep Type: Total/NA
Prep Batch: 10075

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.999	0.892		mg/Kg		89	70 - 130	2	20
Ethylbenzene	ND		0.999	0.844		mg/Kg		84	70 - 130	2	20
m&p-Xylene	ND		2.00	1.68		mg/Kg		83	70 - 130	1	20
o-Xylene	ND		0.999	0.810		mg/Kg		81	70 - 130	3	20
Toluene	ND		0.999	0.852		mg/Kg		84	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-10121/1-A
Matrix: Solid
Analysis Batch: 10172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10121

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		08/12/24 15:45	08/13/24 12:07	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		08/12/24 15:45	08/13/24 12:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*128*		*62 - 134*	*08/12/24 15:45*	*08/13/24 12:07*	*1*

Lab Sample ID: LCS 885-10121/2-A
Matrix: Solid
Analysis Batch: 10172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10121

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	74.4	*+	mg/Kg		149	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*161*	*S1+*	*62 - 134*

Lab Sample ID: MB 885-10424/1-A
Matrix: Solid
Analysis Batch: 10409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10424

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		08/16/24 12:02	08/16/24 17:38	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		08/16/24 12:02	08/16/24 17:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*93*		*62 - 134*	*08/16/24 12:02*	*08/16/24 17:38*	*1*

Lab Sample ID: LCS 885-10424/2-A
Matrix: Solid
Analysis Batch: 10409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10424

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	46.8		mg/Kg		94	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*

Lab Sample ID: MB 885-10622/1-A
Matrix: Solid
Analysis Batch: 10682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10622

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		08/20/24 12:52	08/21/24 13:36	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		08/20/24 12:52	08/21/24 13:36	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-10622/1-A
Matrix: Solid
Analysis Batch: 10682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10622

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134	08/20/24 12:52	08/21/24 13:36	1

Lab Sample ID: LCS 885-10622/2-A
Matrix: Solid
Analysis Batch: 10682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10622

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	45.8		mg/Kg		92	60 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	95		62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-10129/1-A
Matrix: Solid
Analysis Batch: 10165

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10129

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/12/24 17:05	08/13/24 16:12	1

Lab Sample ID: LCS 885-10129/2-A
Matrix: Solid
Analysis Batch: 10165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	30.7		mg/Kg		102	90 - 110

Lab Sample ID: MB 885-10576/12
Matrix: Solid
Analysis Batch: 10576

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			08/14/24 11:41	1

Lab Sample ID: MRL 885-10576/11
Matrix: Solid
Analysis Batch: 10576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.521		mg/L		104	50 - 150

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

GC VOA

Prep Batch: 10075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-1	PH01@10'	Total/NA	Solid	5030C	
885-9544-2	PH02@4'	Total/NA	Solid	5030C	
885-9544-3	PH02@7'	Total/NA	Solid	5030C	
885-9544-4	PH02@10'	Total/NA	Solid	5030C	
885-9544-6	PH03@7'	Total/NA	Solid	5030C	
885-9544-7	PH03@10'	Total/NA	Solid	5030C	
885-9544-9	PH04@7'	Total/NA	Solid	5030C	
885-9544-10	PH04@10'	Total/NA	Solid	5030C	
MB 885-10075/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10075/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10075/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-9544-1 MS	PH01@10'	Total/NA	Solid	5030C	
885-9544-1 MSD	PH01@10'	Total/NA	Solid	5030C	
885-9544-2 MS	PH02@4'	Total/NA	Solid	5030C	
885-9544-2 MSD	PH02@4'	Total/NA	Solid	5030C	

Analysis Batch: 10255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-1	PH01@10'	Total/NA	Solid	8015M/D	10075
885-9544-2	PH02@4'	Total/NA	Solid	8015M/D	10075
885-9544-3	PH02@7'	Total/NA	Solid	8015M/D	10075
885-9544-4	PH02@10'	Total/NA	Solid	8015M/D	10075
885-9544-6	PH03@7'	Total/NA	Solid	8015M/D	10075
885-9544-7	PH03@10'	Total/NA	Solid	8015M/D	10075
885-9544-9	PH04@7'	Total/NA	Solid	8015M/D	10075
885-9544-10	PH04@10'	Total/NA	Solid	8015M/D	10075
MB 885-10075/1-A	Method Blank	Total/NA	Solid	8015M/D	10075
LCS 885-10075/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10075
885-9544-1 MS	PH01@10'	Total/NA	Solid	8015M/D	10075
885-9544-1 MSD	PH01@10'	Total/NA	Solid	8015M/D	10075

Analysis Batch: 10256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-1	PH01@10'	Total/NA	Solid	8021B	10075
885-9544-2	PH02@4'	Total/NA	Solid	8021B	10075
885-9544-3	PH02@7'	Total/NA	Solid	8021B	10075
885-9544-4	PH02@10'	Total/NA	Solid	8021B	10075
885-9544-6	PH03@7'	Total/NA	Solid	8021B	10075
885-9544-7	PH03@10'	Total/NA	Solid	8021B	10075
885-9544-9	PH04@7'	Total/NA	Solid	8021B	10075
885-9544-10	PH04@10'	Total/NA	Solid	8021B	10075
MB 885-10075/1-A	Method Blank	Total/NA	Solid	8021B	10075
LCS 885-10075/3-A	Lab Control Sample	Total/NA	Solid	8021B	10075
885-9544-2 MS	PH02@4'	Total/NA	Solid	8021B	10075
885-9544-2 MSD	PH02@4'	Total/NA	Solid	8021B	10075

GC Semi VOA

Prep Batch: 10121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-1	PH01@10'	Total/NA	Solid	SHAKE	

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

GC Semi VOA (Continued)

Prep Batch: 10121 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-10121/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10121/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 10172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-1	PH01@10'	Total/NA	Solid	8015M/D	10121
MB 885-10121/1-A	Method Blank	Total/NA	Solid	8015M/D	10121
LCS 885-10121/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10121

Analysis Batch: 10409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-4	PH02@10'	Total/NA	Solid	8015M/D	10424
885-9544-10	PH04@10'	Total/NA	Solid	8015M/D	10424
MB 885-10424/1-A	Method Blank	Total/NA	Solid	8015M/D	10424
LCS 885-10424/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10424

Prep Batch: 10424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-4	PH02@10'	Total/NA	Solid	SHAKE	
885-9544-6	PH03@7'	Total/NA	Solid	SHAKE	
885-9544-7	PH03@10'	Total/NA	Solid	SHAKE	
885-9544-9	PH04@7'	Total/NA	Solid	SHAKE	
885-9544-10	PH04@10'	Total/NA	Solid	SHAKE	
MB 885-10424/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10424/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 10525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-2	PH02@4'	Total/NA	Solid	SHAKE	

Prep Batch: 10622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-3	PH02@7'	Total/NA	Solid	SHAKE	
MB 885-10622/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10622/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 10647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-2	PH02@4'	Total/NA	Solid	8015M/D	10525
885-9544-6	PH03@7'	Total/NA	Solid	8015M/D	10424
885-9544-7	PH03@10'	Total/NA	Solid	8015M/D	10424
885-9544-9	PH04@7'	Total/NA	Solid	8015M/D	10424

Analysis Batch: 10682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-3	PH02@7'	Total/NA	Solid	8015M/D	10622
MB 885-10622/1-A	Method Blank	Total/NA	Solid	8015M/D	10622
LCS 885-10622/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10622

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

HPLC/IC

Prep Batch: 10129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-1	PH01@10'	Total/NA	Solid	300_Prep	
885-9544-2	PH02@4'	Total/NA	Solid	300_Prep	
885-9544-3	PH02@7'	Total/NA	Solid	300_Prep	
885-9544-4	PH02@10'	Total/NA	Solid	300_Prep	
885-9544-6	PH03@7'	Total/NA	Solid	300_Prep	
885-9544-7	PH03@10'	Total/NA	Solid	300_Prep	
885-9544-9	PH04@7'	Total/NA	Solid	300_Prep	
885-9544-10	PH04@10'	Total/NA	Solid	300_Prep	
MB 885-10129/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10129/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 10165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-1	PH01@10'	Total/NA	Solid	300.0	10129
885-9544-2	PH02@4'	Total/NA	Solid	300.0	10129
885-9544-3	PH02@7'	Total/NA	Solid	300.0	10129
885-9544-4	PH02@10'	Total/NA	Solid	300.0	10129
885-9544-7	PH03@10'	Total/NA	Solid	300.0	10129
885-9544-9	PH04@7'	Total/NA	Solid	300.0	10129
885-9544-10	PH04@10'	Total/NA	Solid	300.0	10129
MB 885-10129/1-A	Method Blank	Total/NA	Solid	300.0	10129
LCS 885-10129/2-A	Lab Control Sample	Total/NA	Solid	300.0	10129

Analysis Batch: 10576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9544-6	PH03@7'	Total/NA	Solid	300.0	10129
MB 885-10576/12	Method Blank	Total/NA	Solid	300.0	
MRL 885-10576/11	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH01@10'

Lab Sample ID: 885-9544-1
Matrix: Solid
Date Collected: 08/08/24 14:15
Date Received: 08/09/24 06:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/13/24 20:49
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/13/24 20:49
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 12:29
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 16:42

Client Sample ID: PH02@4'

Lab Sample ID: 885-9544-2
Matrix: Solid
Date Collected: 08/08/24 14:25
Date Received: 08/09/24 06:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/13/24 21:59
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/13/24 21:59
Total/NA	Prep	SHAKE			10525	EM	EET ALB	08/19/24 14:25
Total/NA	Analysis	8015M/D		10	10647	EM	EET ALB	08/20/24 10:27
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 16:58

Client Sample ID: PH02@7'

Lab Sample ID: 885-9544-3
Matrix: Solid
Date Collected: 08/08/24 15:10
Date Received: 08/09/24 06:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/13/24 23:10
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/13/24 23:10
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 13:57
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 17:13

Client Sample ID: PH02@10'

Lab Sample ID: 885-9544-4
Matrix: Solid
Date Collected: 08/08/24 14:35
Date Received: 08/09/24 06:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/13/24 23:33

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH02@10'
Date Collected: 08/08/24 14:35
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/13/24 23:33
Total/NA	Prep	SHAKE			10424	EM	EET ALB	08/16/24 12:02
Total/NA	Analysis	8015M/D		20	10409	DH	EET ALB	08/16/24 18:00
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 17:58

Client Sample ID: PH03@7'
Date Collected: 08/08/24 14:45
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/13/24 23:57
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/13/24 23:57
Total/NA	Prep	SHAKE			10424	EM	EET ALB	08/16/24 12:02
Total/NA	Analysis	8015M/D		20	10647	EM	EET ALB	08/20/24 13:00
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		50	10576	MA	EET ALB	08/14/24 11:04

Client Sample ID: PH03@10'
Date Collected: 08/08/24 14:48
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 00:20
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 00:20
Total/NA	Prep	SHAKE			10424	EM	EET ALB	08/16/24 12:02
Total/NA	Analysis	8015M/D		20	10647	EM	EET ALB	08/20/24 13:30
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 19:29

Client Sample ID: PH04@7'
Date Collected: 08/08/24 14:55
Date Received: 08/09/24 06:15

Lab Sample ID: 885-9544-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 00:43
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 00:43

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Client Sample ID: PH04@7'

Lab Sample ID: 885-9544-9
Matrix: Solid
Date Collected: 08/08/24 14:55
Date Received: 08/09/24 06:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			10424	EM	EET ALB	08/16/24 12:02
Total/NA	Analysis	8015M/D		20	10647	EM	EET ALB	08/20/24 14:01
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 19:44

Client Sample ID: PH04@10'

Lab Sample ID: 885-9544-10
Matrix: Solid
Date Collected: 08/08/24 15:00
Date Received: 08/09/24 06:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 01:07
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 01:07
Total/NA	Prep	SHAKE			10424	EM	EET ALB	08/16/24 12:02
Total/NA	Analysis	8015M/D		20	10409	DH	EET ALB	08/16/24 19:31
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 19:59

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD

Job ID: 885-9544-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp Energy
Mitch Killough
Mailing Address: 1111 Travis St
Houston, TX
Phone #:
email or Fax#: mkillough@hilcorp.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☒ EDD (Type) Excel

Turn-Around Time:
5-Day
☒ Standard ☐ Rush
Project Name: Salty Dog SWD 1
Project #:
Project Manager: Stuart Hyde
shyde@ensolum.com
Sampler: Stuart Hyde
On Ice: ☒ Yes ☐ No yes
# of Coolers: 1
Cooler Temp (including CF): 3.6 + 0.2 = 3.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 8710[illegible] 885-9544 COC
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)	HOLD
8/8/24		soil	PH01@10'	1415	cool	1	X	X					X				
			PH02@4'	1425		2	X	X					X				
			PH02@7'	1510		3	X	X					X				
			PH02@10'	1435		4	X	X					X				
			PH03@4'	1440		5											X
			PH03@7'	1445		6	X	X					X				
			PH03@10'	1448		7	X	X					X				
			PH04@4'	1450		8											X
			PH04@7'	1455		9	X	X					X				
			PH04@10'	1500		10	X	X					X				

Date	Time	Relinquished by	Received by	Via	Date	Time
8/8/24	1620				8/8/24	1620
8/8/24	1720			courier	8/9/24	6:15

Remarks: (1) H-02 jar

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.

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-9544-1

Login Number: 9544 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 9/17/2024 4:14:28 PM

JOB DESCRIPTION

Salty Dog SWD #1

JOB NUMBER

885-11196-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

my EOL

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
9/17/2024 4:14:28 PM

Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Laboratory Job ID: 885-11196-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
S1-	Surrogate recovery exceeds control limits, low biased.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: Salty Dog SWD #1

Job ID: 885-11196-1

Job ID: 885-11196-1 Eurofins Albuquerque

Job Narrative
885-11196-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/5/2024 7:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method 8015D_DRO: The following sample required a dilution due to the nature of the sample matrix: PH07@6' (885-11196-5). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH05@9'

Date Collected: 09/04/24 11:12
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-1

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/05/24 14:21	09/11/24 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*09/05/24 14:21*	*09/11/24 12:36*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/05/24 14:21	09/11/24 12:36	1
Ethylbenzene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 12:36	1
Toluene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 12:36	1
Xylenes, Total	ND		0.095		mg/Kg		09/05/24 14:21	09/11/24 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*09/05/24 14:21*	*09/11/24 12:36*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0		mg/Kg		09/06/24 10:28	09/10/24 23:42	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		09/06/24 10:28	09/10/24 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*09/06/24 10:28*	*09/10/24 23:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1400**		60		mg/Kg		09/09/24 09:17	09/09/24 16:52	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH05@12'

Date Collected: 09/04/24 11:25
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-2

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/05/24 14:21	09/11/24 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*35 - 166*	*09/05/24 14:21*	*09/11/24 13:46*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/05/24 14:21	09/11/24 13:46	1
Ethylbenzene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 13:46	1
Toluene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 13:46	1
Xylenes, Total	ND		0.097		mg/Kg		09/05/24 14:21	09/11/24 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*48 - 145*	*09/05/24 14:21*	*09/11/24 13:46*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		09/06/24 10:28	09/11/24 00:06	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/06/24 10:28	09/11/24 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*09/06/24 10:28*	*09/11/24 00:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**940**		60		mg/Kg		09/09/24 09:17	09/09/24 17:05	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH07@6'

Date Collected: 09/04/24 12:04
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-5

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		09/05/24 14:21	09/11/24 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*09/05/24 14:21*	*09/11/24 14:57*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/05/24 14:21	09/11/24 14:57	1
Ethylbenzene	ND		0.049		mg/Kg		09/05/24 14:21	09/11/24 14:57	1
Toluene	ND		0.049		mg/Kg		09/05/24 14:21	09/11/24 14:57	1
Xylenes, Total	ND		0.097		mg/Kg		09/05/24 14:21	09/11/24 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*48 - 145*	*09/05/24 14:21*	*09/11/24 14:57*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**430**		96		mg/Kg		09/06/24 10:28	09/11/24 00:30	10
Motor Oil Range Organics [C28-C40]	**880**		480		mg/Kg		09/06/24 10:28	09/11/24 00:30	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*S1- D*	*62 - 134*	*09/06/24 10:28*	*09/11/24 00:30*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1500**		60		mg/Kg		09/09/24 09:17	09/09/24 17:18	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH07@12'

Date Collected: 09/04/24 12:14
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-6

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		09/05/24 14:21	09/11/24 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*09/05/24 14:21*	*09/11/24 15:20*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/05/24 14:21	09/11/24 15:20	1
Ethylbenzene	ND		0.049		mg/Kg		09/05/24 14:21	09/11/24 15:20	1
Toluene	ND		0.049		mg/Kg		09/05/24 14:21	09/11/24 15:20	1
Xylenes, Total	ND		0.098		mg/Kg		09/05/24 14:21	09/11/24 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*48 - 145*	*09/05/24 14:21*	*09/11/24 15:20*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**45**		10		mg/Kg		09/06/24 10:28	09/11/24 00:54	1
Motor Oil Range Organics [C28-C40]	**95**		50		mg/Kg		09/06/24 10:28	09/11/24 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*	*09/06/24 10:28*	*09/11/24 00:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		60		mg/Kg		09/09/24 09:17	09/09/24 17:31	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH08@3'
Date Collected: 09/04/24 12:22
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-7
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		09/05/24 14:21	09/11/24 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*35 - 166*	*09/05/24 14:21*	*09/11/24 15:43*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		09/05/24 14:21	09/11/24 15:43	1
Ethylbenzene	ND		0.047		mg/Kg		09/05/24 14:21	09/11/24 15:43	1
Toluene	ND		0.047		mg/Kg		09/05/24 14:21	09/11/24 15:43	1
Xylenes, Total	ND		0.093		mg/Kg		09/05/24 14:21	09/11/24 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*09/05/24 14:21*	*09/11/24 15:43*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**18**		9.6		mg/Kg		09/06/24 10:28	09/11/24 01:18	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		09/06/24 10:28	09/11/24 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*09/06/24 10:28*	*09/11/24 01:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		60		mg/Kg		09/09/24 09:17	09/09/24 17:44	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH08@6'

Date Collected: 09/04/24 12:24
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-8

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		09/05/24 14:21	09/11/24 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*35 - 166*	*09/05/24 14:21*	*09/11/24 16:07*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		09/05/24 14:21	09/11/24 16:07	1
Ethylbenzene	ND		0.047		mg/Kg		09/05/24 14:21	09/11/24 16:07	1
Toluene	ND		0.047		mg/Kg		09/05/24 14:21	09/11/24 16:07	1
Xylenes, Total	ND		0.093		mg/Kg		09/05/24 14:21	09/11/24 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*09/05/24 14:21*	*09/11/24 16:07*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		09/06/24 10:28	09/11/24 01:42	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/06/24 10:28	09/11/24 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*109*		*62 - 134*	*09/06/24 10:28*	*09/11/24 01:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**790**		60		mg/Kg		09/09/24 09:17	09/09/24 17:56	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH08@12'

Date Collected: 09/04/24 12:37
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-9

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/05/24 14:21	09/11/24 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*35 - 166*	*09/05/24 14:21*	*09/11/24 16:30*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/05/24 14:21	09/11/24 16:30	1
Ethylbenzene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 16:30	1
Toluene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 16:30	1
Xylenes, Total	ND		0.097		mg/Kg		09/05/24 14:21	09/11/24 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*09/05/24 14:21*	*09/11/24 16:30*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5		mg/Kg		09/06/24 10:28	09/11/24 02:06	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		09/06/24 10:28	09/11/24 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*107*		*62 - 134*	*09/06/24 10:28*	*09/11/24 02:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**900**		60		mg/Kg		09/09/24 09:17	09/09/24 18:09	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH01@12'

Date Collected: 09/04/24 12:51
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-10

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/05/24 14:21	09/11/24 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*35 - 166*	*09/05/24 14:21*	*09/11/24 16:54*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/05/24 14:21	09/11/24 16:54	1
Ethylbenzene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 16:54	1
Toluene	ND		0.048		mg/Kg		09/05/24 14:21	09/11/24 16:54	1
Xylenes, Total	ND		0.097		mg/Kg		09/05/24 14:21	09/11/24 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*09/05/24 14:21*	*09/11/24 16:54*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**35**		10		mg/Kg		09/06/24 10:28	09/11/24 02:30	1
Motor Oil Range Organics [C28-C40]	**140**		50		mg/Kg		09/06/24 10:28	09/11/24 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*110*		*62 - 134*	*09/06/24 10:28*	*09/11/24 02:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**410**		60		mg/Kg		09/09/24 09:17	09/09/24 19:14	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-11689/1-A
Matrix: Solid
Analysis Batch: 12117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11689

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		09/05/24 14:21	09/11/24 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*09/05/24 14:21*	*09/11/24 12:13*	*1*

Lab Sample ID: LCS 885-11689/2-A
Matrix: Solid
Analysis Batch: 12117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11689

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.0		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*203*		*35 - 166*

Lab Sample ID: 885-11196-1 MS
Matrix: Solid
Analysis Batch: 12117

Client Sample ID: PH05@9'
Prep Type: Total/NA
Prep Batch: 11689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		23.6	22.7		mg/Kg		96	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*207*		*35 - 166*

Lab Sample ID: 885-11196-1 MSD
Matrix: Solid
Analysis Batch: 12117

Client Sample ID: PH05@9'
Prep Type: Total/NA
Prep Batch: 11689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		23.6	22.8		mg/Kg		96	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*207*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-11689/1-A
Matrix: Solid
Analysis Batch: 12126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11689

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		09/05/24 14:21	09/11/24 12:13	1
Ethylbenzene	ND		0.050		mg/Kg		09/05/24 14:21	09/11/24 12:13	1
Toluene	ND		0.050		mg/Kg		09/05/24 14:21	09/11/24 12:13	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-11689/1-A
Matrix: Solid
Analysis Batch: 12126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11689

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10		mg/Kg		09/05/24 14:21	09/11/24 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*09/05/24 14:21*	*09/11/24 12:13*	*1*

Lab Sample ID: LCS 885-11689/3-A
Matrix: Solid
Analysis Batch: 12126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11689

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.925		mg/Kg		93	70 - 130		
Ethylbenzene			1.00	0.853		mg/Kg		85	70 - 130		
m&p-Xylene			2.00	1.72		mg/Kg		86	70 - 130		
o-Xylene			1.00	0.817		mg/Kg		82	70 - 130		
Toluene			1.00	0.874		mg/Kg		87	70 - 130		
Xylenes, Total			3.00	2.54		mg/Kg		85	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*

Lab Sample ID: 885-11196-2 MS
Matrix: Solid
Analysis Batch: 12126

Client Sample ID: PH05@12'
Prep Type: Total/NA
Prep Batch: 11689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.969	0.859		mg/Kg		89	70 - 130		
Ethylbenzene	ND		0.969	0.799		mg/Kg		82	70 - 130		
m&p-Xylene	ND		1.94	1.62		mg/Kg		82	70 - 130		
o-Xylene	ND		0.969	0.775		mg/Kg		80	70 - 130		
Toluene	ND		0.969	0.821		mg/Kg		83	70 - 130		
Xylenes, Total	ND		2.91	2.39		mg/Kg		81	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*

Lab Sample ID: 885-11196-2 MSD
Matrix: Solid
Analysis Batch: 12126

Client Sample ID: PH05@12'
Prep Type: Total/NA
Prep Batch: 11689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.970	0.850		mg/Kg		88	70 - 130	1	20
Ethylbenzene	ND		0.970	0.790		mg/Kg		81	70 - 130	1	20
m&p-Xylene	ND		1.94	1.60		mg/Kg		81	70 - 130	1	20
o-Xylene	ND		0.970	0.749		mg/Kg		77	70 - 130	3	20
Toluene	ND		0.970	0.800		mg/Kg		81	70 - 130	3	20
Xylenes, Total	ND		2.91	2.35		mg/Kg		80	70 - 130	2	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-11196-2 MSD
Matrix: Solid
Analysis Batch: 12126

Client Sample ID: PH05@12'
Prep Type: Total/NA
Prep Batch: 11689

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-11750/1-A
Matrix: Solid
Analysis Batch: 11911

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11750

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		09/06/24 10:28	09/10/24 22:05	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/06/24 10:28	09/10/24 22:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*09/06/24 10:28*	*09/10/24 22:05*	*1*

Lab Sample ID: LCS 885-11750/2-A
Matrix: Solid
Analysis Batch: 11911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11750

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	57.4		mg/Kg		115	60 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-11827/1-A
Matrix: Solid
Analysis Batch: 11864

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11827

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		09/09/24 09:17	09/09/24 14:44	1

Lab Sample ID: LCS 885-11827/2-A
Matrix: Solid
Analysis Batch: 11864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11827

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	31.1		mg/Kg		104	90 - 110		

Lab Sample ID: 885-11196-9 MS
Matrix: Solid
Analysis Batch: 11864

Client Sample ID: PH08@12'
Prep Type: Total/NA
Prep Batch: 11827

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	900		30.1	902	4	mg/Kg		13	50 - 150		

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-11196-9 MSD
Matrix: Solid
Analysis Batch: 11864

Client Sample ID: PH08@12'
Prep Type: Total/NA
Prep Batch: 11827

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	900		30.1	931	4	mg/Kg		110	50 - 150	3	20

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

GC VOA

Prep Batch: 11689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-1	PH05@9'	Total/NA	Solid	5030C	
885-11196-2	PH05@12'	Total/NA	Solid	5030C	
885-11196-5	PH07@6'	Total/NA	Solid	5030C	
885-11196-6	PH07@12'	Total/NA	Solid	5030C	
885-11196-7	PH08@3'	Total/NA	Solid	5030C	
885-11196-8	PH08@6'	Total/NA	Solid	5030C	
885-11196-9	PH08@12'	Total/NA	Solid	5030C	
885-11196-10	PH01@12'	Total/NA	Solid	5030C	
MB 885-11689/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-11689/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-11689/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-11196-1 MS	PH05@9'	Total/NA	Solid	5030C	
885-11196-1 MSD	PH05@9'	Total/NA	Solid	5030C	
885-11196-2 MS	PH05@12'	Total/NA	Solid	5030C	
885-11196-2 MSD	PH05@12'	Total/NA	Solid	5030C	

Analysis Batch: 12117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-1	PH05@9'	Total/NA	Solid	8015M/D	11689
885-11196-2	PH05@12'	Total/NA	Solid	8015M/D	11689
885-11196-5	PH07@6'	Total/NA	Solid	8015M/D	11689
885-11196-6	PH07@12'	Total/NA	Solid	8015M/D	11689
885-11196-7	PH08@3'	Total/NA	Solid	8015M/D	11689
885-11196-8	PH08@6'	Total/NA	Solid	8015M/D	11689
885-11196-9	PH08@12'	Total/NA	Solid	8015M/D	11689
885-11196-10	PH01@12'	Total/NA	Solid	8015M/D	11689
MB 885-11689/1-A	Method Blank	Total/NA	Solid	8015M/D	11689
LCS 885-11689/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	11689
885-11196-1 MS	PH05@9'	Total/NA	Solid	8015M/D	11689
885-11196-1 MSD	PH05@9'	Total/NA	Solid	8015M/D	11689

Analysis Batch: 12126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-1	PH05@9'	Total/NA	Solid	8021B	11689
885-11196-2	PH05@12'	Total/NA	Solid	8021B	11689
885-11196-5	PH07@6'	Total/NA	Solid	8021B	11689
885-11196-6	PH07@12'	Total/NA	Solid	8021B	11689
885-11196-7	PH08@3'	Total/NA	Solid	8021B	11689
885-11196-8	PH08@6'	Total/NA	Solid	8021B	11689
885-11196-9	PH08@12'	Total/NA	Solid	8021B	11689
885-11196-10	PH01@12'	Total/NA	Solid	8021B	11689
MB 885-11689/1-A	Method Blank	Total/NA	Solid	8021B	11689
LCS 885-11689/3-A	Lab Control Sample	Total/NA	Solid	8021B	11689
885-11196-2 MS	PH05@12'	Total/NA	Solid	8021B	11689
885-11196-2 MSD	PH05@12'	Total/NA	Solid	8021B	11689

GC Semi VOA

Prep Batch: 11750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-1	PH05@9'	Total/NA	Solid	SHAKE	

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

GC Semi VOA (Continued)

Prep Batch: 11750 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-2	PH05@12'	Total/NA	Solid	SHAKE	
885-11196-5	PH07@6'	Total/NA	Solid	SHAKE	
885-11196-6	PH07@12'	Total/NA	Solid	SHAKE	
885-11196-7	PH08@3'	Total/NA	Solid	SHAKE	
885-11196-8	PH08@6'	Total/NA	Solid	SHAKE	
885-11196-9	PH08@12'	Total/NA	Solid	SHAKE	
885-11196-10	PH01@12'	Total/NA	Solid	SHAKE	
MB 885-11750/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-11750/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 11911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-1	PH05@9'	Total/NA	Solid	8015M/D	11750
885-11196-2	PH05@12'	Total/NA	Solid	8015M/D	11750
885-11196-5	PH07@6'	Total/NA	Solid	8015M/D	11750
885-11196-6	PH07@12'	Total/NA	Solid	8015M/D	11750
885-11196-7	PH08@3'	Total/NA	Solid	8015M/D	11750
885-11196-8	PH08@6'	Total/NA	Solid	8015M/D	11750
885-11196-9	PH08@12'	Total/NA	Solid	8015M/D	11750
885-11196-10	PH01@12'	Total/NA	Solid	8015M/D	11750
MB 885-11750/1-A	Method Blank	Total/NA	Solid	8015M/D	11750
LCS 885-11750/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	11750

HPLC/IC

Prep Batch: 11827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-1	PH05@9'	Total/NA	Solid	300_Prep	
885-11196-2	PH05@12'	Total/NA	Solid	300_Prep	
885-11196-5	PH07@6'	Total/NA	Solid	300_Prep	
885-11196-6	PH07@12'	Total/NA	Solid	300_Prep	
885-11196-7	PH08@3'	Total/NA	Solid	300_Prep	
885-11196-8	PH08@6'	Total/NA	Solid	300_Prep	
885-11196-9	PH08@12'	Total/NA	Solid	300_Prep	
885-11196-10	PH01@12'	Total/NA	Solid	300_Prep	
MB 885-11827/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-11827/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-11196-9 MS	PH08@12'	Total/NA	Solid	300_Prep	
885-11196-9 MSD	PH08@12'	Total/NA	Solid	300_Prep	

Analysis Batch: 11864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11196-1	PH05@9'	Total/NA	Solid	300.0	11827
885-11196-2	PH05@12'	Total/NA	Solid	300.0	11827
885-11196-5	PH07@6'	Total/NA	Solid	300.0	11827
885-11196-6	PH07@12'	Total/NA	Solid	300.0	11827
885-11196-7	PH08@3'	Total/NA	Solid	300.0	11827
885-11196-8	PH08@6'	Total/NA	Solid	300.0	11827
885-11196-9	PH08@12'	Total/NA	Solid	300.0	11827
885-11196-10	PH01@12'	Total/NA	Solid	300.0	11827
MB 885-11827/1-A	Method Blank	Total/NA	Solid	300.0	11827

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

HPLC/IC (Continued)

Analysis Batch: 11864 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-11827/2-A	Lab Control Sample	Total/NA	Solid	300.0	11827
885-11196-9 MS	PH08@12'	Total/NA	Solid	300.0	11827
885-11196-9 MSD	PH08@12'	Total/NA	Solid	300.0	11827

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH05@9'
Lab Sample ID: 885-11196-1
Date Collected: 09/04/24 11:12
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 12:36
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 12:36
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		1	11911	KR	EET ALB	09/10/24 23:42
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 16:52

Client Sample ID: PH05@12'
Lab Sample ID: 885-11196-2
Date Collected: 09/04/24 11:25
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 13:46
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 13:46
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		1	11911	KR	EET ALB	09/11/24 00:06
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 17:05

Client Sample ID: PH07@6'
Lab Sample ID: 885-11196-5
Date Collected: 09/04/24 12:04
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 14:57
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 14:57
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		10	11911	KR	EET ALB	09/11/24 00:30
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 17:18

Client Sample ID: PH07@12'
Lab Sample ID: 885-11196-6
Date Collected: 09/04/24 12:14
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 15:20

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH07@12'
Lab Sample ID: 885-11196-6
Date Collected: 09/04/24 12:14
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 15:20
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		1	11911	KR	EET ALB	09/11/24 00:54
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 17:31

Client Sample ID: PH08@3'
Lab Sample ID: 885-11196-7
Date Collected: 09/04/24 12:22
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 15:43
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 15:43
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		1	11911	KR	EET ALB	09/11/24 01:18
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 17:44

Client Sample ID: PH08@6'
Lab Sample ID: 885-11196-8
Date Collected: 09/04/24 12:24
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 16:07
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 16:07
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		1	11911	KR	EET ALB	09/11/24 01:42
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 17:56

Client Sample ID: PH08@12'
Lab Sample ID: 885-11196-9
Date Collected: 09/04/24 12:37
Matrix: Solid
Date Received: 09/05/24 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 16:30
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 16:30

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-11196-1

Client Sample ID: PH08@12'
Date Collected: 09/04/24 12:37
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		1	11911	KR	EET ALB	09/11/24 02:06
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 18:09

Client Sample ID: PH01@12'
Date Collected: 09/04/24 12:51
Date Received: 09/05/24 07:35

Lab Sample ID: 885-11196-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8015M/D		1	12117	RA	EET ALB	09/11/24 16:54
Total/NA	Prep	5030C			11689	JP	EET ALB	09/05/24 14:21
Total/NA	Analysis	8021B		1	12126	RA	EET ALB	09/11/24 16:54
Total/NA	Prep	SHAKE			11750	KR	EET ALB	09/06/24 10:28
Total/NA	Analysis	8015M/D		1	11911	KR	EET ALB	09/11/24 02:30
Total/NA	Prep	300_Prep			11827	EH	EET ALB	09/09/24 09:17
Total/NA	Analysis	300.0		20	11864	EH	EET ALB	09/09/24 19:14

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy
Job ID: 885-11196-1
Project/Site: Salty Dog SWD #1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp @ attn: Mitch Killough

Mailing Address:

Phone #:

email or Fax#: mkillough@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Salty Dog SWD #1

Project #:

Project Manager: Stuart Hyde
shyde@ensolum.com

Sampler: Zach Myers

On Ice: ☑ Yes ☐ No cubes

# of Coolers: 1

Cooler Temp(including CF): 4.4-0.1=4.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 8710
Tel. 505-345-3975 Fax 505-345-4107

885-11196 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)		Hold				
9-4	1112	soil	PH05@9'	4oz jar	cool	1	X	X					X									
	1125		PH05@12'			2																
	1135		PH06@6'			3												X				
	1143		PH06@12'			4												X				
	1204		PH07@6'			5																
	1214		PH07@12'			6																
	1222		PH08@3'			7																
	1224		PH08@6'			8																
	1237		PH08@12'			9																
	1251		PH01@12'			10																

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/4/24	1500				9/4/24	1500
9/4/24	1800			courier	9/5/24	7:35

Remarks:
cc: Zmyers@ensolum.com
Jcook

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.

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-11196-1

Login Number: 11196 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 10/2/2024 4:35:21 PM

JOB DESCRIPTION

Salty Dog SWD #1

JOB NUMBER

885-12212-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

my EOL

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

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Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Laboratory Job ID: 885-12212-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Job ID: 885-12212-1
Project/Site: Salty Dog SWD #1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
S1-	Surrogate recovery exceeds control limits, low biased.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: Salty Dog SWD #1

Job ID: 885-12212-1

Job ID: 885-12212-1 Eurofins Albuquerque

Job Narrative
885-12212-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/20/2024 7:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method 8015D_DRO: The following sample was diluted due to the nature of the sample matrix: PH09@3' (885-12212-3). Elevated reporting limits (RLs) are provided.

Method 8015D_DRO: The following sample required a dilution due to the nature of the sample matrix: PH09@3' (885-12212-3). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_OF_28D_PREC: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-12959 and analytical batch 885-13028 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH07@15'

Date Collected: 09/19/24 10:15
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-1

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		09/20/24 14:22	09/24/24 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*35 - 166*	*09/20/24 14:22*	*09/24/24 03:21*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		09/20/24 14:22	09/24/24 03:21	1
Ethylbenzene	ND		0.050		mg/Kg		09/20/24 14:22	09/24/24 03:21	1
Toluene	ND		0.050		mg/Kg		09/20/24 14:22	09/24/24 03:21	1
Xylenes, Total	ND		0.10		mg/Kg		09/20/24 14:22	09/24/24 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*48 - 145*	*09/20/24 14:22*	*09/24/24 03:21*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**31**		10		mg/Kg		09/24/24 07:58	09/25/24 13:13	1
Motor Oil Range Organics [C28-C40]	**61**		50		mg/Kg		09/24/24 07:58	09/25/24 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*83*		*62 - 134*	*09/24/24 07:58*	*09/25/24 13:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**860**		61		mg/Kg		09/24/24 19:04	09/25/24 14:22	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH07@18'

Date Collected: 09/19/24 10:20
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-2

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		09/20/24 14:22	09/24/24 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*35 - 166*	*09/20/24 14:22*	*09/24/24 03:45*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/20/24 14:22	09/24/24 03:45	1
Ethylbenzene	ND		0.049		mg/Kg		09/20/24 14:22	09/24/24 03:45	1
Toluene	ND		0.049		mg/Kg		09/20/24 14:22	09/24/24 03:45	1
Xylenes, Total	ND		0.098		mg/Kg		09/20/24 14:22	09/24/24 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*48 - 145*	*09/20/24 14:22*	*09/24/24 03:45*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		09/24/24 07:58	09/25/24 13:25	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		09/24/24 07:58	09/25/24 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*82*		*62 - 134*	*09/24/24 07:58*	*09/25/24 13:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**780**		60		mg/Kg		09/24/24 19:04	09/25/24 14:35	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH09@3'

Date Collected: 09/19/24 10:24
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-3

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/23/24 11:46	09/25/24 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*35 - 166*	*09/23/24 11:46*	*09/25/24 13:00*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/23/24 11:46	09/25/24 13:00	1
Ethylbenzene	ND		0.048		mg/Kg		09/23/24 11:46	09/25/24 13:00	1
Toluene	ND		0.048		mg/Kg		09/23/24 11:46	09/25/24 13:00	1
Xylenes, Total	ND		0.097		mg/Kg		09/23/24 11:46	09/25/24 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*09/23/24 11:46*	*09/25/24 13:00*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**150**		97		mg/Kg		09/24/24 07:58	09/25/24 13:37	10
Motor Oil Range Organics [C28-C40]	ND	D	490		mg/Kg		09/24/24 07:58	09/25/24 13:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*D S1-*	*62 - 134*	*09/24/24 07:58*	*09/25/24 13:37*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**500**		60		mg/Kg		09/24/24 19:04	09/25/24 14:48	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH09@12'

Date Collected: 09/19/24 10:33
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-4

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/23/24 11:46	09/25/24 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*35 - 166*	*09/23/24 11:46*	*09/25/24 13:22*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/23/24 11:46	09/25/24 13:22	1
Ethylbenzene	ND		0.048		mg/Kg		09/23/24 11:46	09/25/24 13:22	1
Toluene	ND		0.048		mg/Kg		09/23/24 11:46	09/25/24 13:22	1
Xylenes, Total	ND		0.096		mg/Kg		09/23/24 11:46	09/25/24 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*48 - 145*	*09/23/24 11:46*	*09/25/24 13:22*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		09/24/24 07:58	09/25/24 14:01	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/24/24 07:58	09/25/24 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*93*		*62 - 134*	*09/24/24 07:58*	*09/25/24 14:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**770**		60		mg/Kg		09/24/24 19:04	09/25/24 15:01	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH10@3'

Date Collected: 09/19/24 10:40
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-5

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/23/24 11:46	09/25/24 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*35 - 166*	*09/23/24 11:46*	*09/25/24 13:44*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/23/24 11:46	09/25/24 13:44	1
Ethylbenzene	ND		0.048		mg/Kg		09/23/24 11:46	09/25/24 13:44	1
Toluene	ND		0.048		mg/Kg		09/23/24 11:46	09/25/24 13:44	1
Xylenes, Total	ND		0.095		mg/Kg		09/23/24 11:46	09/25/24 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*09/23/24 11:46*	*09/25/24 13:44*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**92**		10		mg/Kg		09/24/24 07:58	09/26/24 15:31	1
Motor Oil Range Organics [C28-C40]	**410**		50		mg/Kg		09/24/24 07:58	09/26/24 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*95*		*62 - 134*	*09/24/24 07:58*	*09/26/24 15:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**		60		mg/Kg		09/24/24 19:04	09/25/24 15:13	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH10@12'

Date Collected: 09/19/24 10:48
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-6

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		09/23/24 11:46	09/25/24 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*35 - 166*	*09/23/24 11:46*	*09/25/24 14:05*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		09/23/24 11:46	09/25/24 14:05	1
Ethylbenzene	ND		0.047		mg/Kg		09/23/24 11:46	09/25/24 14:05	1
Toluene	ND		0.047		mg/Kg		09/23/24 11:46	09/25/24 14:05	1
Xylenes, Total	ND		0.093		mg/Kg		09/23/24 11:46	09/25/24 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*48 - 145*	*09/23/24 11:46*	*09/25/24 14:05*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		09/24/24 07:58	09/25/24 14:38	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		09/24/24 07:58	09/25/24 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*88*		*62 - 134*	*09/24/24 07:58*	*09/25/24 14:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1600**		60		mg/Kg		09/24/24 19:04	09/25/24 15:26	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH11@3'

Date Collected: 09/19/24 09:56
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-7

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		09/23/24 11:46	09/25/24 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*09/23/24 11:46*	*09/25/24 14:27*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/23/24 11:46	09/25/24 14:27	1
Ethylbenzene	ND		0.047		mg/Kg		09/23/24 11:46	09/25/24 14:27	1
Toluene	ND		0.047		mg/Kg		09/23/24 11:46	09/25/24 14:27	1
Xylenes, Total	ND		0.095		mg/Kg		09/23/24 11:46	09/25/24 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*48 - 145*	*09/23/24 11:46*	*09/25/24 14:27*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		09/24/24 09:27	09/25/24 16:50	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		09/24/24 09:27	09/25/24 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*88*		*62 - 134*	*09/24/24 09:27*	*09/25/24 16:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1800**	**F1**	60		mg/Kg		09/24/24 19:25	09/25/24 10:15	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH11@6'

Date Collected: 09/19/24 09:59
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-8

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		09/23/24 11:46	09/25/24 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*35 - 166*	*09/23/24 11:46*	*09/25/24 14:49*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		09/23/24 11:46	09/25/24 14:49	1
Ethylbenzene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 14:49	1
Toluene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 14:49	1
Xylenes, Total	ND		0.099		mg/Kg		09/23/24 11:46	09/25/24 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*48 - 145*	*09/23/24 11:46*	*09/25/24 14:49*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		09/24/24 09:27	09/25/24 17:02	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		09/24/24 09:27	09/25/24 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*90*		*62 - 134*	*09/24/24 09:27*	*09/25/24 17:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2100**		150		mg/Kg		09/24/24 19:25	09/25/24 16:31	50

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Client Sample ID: PH11@12'

Date Collected: 09/19/24 10:05
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12212-9

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		09/23/24 11:46	09/25/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*09/23/24 11:46*	*09/25/24 15:11*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/23/24 11:46	09/25/24 15:11	1
Ethylbenzene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 15:11	1
Toluene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 15:11	1
Xylenes, Total	ND		0.097		mg/Kg		09/23/24 11:46	09/25/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*09/23/24 11:46*	*09/25/24 15:11*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		09/24/24 09:27	09/25/24 17:14	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		09/24/24 09:27	09/25/24 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*94*		*62 - 134*	*09/24/24 09:27*	*09/25/24 17:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**530**		60		mg/Kg		09/24/24 19:25	09/25/24 11:32	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-12663/1-A
Matrix: Solid
Analysis Batch: 12849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12663

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		09/20/24 14:22	09/23/24 17:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*35 - 166*	*09/20/24 14:22*	*09/23/24 17:56*	*1*

Lab Sample ID: LCS 885-12663/2-A
Matrix: Solid
Analysis Batch: 12849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12663

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.3		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*212*		*35 - 166*

Lab Sample ID: MB 885-12766/1-A
Matrix: Solid
Analysis Batch: 13001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12766

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		09/23/24 11:46	09/25/24 03:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*35 - 166*	*09/23/24 11:46*	*09/25/24 03:56*	*1*

Lab Sample ID: LCS 885-12766/2-A
Matrix: Solid
Analysis Batch: 13001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12766

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.4		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*224*	*S1+*	*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-12663/1-A
Matrix: Solid
Analysis Batch: 12850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12663

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		09/20/24 14:22	09/23/24 17:56	1
Ethylbenzene	ND		0.050		mg/Kg		09/20/24 14:22	09/23/24 17:56	1
Toluene	ND		0.050		mg/Kg		09/20/24 14:22	09/23/24 17:56	1
Xylenes, Total	ND		0.10		mg/Kg		09/20/24 14:22	09/23/24 17:56	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-12663/1-A
Matrix: Solid
Analysis Batch: 12850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12663

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		48 - 145	09/20/24 14:22	09/23/24 17:56	1

Lab Sample ID: LCS 885-12663/3-A
Matrix: Solid
Analysis Batch: 12850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12663

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.939		mg/Kg		94	70 - 130
Ethylbenzene	1.00	0.984		mg/Kg		98	70 - 130
m&p-Xylene	2.00	1.96		mg/Kg		98	70 - 130
o-Xylene	1.00	0.955		mg/Kg		95	70 - 130
Toluene	1.00	0.964		mg/Kg		96	70 - 130
Xylenes, Total	3.00	2.91		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		48 - 145

Lab Sample ID: MB 885-12766/1-A
Matrix: Solid
Analysis Batch: 13002

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12766

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		09/23/24 11:46	09/25/24 03:56	1
Ethylbenzene	ND		0.050	mg/Kg		09/23/24 11:46	09/25/24 03:56	1
Toluene	ND		0.050	mg/Kg		09/23/24 11:46	09/25/24 03:56	1
Xylenes, Total	ND		0.10	mg/Kg		09/23/24 11:46	09/25/24 03:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145	09/23/24 11:46	09/25/24 03:56	1

Lab Sample ID: LCS 885-12766/3-A
Matrix: Solid
Analysis Batch: 13037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.50	1.55		mg/Kg		103	70 - 130
Ethylbenzene	1.50	1.55		mg/Kg		103	70 - 130
m&p-Xylene	3.00	3.07		mg/Kg		102	70 - 130
o-Xylene	1.50	1.52		mg/Kg		102	70 - 130
Toluene	1.50	1.54		mg/Kg		103	70 - 130
Xylenes, Total	4.50	4.59		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		48 - 145

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: 885-12212-6 MS
Matrix: Solid
Analysis Batch: 12967

Client Sample ID: PH10@12'
Prep Type: Total/NA
Prep Batch: 12828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		49.8	46.8		mg/Kg		94	44 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*88*		*62 - 134*

Lab Sample ID: 885-12212-6 MSD
Matrix: Solid
Analysis Batch: 12967

Client Sample ID: PH10@12'
Prep Type: Total/NA
Prep Batch: 12828

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		49.9	46.6		mg/Kg		93	44 - 136	0	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*

Lab Sample ID: MB 885-12847/1-A
Matrix: Solid
Analysis Batch: 12967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12847

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		09/24/24 09:27	09/25/24 15:26	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/24/24 09:27	09/25/24 15:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*91*		*62 - 134*	*09/24/24 09:27*	*09/25/24 15:26*	*1*

Lab Sample ID: LCS 885-12847/2-A
Matrix: Solid
Analysis Batch: 12967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12847

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]			50.0	46.5		mg/Kg		93	60 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-12958/1-A
Matrix: Solid
Analysis Batch: 13000

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12958

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		09/24/24 19:04	09/25/24 09:00	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-12958/2-A
Matrix: Solid
Analysis Batch: 13000

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12958

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	30.6		mg/Kg		102	90 - 110		

Lab Sample ID: MB 885-12959/1-A
Matrix: Solid
Analysis Batch: 13028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12959

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		09/24/24 19:25	09/25/24 09:42	1

Lab Sample ID: LCS 885-12959/2-A
Matrix: Solid
Analysis Batch: 13028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12959

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	32.6		mg/Kg		109	90 - 110		

Lab Sample ID: 885-12212-7 MS
Matrix: Solid
Analysis Batch: 13028

Client Sample ID: PH11@3'
Prep Type: Total/NA
Prep Batch: 12959

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1800	F1	624	1480	F1	mg/Kg		-46	50 - 150		

Lab Sample ID: 885-12212-7 MSD
Matrix: Solid
Analysis Batch: 13028

Client Sample ID: PH11@3'
Prep Type: Total/NA
Prep Batch: 12959

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1800	F1	624	1490	F1	mg/Kg		-44	50 - 150	1	20

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

GC VOA

Prep Batch: 12663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-1	PH07@15'	Total/NA	Solid	5030C	
885-12212-2	PH07@18'	Total/NA	Solid	5030C	
MB 885-12663/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-12663/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-12663/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 12766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-3	PH09@3'	Total/NA	Solid	5030C	
885-12212-4	PH09@12'	Total/NA	Solid	5030C	
885-12212-5	PH10@3'	Total/NA	Solid	5030C	
885-12212-6	PH10@12'	Total/NA	Solid	5030C	
885-12212-7	PH11@3'	Total/NA	Solid	5030C	
885-12212-8	PH11@6'	Total/NA	Solid	5030C	
885-12212-9	PH11@12'	Total/NA	Solid	5030C	
MB 885-12766/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-12766/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-12766/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 12849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-1	PH07@15'	Total/NA	Solid	8015M/D	12663
885-12212-2	PH07@18'	Total/NA	Solid	8015M/D	12663
MB 885-12663/1-A	Method Blank	Total/NA	Solid	8015M/D	12663
LCS 885-12663/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	12663

Analysis Batch: 12850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-1	PH07@15'	Total/NA	Solid	8021B	12663
885-12212-2	PH07@18'	Total/NA	Solid	8021B	12663
MB 885-12663/1-A	Method Blank	Total/NA	Solid	8021B	12663
LCS 885-12663/3-A	Lab Control Sample	Total/NA	Solid	8021B	12663

Analysis Batch: 13001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-12766/1-A	Method Blank	Total/NA	Solid	8015M/D	12766
LCS 885-12766/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	12766

Analysis Batch: 13002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-12766/1-A	Method Blank	Total/NA	Solid	8021B	12766

Analysis Batch: 13036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-3	PH09@3'	Total/NA	Solid	8015M/D	12766
885-12212-4	PH09@12'	Total/NA	Solid	8015M/D	12766
885-12212-5	PH10@3'	Total/NA	Solid	8015M/D	12766
885-12212-6	PH10@12'	Total/NA	Solid	8015M/D	12766
885-12212-7	PH11@3'	Total/NA	Solid	8015M/D	12766
885-12212-8	PH11@6'	Total/NA	Solid	8015M/D	12766
885-12212-9	PH11@12'	Total/NA	Solid	8015M/D	12766

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

GC VOA

Analysis Batch: 13037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-3	PH09@3'	Total/NA	Solid	8021B	12766
885-12212-4	PH09@12'	Total/NA	Solid	8021B	12766
885-12212-5	PH10@3'	Total/NA	Solid	8021B	12766
885-12212-6	PH10@12'	Total/NA	Solid	8021B	12766
885-12212-7	PH11@3'	Total/NA	Solid	8021B	12766
885-12212-8	PH11@6'	Total/NA	Solid	8021B	12766
885-12212-9	PH11@12'	Total/NA	Solid	8021B	12766
LCS 885-12766/3-A	Lab Control Sample	Total/NA	Solid	8021B	12766

GC Semi VOA

Prep Batch: 12828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-1	PH07@15'	Total/NA	Solid	SHAKE	
885-12212-2	PH07@18'	Total/NA	Solid	SHAKE	
885-12212-3	PH09@3'	Total/NA	Solid	SHAKE	
885-12212-4	PH09@12'	Total/NA	Solid	SHAKE	
885-12212-5	PH10@3'	Total/NA	Solid	SHAKE	
885-12212-6	PH10@12'	Total/NA	Solid	SHAKE	
885-12212-6 MS	PH10@12'	Total/NA	Solid	SHAKE	
885-12212-6 MSD	PH10@12'	Total/NA	Solid	SHAKE	

Prep Batch: 12847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-7	PH11@3'	Total/NA	Solid	SHAKE	
885-12212-8	PH11@6'	Total/NA	Solid	SHAKE	
885-12212-9	PH11@12'	Total/NA	Solid	SHAKE	
MB 885-12847/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-12847/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 12967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-1	PH07@15'	Total/NA	Solid	8015M/D	12828
885-12212-2	PH07@18'	Total/NA	Solid	8015M/D	12828
885-12212-3	PH09@3'	Total/NA	Solid	8015M/D	12828
885-12212-4	PH09@12'	Total/NA	Solid	8015M/D	12828
885-12212-6	PH10@12'	Total/NA	Solid	8015M/D	12828
885-12212-7	PH11@3'	Total/NA	Solid	8015M/D	12847
885-12212-8	PH11@6'	Total/NA	Solid	8015M/D	12847
885-12212-9	PH11@12'	Total/NA	Solid	8015M/D	12847
MB 885-12847/1-A	Method Blank	Total/NA	Solid	8015M/D	12847
LCS 885-12847/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	12847
885-12212-6 MS	PH10@12'	Total/NA	Solid	8015M/D	12828
885-12212-6 MSD	PH10@12'	Total/NA	Solid	8015M/D	12828

Analysis Batch: 13085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-5	PH10@3'	Total/NA	Solid	8015M/D	12828

QC Association Summary

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12212-1

HPLC/IC

Prep Batch: 12958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-1	PH07@15'	Total/NA	Solid	300_Prep	
885-12212-2	PH07@18'	Total/NA	Solid	300_Prep	
885-12212-3	PH09@3'	Total/NA	Solid	300_Prep	
885-12212-4	PH09@12'	Total/NA	Solid	300_Prep	
885-12212-5	PH10@3'	Total/NA	Solid	300_Prep	
885-12212-6	PH10@12'	Total/NA	Solid	300_Prep	
MB 885-12958/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-12958/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 12959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-7	PH11@3'	Total/NA	Solid	300_Prep	
885-12212-8	PH11@6'	Total/NA	Solid	300_Prep	
885-12212-9	PH11@12'	Total/NA	Solid	300_Prep	
MB 885-12959/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-12959/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-12212-7 MS	PH11@3'	Total/NA	Solid	300_Prep	
885-12212-7 MSD	PH11@3'	Total/NA	Solid	300_Prep	

Analysis Batch: 13000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-1	PH07@15'	Total/NA	Solid	300.0	12958
885-12212-2	PH07@18'	Total/NA	Solid	300.0	12958
885-12212-3	PH09@3'	Total/NA	Solid	300.0	12958
885-12212-4	PH09@12'	Total/NA	Solid	300.0	12958
885-12212-5	PH10@3'	Total/NA	Solid	300.0	12958
885-12212-6	PH10@12'	Total/NA	Solid	300.0	12958
885-12212-8	PH11@6'	Total/NA	Solid	300.0	12959
MB 885-12958/1-A	Method Blank	Total/NA	Solid	300.0	12958
LCS 885-12958/2-A	Lab Control Sample	Total/NA	Solid	300.0	12958

Analysis Batch: 13028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12212-7	PH11@3'	Total/NA	Solid	300.0	12959
885-12212-9	PH11@12'	Total/NA	Solid	300.0	12959
MB 885-12959/1-A	Method Blank	Total/NA	Solid	300.0	12959
LCS 885-12959/2-A	Lab Control Sample	Total/NA	Solid	300.0	12959
885-12212-7 MS	PH11@3'	Total/NA	Solid	300.0	12959
885-12212-7 MSD	PH11@3'	Total/NA	Solid	300.0	12959

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-12212-1
Project/Site: Salty Dog SWD #1

Client Sample ID: PH07@15'
Lab Sample ID: 885-12212-1
Date Collected: 09/19/24 10:15
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12663	JR	EET ALB	09/20/24 14:22
Total/NA	Analysis	8015M/D		1	12849	JP	EET ALB	09/24/24 03:21
Total/NA	Prep	5030C			12663	JR	EET ALB	09/20/24 14:22
Total/NA	Analysis	8021B		1	12850	JP	EET ALB	09/24/24 03:21
Total/NA	Prep	SHAKE			12828	KR	EET ALB	09/24/24 07:58
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 13:13
Total/NA	Prep	300_Prep			12958	JT	EET ALB	09/24/24 19:04
Total/NA	Analysis	300.0		20	13000	EH	EET ALB	09/25/24 14:22

Client Sample ID: PH07@18'
Lab Sample ID: 885-12212-2
Date Collected: 09/19/24 10:20
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12663	JR	EET ALB	09/20/24 14:22
Total/NA	Analysis	8015M/D		1	12849	JP	EET ALB	09/24/24 03:45
Total/NA	Prep	5030C			12663	JR	EET ALB	09/20/24 14:22
Total/NA	Analysis	8021B		1	12850	JP	EET ALB	09/24/24 03:45
Total/NA	Prep	SHAKE			12828	KR	EET ALB	09/24/24 07:58
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 13:25
Total/NA	Prep	300_Prep			12958	JT	EET ALB	09/24/24 19:04
Total/NA	Analysis	300.0		20	13000	EH	EET ALB	09/25/24 14:35

Client Sample ID: PH09@3'
Lab Sample ID: 885-12212-3
Date Collected: 09/19/24 10:24
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 13:00
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 13:00
Total/NA	Prep	SHAKE			12828	KR	EET ALB	09/24/24 07:58
Total/NA	Analysis	8015M/D		10	12967	KR	EET ALB	09/25/24 13:37
Total/NA	Prep	300_Prep			12958	JT	EET ALB	09/24/24 19:04
Total/NA	Analysis	300.0		20	13000	EH	EET ALB	09/25/24 14:48

Client Sample ID: PH09@12'
Lab Sample ID: 885-12212-4
Date Collected: 09/19/24 10:33
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 13:22

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-12212-1
Project/Site: Salty Dog SWD #1

Client Sample ID: PH09@12'
Lab Sample ID: 885-12212-4
Date Collected: 09/19/24 10:33
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 13:22
Total/NA	Prep	SHAKE			12828	KR	EET ALB	09/24/24 07:58
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 14:01
Total/NA	Prep	300_Prep			12958	JT	EET ALB	09/24/24 19:04
Total/NA	Analysis	300.0		20	13000	EH	EET ALB	09/25/24 15:01

Client Sample ID: PH10@3'
Lab Sample ID: 885-12212-5
Date Collected: 09/19/24 10:40
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 13:44
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 13:44
Total/NA	Prep	SHAKE			12828	KR	EET ALB	09/24/24 07:58
Total/NA	Analysis	8015M/D		1	13085	EM	EET ALB	09/26/24 15:31
Total/NA	Prep	300_Prep			12958	JT	EET ALB	09/24/24 19:04
Total/NA	Analysis	300.0		20	13000	EH	EET ALB	09/25/24 15:13

Client Sample ID: PH10@12'
Lab Sample ID: 885-12212-6
Date Collected: 09/19/24 10:48
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 14:05
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 14:05
Total/NA	Prep	SHAKE			12828	KR	EET ALB	09/24/24 07:58
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 14:38
Total/NA	Prep	300_Prep			12958	JT	EET ALB	09/24/24 19:04
Total/NA	Analysis	300.0		20	13000	EH	EET ALB	09/25/24 15:26

Client Sample ID: PH11@3'
Lab Sample ID: 885-12212-7
Date Collected: 09/19/24 09:56
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 14:27
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 14:27

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-12212-1
Project/Site: Salty Dog SWD #1

Client Sample ID: PH11@3'
Lab Sample ID: 885-12212-7
Date Collected: 09/19/24 09:56
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			12847	KR	EET ALB	09/24/24 09:27
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 16:50
Total/NA	Prep	300_Prep			12959	JT	EET ALB	09/24/24 19:25
Total/NA	Analysis	300.0		20	13028	EH	EET ALB	09/25/24 10:15

Client Sample ID: PH11@6'
Lab Sample ID: 885-12212-8
Date Collected: 09/19/24 09:59
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 14:49
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 14:49
Total/NA	Prep	SHAKE			12847	KR	EET ALB	09/24/24 09:27
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 17:02
Total/NA	Prep	300_Prep			12959	JT	EET ALB	09/24/24 19:25
Total/NA	Analysis	300.0		50	13000	EH	EET ALB	09/25/24 16:31

Client Sample ID: PH11@12'
Lab Sample ID: 885-12212-9
Date Collected: 09/19/24 10:05
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 15:11
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 15:11
Total/NA	Prep	SHAKE			12847	KR	EET ALB	09/24/24 09:27
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 17:14
Total/NA	Prep	300_Prep			12959	JT	EET ALB	09/24/24 19:25
Total/NA	Analysis	300.0		20	13028	EH	EET ALB	09/25/24 11:32

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy
Job ID: 885-12212-1
Project/Site: Salty Dog SWD #1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp attn: Mitch Killough

Mailing Address:

Phone #:

email or Fax#: mkillough@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 3-day
☐ Standard ☑ Rush

Project Name: Salty Dog SWD #1

Project #:

Project Manager: Stuart Hyde
shyde@ensolum.com

Sampler: Zach Myers

On Ice: ☑ Yes ☐ No chucky

# of Coolers: 1

Cooler Temp(including CF): 5.8-0.1=5.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORA
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107
885-12212 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMBs (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)
9-19	1015	soil	PH07@15	4oz jar	cool	1	X	X					X			
	1020		PH07@18			2										
	1024		PH09@3'			3										
	1033		PH09@12'			4										
	1040		PH10@3'			5										
	1048		PH10@12'			6										
	956		PH11@3'			7										
	959		PH11@6'			8										
	1005		PH11@12'			9										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/19/24	1522		Chris Waeler		9/19/24	1522
9/19/24	1724	Chris Waeler		courier	9/20/24	7:15

Remarks:
cc: smahanay@ensolum.com
zmyers

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.

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-12212-1

Login Number: 12212 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 10/4/2024 9:44:02 AM

JOB DESCRIPTION

Salty Dog SWD #1

JOB NUMBER

885-12213-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
10/4/2024 9:44:02 AM

Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Laboratory Job ID: 885-12213-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy Job ID: 885-12213-1
Project/Site: Salty Dog SWD #1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: Salty Dog SWD #1

Job ID: 885-12213-1

Job ID: 885-12213-1 Eurofins Albuquerque

Job Narrative
885-12213-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/20/2024 7:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12213-1

Client Sample ID: PH12@6'

Date Collected: 09/19/24 09:48
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12213-1

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		09/23/24 11:46	09/25/24 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*35 - 166*	*09/23/24 11:46*	*09/25/24 15:32*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		09/23/24 11:46	09/25/24 15:32	1
Ethylbenzene	ND		0.047		mg/Kg		09/23/24 11:46	09/25/24 15:32	1
Toluene	ND		0.047		mg/Kg		09/23/24 11:46	09/25/24 15:32	1
Xylenes, Total	ND		0.094		mg/Kg		09/23/24 11:46	09/25/24 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*09/23/24 11:46*	*09/25/24 15:32*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		09/24/24 09:27	09/25/24 17:26	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/24/24 09:27	09/25/24 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*	*09/24/24 09:27*	*09/25/24 17:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1800**		60		mg/Kg		09/24/24 19:25	09/25/24 11:45	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12213-1

Client Sample ID: PH12@12'

Date Collected: 09/19/24 09:53
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12213-2

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		09/23/24 11:46	09/25/24 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*09/23/24 11:46*	*09/25/24 15:54*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/23/24 11:46	09/25/24 15:54	1
Ethylbenzene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 15:54	1
Toluene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 15:54	1
Xylenes, Total	ND		0.097		mg/Kg		09/23/24 11:46	09/25/24 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*48 - 145*	*09/23/24 11:46*	*09/25/24 15:54*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		09/24/24 09:27	09/25/24 17:38	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/24/24 09:27	09/25/24 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*09/24/24 09:27*	*09/25/24 17:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1300**		60		mg/Kg		09/24/24 19:25	09/25/24 12:23	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12213-1

Client Sample ID: PH13@6'

Date Collected: 09/19/24 09:33
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12213-3

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		09/23/24 11:46	09/25/24 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*09/23/24 11:46*	*09/25/24 16:16*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		09/23/24 11:46	09/25/24 16:16	1
Ethylbenzene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 16:16	1
Toluene	ND		0.049		mg/Kg		09/23/24 11:46	09/25/24 16:16	1
Xylenes, Total	ND		0.099		mg/Kg		09/23/24 11:46	09/25/24 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*09/23/24 11:46*	*09/25/24 16:16*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		09/24/24 09:27	09/25/24 17:50	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		09/24/24 09:27	09/25/24 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*92*		*62 - 134*	*09/24/24 09:27*	*09/25/24 17:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**790**		60		mg/Kg		09/24/24 19:25	09/25/24 12:36	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12213-1

Client Sample ID: PH13@12'

Date Collected: 09/19/24 09:40
Date Received: 09/20/24 07:15

Lab Sample ID: 885-12213-4

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		09/23/24 16:02	09/25/24 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*35 - 166*	*09/23/24 16:02*	*09/25/24 16:05*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		09/23/24 16:02	09/25/24 16:05	1
Ethylbenzene	ND		0.048		mg/Kg		09/23/24 16:02	09/25/24 16:05	1
Toluene	ND		0.048		mg/Kg		09/23/24 16:02	09/25/24 16:05	1
Xylenes, Total	ND		0.096		mg/Kg		09/23/24 16:02	09/25/24 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*48 - 145*	*09/23/24 16:02*	*09/25/24 16:05*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		09/24/24 09:27	09/25/24 18:03	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		09/24/24 09:27	09/25/24 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*92*		*62 - 134*	*09/24/24 09:27*	*09/25/24 18:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**910**		60		mg/Kg		09/24/24 19:25	09/25/24 12:49	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12213-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-12766/1-A
Matrix: Solid
Analysis Batch: 13001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12766

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		09/23/24 11:46	09/25/24 03:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*35 - 166*	*09/23/24 11:46*	*09/25/24 03:56*	*1*

Lab Sample ID: LCS 885-12766/2-A
Matrix: Solid
Analysis Batch: 13001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12766

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.4		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*224*	*S1+*	*35 - 166*

Lab Sample ID: MB 885-12803/1-A
Matrix: Solid
Analysis Batch: 13061

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12803

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		09/23/24 16:02	09/25/24 14:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*35 - 166*	*09/23/24 16:02*	*09/25/24 14:31*	*1*

Lab Sample ID: LCS 885-12803/2-A
Matrix: Solid
Analysis Batch: 13061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12803

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	22.7		mg/Kg		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*203*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-12766/1-A
Matrix: Solid
Analysis Batch: 13002

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12766

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		09/23/24 11:46	09/25/24 03:56	1
Ethylbenzene	ND		0.050		mg/Kg		09/23/24 11:46	09/25/24 03:56	1
Toluene	ND		0.050		mg/Kg		09/23/24 11:46	09/25/24 03:56	1
Xylenes, Total	ND		0.10		mg/Kg		09/23/24 11:46	09/25/24 03:56	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12213-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-12766/1-A
Matrix: Solid
Analysis Batch: 13002

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12766

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145	09/23/24 11:46	09/25/24 03:56	1

Lab Sample ID: LCS 885-12766/3-A
Matrix: Solid
Analysis Batch: 13037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.50	1.55		mg/Kg		103	70 - 130
Ethylbenzene	1.50	1.55		mg/Kg		103	70 - 130
m&p-Xylene	3.00	3.07		mg/Kg		102	70 - 130
o-Xylene	1.50	1.52		mg/Kg		102	70 - 130
Toluene	1.50	1.54		mg/Kg		103	70 - 130
Xylenes, Total	4.50	4.59		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		48 - 145

Lab Sample ID: MB 885-12803/1-A
Matrix: Solid
Analysis Batch: 13063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12803

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		09/23/24 16:02	09/25/24 14:31	1
Ethylbenzene	ND		0.050	mg/Kg		09/23/24 16:02	09/25/24 14:31	1
Toluene	ND		0.050	mg/Kg		09/23/24 16:02	09/25/24 14:31	1
Xylenes, Total	ND		0.10	mg/Kg		09/23/24 16:02	09/25/24 14:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		48 - 145	09/23/24 16:02	09/25/24 14:31	1

Lab Sample ID: LCS 885-12803/3-A
Matrix: Solid
Analysis Batch: 13063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12803

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.04		mg/Kg		104	70 - 130
Ethylbenzene	1.00	1.04		mg/Kg		104	70 - 130
m&p-Xylene	2.00	2.08		mg/Kg		104	70 - 130
o-Xylene	1.00	1.03		mg/Kg		103	70 - 130
Toluene	1.00	1.03		mg/Kg		103	70 - 130
Xylenes, Total	3.00	3.11		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		48 - 145

QC Sample Results

Client: Hilcorp Energy
Project/Site: Salty Dog SWD #1

Job ID: 885-12213-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-12847/1-A
Matrix: Solid
Analysis Batch: 12967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12847

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		09/24/24 09:27	09/25/24 15:26	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		09/24/24 09:27	09/25/24 15:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*91*		*62 - 134*	*09/24/24 09:27*	*09/25/24 15:26*	*1*

Lab Sample ID: LCS 885-12847/2-A
Matrix: Solid
Analysis Batch: 12967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12847

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	46.5		mg/Kg		93	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-12959/1-A
Matrix: Solid
Analysis Batch: 13028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12959

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		09/24/24 19:25	09/25/24 09:42	1

Lab Sample ID: LCS 885-12959/2-A
Matrix: Solid
Analysis Batch: 13028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12959

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	32.6		mg/Kg		109	90 - 110		

QC Association Summary

Client: Hilcorp Energy
Job ID: 885-12213-1
Project/Site: Salty Dog SWD #1

GC VOA

Prep Batch: 12766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-1	PH12@6'	Total/NA	Solid	5030C	
885-12213-2	PH12@12'	Total/NA	Solid	5030C	
885-12213-3	PH13@6'	Total/NA	Solid	5030C	
MB 885-12766/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-12766/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-12766/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 12803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-4	PH13@12'	Total/NA	Solid	5030C	
MB 885-12803/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-12803/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-12803/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 13001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-12766/1-A	Method Blank	Total/NA	Solid	8015M/D	12766
LCS 885-12766/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	12766

Analysis Batch: 13002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-12766/1-A	Method Blank	Total/NA	Solid	8021B	12766

Analysis Batch: 13036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-1	PH12@6'	Total/NA	Solid	8015M/D	12766
885-12213-2	PH12@12'	Total/NA	Solid	8015M/D	12766
885-12213-3	PH13@6'	Total/NA	Solid	8015M/D	12766

Analysis Batch: 13037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-1	PH12@6'	Total/NA	Solid	8021B	12766
885-12213-2	PH12@12'	Total/NA	Solid	8021B	12766
885-12213-3	PH13@6'	Total/NA	Solid	8021B	12766
LCS 885-12766/3-A	Lab Control Sample	Total/NA	Solid	8021B	12766

Analysis Batch: 13061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-4	PH13@12'	Total/NA	Solid	8015M/D	12803
MB 885-12803/1-A	Method Blank	Total/NA	Solid	8015M/D	12803
LCS 885-12803/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	12803

Analysis Batch: 13063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-4	PH13@12'	Total/NA	Solid	8021B	12803
MB 885-12803/1-A	Method Blank	Total/NA	Solid	8021B	12803
LCS 885-12803/3-A	Lab Control Sample	Total/NA	Solid	8021B	12803

QC Association Summary

Client: Hilcorp Energy
Job ID: 885-12213-1
Project/Site: Salty Dog SWD #1

GC Semi VOA

Prep Batch: 12847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-1	PH12@6'	Total/NA	Solid	SHAKE	
885-12213-2	PH12@12'	Total/NA	Solid	SHAKE	
885-12213-3	PH13@6'	Total/NA	Solid	SHAKE	
885-12213-4	PH13@12'	Total/NA	Solid	SHAKE	
MB 885-12847/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-12847/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 12967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-1	PH12@6'	Total/NA	Solid	8015M/D	12847
885-12213-2	PH12@12'	Total/NA	Solid	8015M/D	12847
885-12213-3	PH13@6'	Total/NA	Solid	8015M/D	12847
885-12213-4	PH13@12'	Total/NA	Solid	8015M/D	12847
MB 885-12847/1-A	Method Blank	Total/NA	Solid	8015M/D	12847
LCS 885-12847/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	12847

HPLC/IC

Prep Batch: 12959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-1	PH12@6'	Total/NA	Solid	300_Prep	
885-12213-2	PH12@12'	Total/NA	Solid	300_Prep	
885-12213-3	PH13@6'	Total/NA	Solid	300_Prep	
885-12213-4	PH13@12'	Total/NA	Solid	300_Prep	
MB 885-12959/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-12959/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 13028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12213-1	PH12@6'	Total/NA	Solid	300.0	12959
885-12213-2	PH12@12'	Total/NA	Solid	300.0	12959
885-12213-3	PH13@6'	Total/NA	Solid	300.0	12959
885-12213-4	PH13@12'	Total/NA	Solid	300.0	12959
MB 885-12959/1-A	Method Blank	Total/NA	Solid	300.0	12959
LCS 885-12959/2-A	Lab Control Sample	Total/NA	Solid	300.0	12959

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-12213-1
Project/Site: Salty Dog SWD #1

Client Sample ID: PH12@6'
Lab Sample ID: 885-12213-1
Date Collected: 09/19/24 09:48
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 15:32
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 15:32
Total/NA	Prep	SHAKE			12847	KR	EET ALB	09/24/24 09:27
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 17:26
Total/NA	Prep	300_Prep			12959	JT	EET ALB	09/24/24 19:25
Total/NA	Analysis	300.0		20	13028	EH	EET ALB	09/25/24 11:45

Client Sample ID: PH12@12'
Lab Sample ID: 885-12213-2
Date Collected: 09/19/24 09:53
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 15:54
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 15:54
Total/NA	Prep	SHAKE			12847	KR	EET ALB	09/24/24 09:27
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 17:38
Total/NA	Prep	300_Prep			12959	JT	EET ALB	09/24/24 19:25
Total/NA	Analysis	300.0		20	13028	EH	EET ALB	09/25/24 12:23

Client Sample ID: PH13@6'
Lab Sample ID: 885-12213-3
Date Collected: 09/19/24 09:33
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8015M/D		1	13036	AT	EET ALB	09/25/24 16:16
Total/NA	Prep	5030C			12766	JP	EET ALB	09/23/24 11:46
Total/NA	Analysis	8021B		1	13037	AT	EET ALB	09/25/24 16:16
Total/NA	Prep	SHAKE			12847	KR	EET ALB	09/24/24 09:27
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 17:50
Total/NA	Prep	300_Prep			12959	JT	EET ALB	09/24/24 19:25
Total/NA	Analysis	300.0		20	13028	EH	EET ALB	09/25/24 12:36

Client Sample ID: PH13@12'
Lab Sample ID: 885-12213-4
Date Collected: 09/19/24 09:40
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12803	JP	EET ALB	09/23/24 16:02
Total/NA	Analysis	8015M/D		1	13061	JP	EET ALB	09/25/24 16:05

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-12213-1
Project/Site: Salty Dog SWD #1

Client Sample ID: PH13@12'
Lab Sample ID: 885-12213-4
Date Collected: 09/19/24 09:40
Matrix: Solid
Date Received: 09/20/24 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			12803	JP	EET ALB	09/23/24 16:02
Total/NA	Analysis	8021B		1	13063	JP	EET ALB	09/25/24 16:05
Total/NA	Prep	SHAKE			12847	KR	EET ALB	09/24/24 09:27
Total/NA	Analysis	8015M/D		1	12967	KR	EET ALB	09/25/24 18:03
Total/NA	Prep	300_Prep			12959	JT	EET ALB	09/24/24 19:25
Total/NA	Analysis	300.0		20	13028	EH	EET ALB	09/25/24 12:49

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy
Job ID: 885-12213-1
Project/Site: Salty Dog SWD #1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp attn: Mitch Killough

Mailing Address:

Phone #:

email or Fax#: mkillough@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 3-day

Project Name: Salty Dog SWD #1

Project #:

Project Manager: Stuart Hyde
shyde@ensolum.com

Sampler: Zach Myers

On Ice: ☐ Yes ☐ No chucky

# of Coolers: 1

Cooler Temp (Including CF): 5.8 - 0.1 = 5.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABOR
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 8710
Tel. 505-345-3975 Fax 505-345-4107

885-12213 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)
9-19	948	soil	PH12@6'	4oz jar	cool	1	X	X					X			
	953		PH12@12'			2										
	933		PH13@6'			3										
	940		PH13@12'			4										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/19/24	1522					
9/19/24	1724			Courier	9/20/24	7:15

Remarks:
cc: smahanay@ensolum.com
Zmyers

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.

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-12213-1

Login Number: 12213 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Report to:

Mitch Killough

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	Salty Dog #1 BGT
Work Order:	E410271
Job Number:	17051-0002
Received:	10/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/24/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 10/24/24

Mitch Killough
PO Box 61529
Houston, TX 77208

Project Name: Salty Dog #1 BGT
Workorder: E410271
Date Received: 10/22/2024 2:50:00PM

Mitch Killough,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/22/2024 2:50:00PM, under the Project Name: Salty Dog #1 BGT.

The analytical test results summarized in this report with the Project Name: Salty Dog #1 BGT apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

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Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
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Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/24/24 10:56

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03@ 20-21.5	E410271-01A	Soil	10/22/24	10/22/24	Glass Jar, 4 oz.

Case Narative:

Project Name: Salty Dog #1 BGT
Workorder:E410271
Date Received: 10/22/24 14:50

The client requested the following sample(s) to be re-extracted and re-analyzed:

Sample Name	Laboratory ID	Analysis
BH03@20-21.5	E410271-01	300.0 Chloride

The analytical test results summarized in this revised report represent this re-extration and re-analysis.

If you have any questions reguarding this report please feel free to contact Envirotech Inc.

Respectfully,

Walter Hinchman

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Mitch Killough	10/24/2024 10:56:15AM

BH03@ 20-21.5

E410271-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2443020
Benzene	ND	0.0250	1	10/22/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/22/24	10/22/24	
Toluene	ND	0.0250	1	10/22/24	10/22/24	
o-Xylene	ND	0.0250	1	10/22/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/22/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/22/24	10/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.6 %*	*70-130*	*10/22/24*	*10/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/22/24	10/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.2 %*	*70-130*	*10/22/24*	*10/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2443074
Diesel Range Organics (C10-C28)	ND	25.0	1	10/22/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/22/24	10/22/24	
Surrogate: n-Nonane		*115 %*	*50-200*	*10/22/24*	*10/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2443062
Chloride	**763**	20.0	1	10/23/24	10/23/24	

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/24/2024 10:56:15AM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443020-BLK1)									Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.34*		*8.00*		*91.8*	*70-130*			
LCS (2443020-BS1)									Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	4.68	0.0250	5.00		93.5	70-130			
Ethylbenzene	4.47	0.0250	5.00		89.3	70-130			
Toluene	4.59	0.0250	5.00		91.8	70-130			
o-Xylene	4.48	0.0250	5.00		89.7	70-130			
p,m-Xylene	9.05	0.0500	10.0		90.5	70-130			
Total Xylenes	13.5	0.0250	15.0		90.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.44*		*8.00*		*93.0*	*70-130*			
Matrix Spike (2443020-MS1)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	4.93	0.0250	5.00	ND	98.7	54-133			
Ethylbenzene	4.75	0.0250	5.00	ND	95.0	61-133			
Toluene	4.85	0.0250	5.00	ND	97.1	61-130			
o-Xylene	4.76	0.0250	5.00	ND	95.3	63-131			
p,m-Xylene	9.64	0.0500	10.0	ND	96.4	63-131			
Total Xylenes	14.4	0.0250	15.0	ND	96.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.42*		*8.00*		*92.7*	*70-130*			
Matrix Spike Dup (2443020-MSD1)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	5.22	0.0250	5.00	ND	104	54-133	5.58	20	
Ethylbenzene	5.01	0.0250	5.00	ND	100	61-133	5.38	20	
Toluene	5.13	0.0250	5.00	ND	103	61-130	5.52	20	
o-Xylene	5.02	0.0250	5.00	ND	100	63-131	5.25	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	5.24	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	5.24	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.38*		*8.00*		*92.3*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/24/2024 10:56:15AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443020-BLK1)									Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.46*		*8.00*		*93.3*	*70-130*			
LCS (2443020-BS2)									Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	44.6	20.0	50.0		89.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.60*		*8.00*		*95.0*	*70-130*			
Matrix Spike (2443020-MS2)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	40.7	20.0	50.0	ND	81.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.55*		*8.00*		*94.4*	*70-130*			
Matrix Spike Dup (2443020-MSD2)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	40.8	20.0	50.0	ND	81.5	70-130	0.0811	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.46*		*8.00*		*93.3*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/24/2024 10:56:15AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443074-BLK1)									Prepared: 10/22/24 Analyzed: 10/22/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*53.2*		*50.0*		*106*	*50-200*			
LCS (2443074-BS1)									Prepared: 10/22/24 Analyzed: 10/22/24
Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			
LCS Dup (2443074-BSD1)									Prepared: 10/22/24 Analyzed: 10/22/24
Diesel Range Organics (C10-C28)	263	25.0	250		105	38-132	2.48	20	
Surrogate: n-Nonane	*50.1*		*50.0*		*100*	*50-200*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/24/2024 10:56:15AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443062-BLK1)									Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	ND	20.0							
LCS (2443062-BS1)									Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2443062-MS1)				**Source: E410243-06**					Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	316	20.0	250	50.5	106	80-120			
Matrix Spike Dup (2443062-MSD1)				**Source: E410243-06**					Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	310	20.0	250	50.5	104	80-120	1.74	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Mitch Killough	10/24/24 10:56

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
DNR	Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Chain of Custody

Client Information		Invoice Information		Lab Use Only		TAT				State				
Client:	Hilcorp Energy Company	Company:	same as client	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name:	Salty Dog #1 BGT	Address:		E410271	17051-0002				X next day					
Project Manager:	Mitch Killough	City, State, Zip:												
Address:	—	Phone:												
City, State, Zip:	—	Email:												
Phone:	281-851-2338	Miscellaneous:	for results include shyde@envirotech.com											
Email:	MKillough@hilcorp.com													

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
1300	10/22/24	soil	1	BH03@ 20-21.5	N	1	X	X	X		X							Please due the grouped pricing of TPH (GRO, DRO, MRO), BTEX, & Cl

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

SM 10/22/24

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: S. Mahoney

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
SM	10/22/24	1450	Raina Schwanz	10/22/24	1450
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Lab Use Only

Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, **v** - VOA

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 10/22/2024 3:01:28PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Hilcorp Energy Co	Date Received:	10/22/24 14:50	Work Order ID:	E410271
Phone:	-	Date Logged In:	10/22/24 14:58	Logged In By:	Caitlin Mars
Email:	mkillough@hilcorp.com	Due Date:	10/23/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: S.Mahoney
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the sample(s) received intact, i.e., not broken?	Yes	
10. Were custody/security seals present?	No	
11. If yes, were custody/security seals intact?	NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Client called 10-22-24 requesting preliminary data same day for samples 1 through 3 and placed samples 4 through 6 on hold.

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Report to:

Mitch Killough

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name: Salty Dog #1 BGT

Work Order: E410272

Job Number: 17051-0002

Received: 10/22/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/28/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 10/28/24

Mitch Killough
PO Box 61529
Houston, TX 77208

Project Name: Salty Dog #1 BGT
Workorder: E410272
Date Received: 10/22/2024 2:50:00PM

Mitch Killough,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/22/2024 2:50:00PM, under the Project Name: Salty Dog #1 BGT.

The analytical test results summarized in this report with the Project Name: Salty Dog #1 BGT apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

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Lynn Jarboe
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Cell: 505-320-4759
ljarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
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Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/24 12:50

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03@ 25-26.5	E410272-01A	Soil	10/22/24	10/22/24	Glass Jar, 4 oz.

Case Narative:

Project Name: Salty Dog #1 BGT
Workorder:E410272
Date Received: 10/22/24 14:50

The client requested the following sample(s) to be re-extracted and re-analyzed:

Sample Name	Laboratory ID	Analysis
BH03@25-26.5	E410272-01	300.0 Choride

The analytical test results summarized in this revised report represents a second re-extration and re-analysis.

If you have any questions reguarding this report please feel free to contact Envirotech Inc.

Respectfully,

Walter Hinchman

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/2024 12:50:37PM

BH03@ 25-26.5

E410272-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2443020
Benzene	ND	0.0250	1	10/22/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/22/24	10/22/24	
Toluene	ND	0.0250	1	10/22/24	10/22/24	
o-Xylene	ND	0.0250	1	10/22/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/22/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/22/24	10/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*10/22/24*	*10/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/22/24	10/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.3 %*	*70-130*	*10/22/24*	*10/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2443074
Diesel Range Organics (C10-C28)	ND	25.0	1	10/22/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/22/24	10/22/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*10/22/24*	*10/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2443207
Chloride	**590**	20.0	1	10/26/24	10/27/24	

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/2024 12:50:37PM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443020-BLK1)									Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.34*		*8.00*		*91.8*	*70-130*			
LCS (2443020-BS1)									Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	4.68	0.0250	5.00		93.5	70-130			
Ethylbenzene	4.47	0.0250	5.00		89.3	70-130			
Toluene	4.59	0.0250	5.00		91.8	70-130			
o-Xylene	4.48	0.0250	5.00		89.7	70-130			
p,m-Xylene	9.05	0.0500	10.0		90.5	70-130			
Total Xylenes	13.5	0.0250	15.0		90.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.44*		*8.00*		*93.0*	*70-130*			
Matrix Spike (2443020-MS1)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	4.93	0.0250	5.00	ND	98.7	54-133			
Ethylbenzene	4.75	0.0250	5.00	ND	95.0	61-133			
Toluene	4.85	0.0250	5.00	ND	97.1	61-130			
o-Xylene	4.76	0.0250	5.00	ND	95.3	63-131			
p,m-Xylene	9.64	0.0500	10.0	ND	96.4	63-131			
Total Xylenes	14.4	0.0250	15.0	ND	96.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.42*		*8.00*		*92.7*	*70-130*			
Matrix Spike Dup (2443020-MSD1)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Benzene	5.22	0.0250	5.00	ND	104	54-133	5.58	20	
Ethylbenzene	5.01	0.0250	5.00	ND	100	61-133	5.38	20	
Toluene	5.13	0.0250	5.00	ND	103	61-130	5.52	20	
o-Xylene	5.02	0.0250	5.00	ND	100	63-131	5.25	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	5.24	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	5.24	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.38*		*8.00*		*92.3*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/2024 12:50:37PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443020-BLK1)									Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.46*		*8.00*		*93.3*	*70-130*			
LCS (2443020-BS2)									Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	44.6	20.0	50.0		89.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.60*		*8.00*		*95.0*	*70-130*			
Matrix Spike (2443020-MS2)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	40.7	20.0	50.0	ND	81.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.55*		*8.00*		*94.4*	*70-130*			
Matrix Spike Dup (2443020-MSD2)				**Source: E410229-06**					Prepared: 10/21/24 Analyzed: 10/22/24
Gasoline Range Organics (C6-C10)	40.8	20.0	50.0	ND	81.5	70-130	0.0811	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.46*		*8.00*		*93.3*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/2024 12:50:37PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443074-BLK1)									Prepared: 10/22/24 Analyzed: 10/22/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*53.2*		*50.0*		*106*	*50-200*			
LCS (2443074-BS1)									Prepared: 10/22/24 Analyzed: 10/22/24
Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			
LCS Dup (2443074-BSD1)									Prepared: 10/22/24 Analyzed: 10/22/24
Diesel Range Organics (C10-C28)	263	25.0	250		105	38-132	2.48	20	
Surrogate: n-Nonane	*50.1*		*50.0*		*100*	*50-200*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/2024 12:50:37PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443062-BLK1)									Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	ND	20.0							
LCS (2443062-BS1)									Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2443062-MS1)				**Source: E410243-06**					Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	316	20.0	250	50.5	106	80-120			
Matrix Spike Dup (2443062-MSD1)				**Source: E410243-06**					Prepared: 10/22/24 Analyzed: 10/22/24
Chloride	310	20.0	250	50.5	104	80-120	1.74	20	

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/2024 12:50:37PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2443207-BLK1)									Prepared: 10/26/24 Analyzed: 10/27/24
Chloride	ND	20.0							
LCS (2443207-BS1)									Prepared: 10/26/24 Analyzed: 10/27/24
Chloride	257	20.0	250		103	90-110			
LCS Dup (2443207-BSD1)									Prepared: 10/26/24 Analyzed: 10/27/24
Chloride	259	20.0	250		104	90-110	0.642	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

Hilcorp Energy Co	Project Name:	Salty Dog #1 BGT	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Mitch Killough	10/28/24 12:50

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
DNR	Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Chain-of-Custody Record

Client: Hilcorp Energy Company

Mailing Address: —

—

Phone #: 281-851-2338

email or Fax#: mkillough@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☑ Rush Next day

Project Name: Salty Dog #1 BGT

Project #: E410272 Job # 17051-0002

Project Manager:
Mitch Killough - mkillough@hilcorp.com
Stuart Hyde - shyde@envirotech.com

Sampler: S. Mahaney

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 4 (°C)

Envirotech

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 / MTBE / TMBs (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)
10/22/24	1305	Soil	BH02@ 25-26.5	4oz glass jar x1	None		X	X					X			

SM 10/22/24

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
10/22/24	1450	Sidney Mahaney	Raina Schwanz		10/22/24	14:50
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Please charge the grouped pricing of TPH (GRO, DRO, MRO), BTEX, & Cl.

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.

Envirotech Analytical Laboratory

Printed: 10/22/2024 3:08:18PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Hilcorp Energy Co	Date Received:	10/22/24 14:50	Work Order ID:	E410272
Phone:	-	Date Logged In:	10/22/24 15:04	Logged In By:	Caitlin Mars
Email:	mkillough@hilcorp.com	Due Date:	10/23/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: S.Mahoney
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the sample(s) received intact, i.e., not broken?	No	
10. Were custody/security seals present?	No	
11. If yes, were custody/security seals intact?	NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Client called 10-22-24 requesting preliminary data same day for samples 1 through 3 and placed samples 4 through 6 on hold.

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Report to:

Stuart Hyde

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	Salty Dog SWD 1
Work Order:	E411240
Job Number:	17051-0002
Received:	11/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/3/24

Date Reported: 12/3/24

Stuart Hyde
PO Box 61529
Houston, TX 77208

Project Name: Salty Dog SWD 1
Workorder: E411240
Date Received: 11/22/2024 10:37:00AM

Stuart Hyde,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/22/2024 10:37:00AM, under the Project Name: Salty Dog SWD 1.

The analytical test results summarized in this report with the Project Name: Salty Dog SWD 1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	12/03/24 06:55

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
HA01 @ 2	E411240-01A	Soil	11/21/24	11/22/24	Glass Jar, 4 oz.
HA01 @ 4	E411240-02A	Soil	11/21/24	11/22/24	Glass Jar, 4 oz.
HA02 @ 1	E411240-03A	Soil	11/21/24	11/22/24	Glass Jar, 4 oz.
HA03 @ 2	E411240-04A	Soil	11/21/24	11/22/24	Glass Jar, 4 oz.
HA03 @ 4	E411240-05A	Soil	11/21/24	11/22/24	Glass Jar, 4 oz.
HA04 @ 2	E411240-06A	Soil	11/21/24	11/22/24	Glass Jar, 4 oz.

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

HA01 @ 2

E411240-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.5 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.5 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF			Batch: 2448006
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/25/24	
Oil Range Organics (C28-C36)	**56.4**	50.0	1	11/25/24	11/25/24	
Surrogate: n-Nonane		*98.4 %*	*50-200*	*11/25/24*	*11/25/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2448011
Chloride	**2400**	40.0	2	11/25/24	11/26/24	

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

HA01 @ 4

E411240-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.5 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.5 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF			Batch: 2448006
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		*100 %*	*50-200*	*11/25/24*	*11/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2448011
Chloride	**1840**	40.0	2	11/25/24	11/26/24	

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

HA02 @ 1

E411240-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF			Batch: 2448006
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*11/25/24*	*11/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2448011
Chloride	**723**	40.0	2	11/25/24	11/26/24	

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

HA03 @ 2

E411240-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.8 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.8 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF			Batch: 2448006
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		*100 %*	*50-200*	*11/25/24*	*11/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2448011
Chloride	**1040**	20.0	1	11/25/24	11/26/24	

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

HA03 @ 4

E411240-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.0 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.0 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF			Batch: 2448006
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		*95.3 %*	*50-200*	*11/25/24*	*11/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2448011
Chloride	**513**	20.0	1	11/25/24	11/26/24	

Sample Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

HA04 @ 2

E411240-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*110 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.6 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		*110 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.6 %*	*70-130*	*11/25/24*	*11/26/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*11/25/24*	*11/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF			Batch: 2448006
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		*99.9 %*	*50-200*	*11/25/24*	*11/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2448011
Chloride	**2550**	40.0	2	11/25/24	11/26/24	

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2448005-BLK1)									Prepared: 11/25/24 Analyzed: 11/26/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	*0.520*		*0.500*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.475*		*0.500*		*95.0*	*70-130*			
Surrogate: Toluene-d8	*0.537*		*0.500*		*107*	*70-130*			
LCS (2448005-BS1)									Prepared: 11/25/24 Analyzed: 12/02/24
Benzene	2.35	0.0250	2.50		94.2	70-130			
Ethylbenzene	2.29	0.0250	2.50		91.7	70-130			
Toluene	2.31	0.0250	2.50		92.3	70-130			
o-Xylene	2.39	0.0250	2.50		95.6	70-130			
p,m-Xylene	4.74	0.0500	5.00		94.9	70-130			
Total Xylenes	7.13	0.0250	7.50		95.1	70-130			
Surrogate: Bromofluorobenzene	*0.579*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.526*		*0.500*		*105*	*70-130*			
LCS Dup (2448005-BSD1)									Prepared: 11/25/24 Analyzed: 11/26/24
Benzene	2.38	0.0250	2.50		95.2	70-130	1.14	23	
Ethylbenzene	2.36	0.0250	2.50		94.3	70-130	2.80	27	
Toluene	2.38	0.0250	2.50		95.1	70-130	3.05	24	
o-Xylene	2.36	0.0250	2.50		94.5	70-130	1.14	27	
p,m-Xylene	4.69	0.0500	5.00		93.9	70-130	1.08	27	
Total Xylenes	7.06	0.0250	7.50		94.1	70-130	1.10	27	
Surrogate: Bromofluorobenzene	*0.528*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.500*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.528*		*0.500*		*106*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2448005-BLK1)									Prepared: 11/25/24 Analyzed: 11/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.520*		*0.500*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.475*		*0.500*		*95.0*	*70-130*			
Surrogate: Toluene-d8	*0.537*		*0.500*		*107*	*70-130*			
LCS (2448005-BS2)									Prepared: 11/25/24 Analyzed: 11/26/24
Gasoline Range Organics (C6-C10)	43.2	20.0	50.0		86.4	70-130			
Surrogate: Bromofluorobenzene	*0.541*		*0.500*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.469*		*0.500*		*93.7*	*70-130*			
Surrogate: Toluene-d8	*0.522*		*0.500*		*104*	*70-130*			
LCS Dup (2448005-BSD2)									Prepared: 11/25/24 Analyzed: 11/26/24
Gasoline Range Organics (C6-C10)	47.1	20.0	50.0		94.2	70-130	8.63	20	
Surrogate: Bromofluorobenzene	*0.568*		*0.500*		*114*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.471*		*0.500*		*94.1*	*70-130*			
Surrogate: Toluene-d8	*0.546*		*0.500*		*109*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2448006-BLK1)									Prepared: 11/25/24 Analyzed: 11/25/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*47.7*		*50.0*		*95.4*	*50-200*			
LCS (2448006-BS1)									Prepared: 11/25/24 Analyzed: 11/25/24
Diesel Range Organics (C10-C28)	251	25.0	250		100	38-132			
Surrogate: n-Nonane	*51.3*		*50.0*		*103*	*50-200*			
Matrix Spike (2448006-MS1)				**Source: E411241-02**					Prepared: 11/25/24 Analyzed: 11/25/24
Diesel Range Organics (C10-C28)	2670	125	250	3090	NR	38-132			M4
Surrogate: n-Nonane	*54.4*		*50.0*		*109*	*50-200*			
Matrix Spike Dup (2448006-MSD1)				**Source: E411241-02**					Prepared: 11/25/24 Analyzed: 11/25/24
Diesel Range Organics (C10-C28)	2660	125	250	3090	NR	38-132	0.374	20	M4
Surrogate: n-Nonane	*49.5*		*50.0*		*99.1*	*50-200*			

QC Summary Data

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	12/3/2024 6:55:27AM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2448011-BLK1)									Prepared: 11/25/24 Analyzed: 11/26/24
Chloride	ND	20.0							
LCS (2448011-BS1)									Prepared: 11/25/24 Analyzed: 11/26/24
Chloride	251	20.0	250		101	90-110			
Matrix Spike (2448011-MS1)				**Source: E411240-04**					Prepared: 11/25/24 Analyzed: 11/26/24
Chloride	1370	20.0	250	1040	131	80-120			M4
Matrix Spike Dup (2448011-MSD1)				**Source: E411240-04**					Prepared: 11/25/24 Analyzed: 11/26/24
Chloride	1390	20.0	250	1040	140	80-120	1.64	20	M4

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

Hilcorp Energy Co	Project Name:	Salty Dog SWD 1	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	12/03/24 06:55

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
DNR	Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: HEC	Company: HEC	Lab WO# E411240	Job Number 17051.0002	1D 2D 3D Std	NM CO UT TX
Project Name: Salty Dog SWD 1	Address:			
Project Manager: Stuart Hyde	City, State, Zip:			
Address:	Phone:			
City, State, Zip:	Email: MKillough@hilcorp.com			
Phone:	Miscellaneous: Attn: Mitch Killough			
Email: Shyde@ensolum.com				
CC: Smahanay@ensolum.com				

Sample Information							Analysis and Method										EPA Program		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Cation/Anion Pkg		SDWA	CWA	RCRA
1205	11/21/24	Soil	1,402	HA01@2		1											Compliance	Y or N	
1210				HA01@4		2											PWSID #		
1610				HA02@1		3											Remarks		
1612				HA03@2		4													
1615				HA03@4		5													
1618				HA04@2		10													

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: Peter Anderson

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	10-22-24	10:37		11.22.24	10:37
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Lab Use Only

Received on ice: (Y) N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 11/22/2024 10:47:58AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Hilcorp Energy Co	Date Received:	11/22/24 10:37	Work Order ID:	E411240
Phone:	-	Date Logged In:	11/22/24 10:41	Logged In By:	Caitlin Mars
Email:	shyde@ensolum.com	Due Date:	12/02/24 17:00 (5 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Peter Anderson
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the sample(s) received intact, i.e., not broken?	Yes	
10. Were custody/security seals present?	No	
11. If yes, were custody/security seals intact?	NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

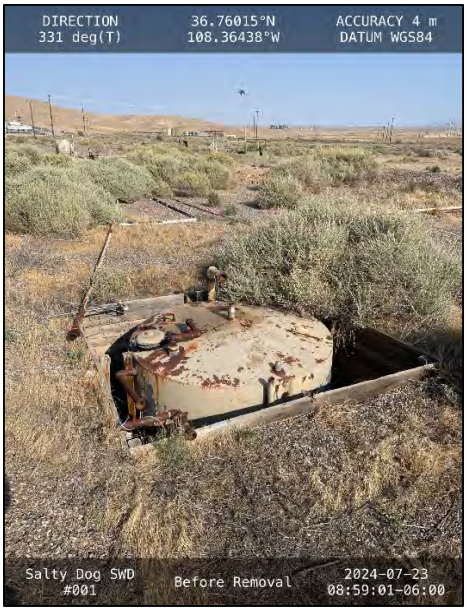
ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
Hilcorp Energy Company
Salty Dog SWD 1
Kirtland, New Mexico



Photograph: 1 Date: 7/23/2024
Description: BGT prior to removal
View: Northwest

Photograph: 2 Date: 7/23/2024
Description: Initial BGT confirmation sampling
View: Southwest

Photograph: 3 Date: 8/8/2024
Description: BGT cribbing after removal
View: East

Photograph: 4 Date: 8/8/2024
Description: Site access road and locate markings
View: Southeast

ENSOLUM

Photographic Log
Hilcorp Energy Company
Salty Dog SWD 1
Kirtland, New Mexico

Photograph: 5 Date: 8/8/2024
Description: Engineered berm on South Side of pad
View: West

Photograph: 6 Date: 8/8/2024
Description: Initial potholing activities
View: South

Photograph: 7 Date: 8/8/2024
Description: Initial potholing activities
View: East

Photograph: 8 Date: 9/4/2024
Description: Additional pothole activities
View: West

ENSOLUM

Photographic Log
Hilcorp Energy Company
Salty Dog SWD 1
Kirtland, New Mexico

Photograph: 9 Date: 9/4/2024
Description: Pothole activities
View: East

Photograph: 10 Date: 10/21/2024
Description: Drilling boring BH02
View: South

Photograph: 11 Date: 10/22/2024
Description: BH03 20-21.5 feet below ground surface
View: NA

Photograph: 12 Date: 10/24/2024
Description: BH02 dry hole total depth
View: South

ENSOLUM

Photographic Log
Hilcorp Energy Company
Salty Dog SWD 1
Kirtland, New Mexico

Photograph: 13 Date: 11/21/2024
Description: Hand auger boring HA01
View: Southwest

Photograph: 14 Date: 11/21/2024
Description: Hand auger boring HA02
View: West

Photograph: 15 Date: 11/21/2024
Description: Hand auger boring HA04
View: Northeast

Photograph: 16 Date: 11/21/2024
Description: Hand auger boring HA04
View: Southeast

ENSOLUM

Photographic Log
Hilcorp Energy Company
Salty Dog SWD 1
Kirtland, New Mexico

Photograph: 17 Date: 12/19/2024
Description: Hand auger boring HA05
View: South

Photograph: 18 Date: 12/19/2024
Description: Hand auger boring HA06
View: Northwest

Photograph: 19 Date: 12/19/2024
Description: Hand auger boring HA07
View: Southwest

Photograph: 20 Date: 12/19/2024
Description: Hand auger boring HA08
View: Southeast

ENSOLUM

APPENDIX D

ProUCL Background Threshold Value (BTV) Calculations

1			Background Statistics for Data Sets with Non-Detects								
2		User Selected Options									
3		Date/Time of Computation	ProUCL 5.2 10/13/2025 9:44:53 AM								
4		From File	ProUCL_Input_SaltydogBGT_Inter-Well_BTV_2025.xls								
5		Full Precision	OFF								
6		Confidence Coefficient	95%								
7		Coverage	95%								
8		ifferent or Future K Observations	1								
9		Number of Bootstrap Operations	2000								
10											
11	Chloride										
12											
13					General Statistics						
14				Total Number of Observations	12			Number of Missing Observations	0		
15				Number of Distinct Observations	11						
16				Number of Detects	10			Number of Non-Detects	2		
17				Number of Distinct Detects	10			Number of Distinct Non-Detects	1		
18				Minimum Detect	33.2			Minimum Non-Detect	20		
19				Maximum Detect	6710			Maximum Non-Detect	20		
20				Variance Detected	4806997			Percent Non-Detects	16.67%		
21				Mean Detected	1878			SD Detected	2192		
22				Mean of Detected Logged Data	6.627			SD of Detected Logged Data	1.767		
23											
24					Critical Values for Background Threshold Values (BTVs)						
25				Tolerance Factor K (For UTL)	2.736			d2max (for USL)	2.285		
26											
27					Normal GOF Test on Detects Only						
28				Shapiro Wilk Test Statistic	0.812			Shapiro Wilk GOF Test			
29				1% Shapiro Wilk Critical Value	0.781			Detected Data appear Normal at 1% Significance Level			
30				Lilliefors Test Statistic	0.249			Lilliefors GOF Test			
31				1% Lilliefors Critical Value	0.304			Detected Data appear Normal at 1% Significance Level			
32					Detected Data appear Normal at 1% Significance Level						
33											
34					Kaplan Meier (KM) Background Statistics Assuming Normal Distribution						
35				KM Mean	1568			KM SD	2021		
36				95% UTL95% Coverage	7098			95% KM UPL (t)	5346		
37				90% KM Percentile (z)	4158			95% KM Percentile (z)	4893		
38				99% KM Percentile (z)	6270			95% KM USL	6186		
39											
40					DL/2 Substitution Background Statistics Assuming Normal Distribution						
41				Mean	1567			SD	2112		
42				95% UTL95% Coverage	7346			95% UPL (t)	5515		
43				90% Percentile (z)	4274			95% Percentile (z)	5041		
44				99% Percentile (z)	6480			95% USL	6393		
45					DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons						
46											
47					Gamma GOF Tests on Detected Observations Only						
48				A-D Test Statistic	0.226			Anderson-Darling GOF Test			
49				5% A-D Critical Value	0.764			Detected data appear Gamma Distributed at 5% Significance Level			
50				K-S Test Statistic	0.131			Kolmogorov-Smirnov GOF			
51				5% K-S Critical Value	0.278			Detected data appear Gamma Distributed at 5% Significance Level			
52					Detected data appear Gamma Distributed at 5% Significance Level						
53											

54	Gamma Statistics on Detected Data Only										
55				k hat (MLE)	0.668			k star (bias corrected MLE)	0.534		
56				Theta hat (MLE)	2812			Theta star (bias corrected MLE)	3516		
57				nu hat (MLE)	13.36			nu star (bias corrected)	10.68		
58				MLE Mean (bias corrected)	1878						
59				MLE Sd (bias corrected)	2569			95% Percentile of Chisquare (2kstar)	4.008		
60											
61	Gamma ROS Statistics using Imputed Non-Detects										
62	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs										
63	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)										
64	For such situations, GROS method may yield incorrect values of UCLs and BTVs										
65	This is especially true when the sample size is small.										
66	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates										
67				Minimum	0.01			Mean	1565		
68				Maximum	6710			Median	698		
69				SD	2114			CV	1.351		
70				k hat (MLE)	0.27			k star (bias corrected MLE)	0.258		
71				Theta hat (MLE)	5801			Theta star (bias corrected MLE)	6068		
72				nu hat (MLE)	6.475			nu star (bias corrected)	6.189		
73				MLE Mean (bias corrected)	1565			MLE Sd (bias corrected)	3082		
74				95% Percentile of Chisquare (2kstar)	2.473			90% Percentile	4686		
75				95% Percentile	7505			99% Percentile	14975		
76	The following statistics are computed using Gamma ROS Statistics on Imputed Data										
77	Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods										
78					WH	HW				WH	HW
79	95% Approx. Gamma UTL with 95% Coverage				16309	25300		95% Approx. Gamma UPL		8106	10533
80				95% Gamma USL	11569	16425					
81											
82	Estimates of Gamma Parameters using KM Estimates										
83				Mean (KM)	1568			SD (KM)	2021		
84				Variance (KM)	4084668			SE of Mean (KM)	615		
85				k hat (KM)	0.602			k star (KM)	0.507		
86				nu hat (KM)	14.45			nu star (KM)	12.17		
87				theta hat (KM)	2605			theta star (KM)	3092		
88				80% gamma percentile (KM)	2577			90% gamma percentile (KM)	4230		
89				95% gamma percentile (KM)	5994			99% gamma percentile (KM)	10325		
90											
91	The following statistics are computed using gamma distribution and KM estimates										
92	Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods										
93					WH	HW				WH	HW
94	95% Approx. Gamma UTL with 95% Coverage				13032	16709		95% Approx. Gamma UPL		6829	7730
95				95% KM Gamma Percentile	5632	6165		95% Gamma USL		9474	11398
96											
97	Lognormal GOF Test on Detected Observations Only										
98				Shapiro Wilk Test Statistic	0.904			Shapiro Wilk GOF Test			
99				10% Shapiro Wilk Critical Value	0.869			Detected Data appear Lognormal at 10% Significance Level			
100				Lilliefors Test Statistic	0.213			Lilliefors GOF Test			
101				10% Lilliefors Critical Value	0.241			Detected Data appear Lognormal at 10% Significance Level			
102	Detected Data appear Lognormal at 10% Significance Level										
103											
104	Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects										
105				Mean in Original Scale	1567			Mean in Log Scale	5.95		
106				SD in Original Scale	2112			SD in Log Scale	2.256		

107				95% UTL95% Coverage	184121			95% BCA UTL95% Coverage		6710	
108			95% Bootstrap (%) UTL95% Coverage		6710				95% UPL (t)	26047	
109				90% Percentile (z)	6917				95% Percentile (z)	15701	
110				99% Percentile (z)	73063				95% USL	66548	
111											
112				Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution							
113				KM Mean of Logged Data	6.022			95% KM UTL (Lognormal) 95% Coverage		110360	
114				KM SD of Logged Data	2.043				95% KM UPL (Lognormal)	18781	
115			95% KM Percentile Lognormal (z)		11876				95% KM USL (Lognormal)	43914	
116											
117				Background DL/2 Statistics Assuming Lognormal Distribution							
118				Mean in Original Scale	1567				Mean in Log Scale	5.906	
119				SD in Original Scale	2112				SD in Log Scale	2.321	
120				95% UTL95% Coverage	210580				95% UPL (t)	28154	
121				90% Percentile (z)	7196				95% Percentile (z)	16724	
122				99% Percentile (z)	81360				95% USL	73906	
123			DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.								
124											
125				Nonparametric Distribution Free Background Statistics							
126				Data appear to follow a Discernible Distribution							
127											
128				Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)							
129				Order of Statistic, r	12			95% UTL with 95% Coverage		6710	
130			Approx, f used to compute achieved CC		0.632		pproximate Actual Confidence Coefficient achieved by UTL			0.46	
131		Approximate Sample Size needed to achieve specified CC			59				95% UPL	6710	
132				95% USL	6710			95% KM Chebyshev UPL		10738	
133											
134				Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.							
135				Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers							
136				and consists of observations collected from clean unimpacted locations.							
137				The use of USL tends to provide a balance between false positives and false negatives provided the data							
138				represents a background data set and when many onsite observations need to be compared with the BTV.							
139											

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QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 519624
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2430352742**
Incident Name	**NAPP2430352742 SALTY DOG SWD 1 @ 30-045-29946**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-045-29946] SALTY DOG SWD #001**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SALTY DOG SWD 1
Date Release Discovered	10/28/2024
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Other | Tank (Any) | Produced Water | Released: 0 BBL (Unknown Released Amount) | Recovered: 0 BBL | Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Historical release discovered during the permanent removal of a below-grade tank (BGT). All further work on this project will be carried out in accordance with 19.15.29 NMAC.

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 519624
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 10/23/2025

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 519624
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1000 (ft.) and ½ (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Zero feet, overlying, or within area
A wetland	Between 500 and 1000 (ft.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	6710
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	12700
GRO+DRO	(EPA SW-846 Method 8015M)	1700
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		01/02/2026
On what date will (or did) the final sampling or liner inspection occur		01/02/2026
On what date will (or was) the remediation complete(d)		01/10/2026
What is the estimated surface area (in square feet) that will be reclaimed		2800
What is the estimated volume (in cubic yards) that will be reclaimed		415
What is the estimated surface area (in square feet) that will be remediated		2800
What is the estimated volume (in cubic yards) that will be remediated		1035
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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QUESTIONS (continued)

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	Action Number: 519624
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	fEEM0112336756 ENVIROTECH LANDFARM #2
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 10/23/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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	Action Number: 519624
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

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	Action Number: 519624
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**412597**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**12/19/2024**
What was the (estimated) number of samples that were to be gathered	**8**
What was the sampling surface area in square feet	**20**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 519624
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved as written except with the following conditions; 1. After reviewing the data in determining the chloride background levels, OCD alternatively approves 1,966 mg/Kg to be used as the closure standard for this incident. 2. Prior to backfilling the open excavation per 19.15.29.12D (2) NMAC, Hilcorp must collect a minimum of one (1) five point composite sample from the media being used as backfill to verify that it meets non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. This is especially important for the material being used within the top four (4) feet from the ground surface. 3. Hilcorp has 90-days (March 19, 2026) to submit to OCD its appropriate or final remediation closure report.	12/19/2025