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

State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2320149561
District RP	
Facility ID	
Application ID	

I Release Notification

Responsible Party

Responsible Party: Hilcorp Energy	OGRID 372171
Contact Name: Kate Kaufman	Contact Telephone: 346-237-2275
Contact email: kkaufman@hilcorp.com	Incident # *(assigned by OCD)* nAPP2320149561
Contact mailing address: 1111 Travis St. Houston, TX 77471	

Location of Release Source

Latitude 36.695036 Longitude -107.873901
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Romero Gas Com A #1	Site Type: Well Site
Date Release Discovered: 2/10/2023	API# *(if applicable)* 30-045-25509

Unit Letter	Section	Township	Range	County
K	27	029N	010W	San Juan

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Carl and Barbara Padilla Trust)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls) 0
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☒ Other (describe) Unknown hydrocarbon	Volume/Weight Released (provide units) Estimated 5.3 bbls	Volume/Weight Recovered (provide units) 5.3 bbls

Cause of Release

Historic release discovered during BGT removal operations. Initial BGT closure sample was collected on 2/8/2023 and results were received on 2/10/2023. Hilcorp proceeded with delineation and determined an estimated release volume on 7/13/2023.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2320149561
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

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.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: __Kate Kaufman_____ Title: __Environmental Specialist_____

Signature: Kathryn Kaufman _____ Date: __7/20/2023_____

email: __kkaufman@hilcorp.com_____ Telephone: _____346-237-2275_____

OCD Only

Received by: _____ Date: _____

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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2320149561
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<50’ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☒ Yes ☐ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☒ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☒ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2320149561
District RP	
Facility ID	
Application ID	

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

Printed Name: ____Kathryn H Kaufman_____ Title: ____Environmental Specialist_____

Signature:_  _____ Date: __8-8-2023_____

email: ___kkaufman@hilcorp.com_____ Telephone: __346-237-2275_____

OCD Only

Received by: Shelly Wells_____ Date: _8/8/2023_____

Incident ID	NAPP2320149561
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Kathryn H. Kaufman Title: Environmental Specialist

Signature: Kathryn H. Kaufman Date: 8/8/2023

email: kkaufman@hilcorp.com Telephone: 346-237-2275

OCD Only

Received by: Shelly Wells Date: 8/8/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Nelson Velez Date: 11/07/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

Executive Summary – Incident #nAPP2320149561

Hilcorp removed a below ground tank (BGT) at the Romero Gas Com A #1 wellsite (API 30-045-25509) on February 8, 2023. The closure sample results were above permit limits and above the NMOCD action criteria in NMAC 19.15.29 Table 1 for total petroleum hydrocarbons (TPH).

Hilcorp proceeded with delineation and removed approximately 5 yds^3 of clean and potentially impacted soil from the excavation. Impacted material will be hauled offsite for disposal. All excavation was within the BGT ring. The historic hydrocarbon release volume was estimated to be approximately 5 bbls. Release volume estimate attached.

Five-point composite samples were collected from the base and sidewalls on 6/1/2023 and 6/28/2023. Analytical results from this sampling event were below NMOCD action criteria noted in NMAC 19.15.29 Table 1. Sample results are included at the end of this summary report.

Scaled Site Map

Lat: 36.695036
Long: -107.873901

Romero Gas Com A #1 Wellsite
API: 30-045-25509

Historic Release Area

N

Depth to groundwater determination.

Estimated depth to groundwater at the Romero Gas Com A #1 wellsite is <50'. Note siting criteria for the Maddox Gas Com A #1, which is ~1,100' SW of the Romero Gas Com A #1 wellsite.

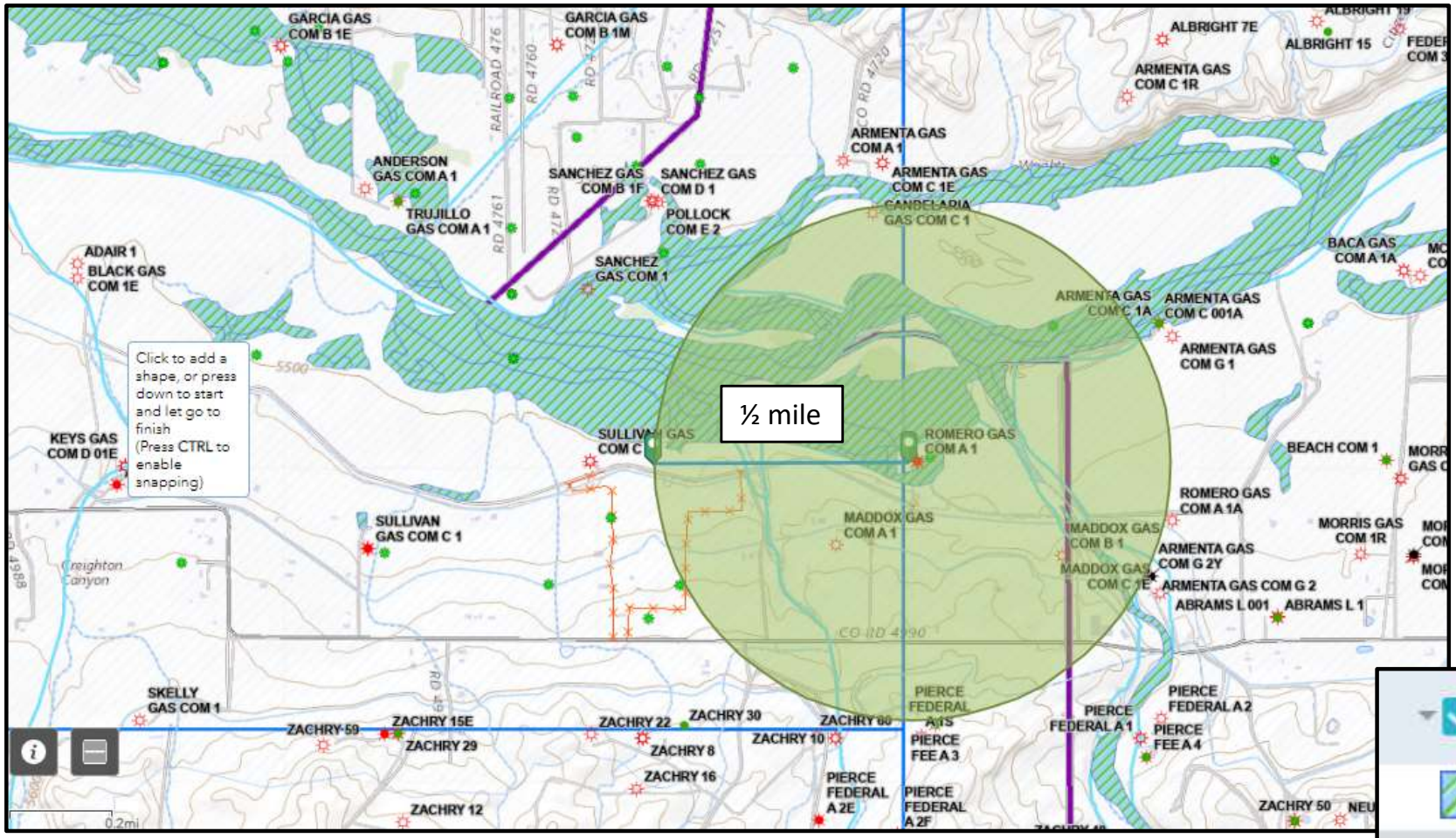
Lodestar Services, Inc.
PO Box 4465, Durango, CO 81302

Pit Permit Siting Criteria Information Sheet

Client:	XTO Energy
Project:	Pit Permits
Revised:	19-Nov-08
Prepared by:	Devin Hencmann

API#:	3004507786	USPLSS:	29N, 10W, 27M
Name:	MADDOX GAS COM A #1	Lat/Long:	36.69276/-107.8768
Depth to groundwater:	< 50'	Geologic formation:	Naciemento
Distance to closest continuously flowing watercourse:	1,600' N to the 'San Juan River'		
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	288' W to Munoz Canyon wash		
		Soil Type:	Entisols
Permanent residence, school, hospital, institution or church within 300'	234' NE to permanent residence		
		Annual Precipitation:	Bloomfield: 8.71" , Farmington: 8.21", Otis: 10.41"
Domestic fresh water well or spring within 500'	No	Precipitation Notes:	Historical daily max: Bloomfield (4.19")
Any other fresh water well or spring within 1000'	No		
Within incorporated municipal boundaries	No	Attached Documents:	i-Waters report pdf
Within defined municipal fresh water well field	No		Topo map pdf, Aerial pdf, Mines and Quarries Map pdf,i-Waters Ground Water Data Map pdf, FEMA flood zone map pdf
Wetland within 500'	No	Mining Activity:	None
Within unstable area	No		
Within 100 year flood plain	No-FEMA Zone 'X'		

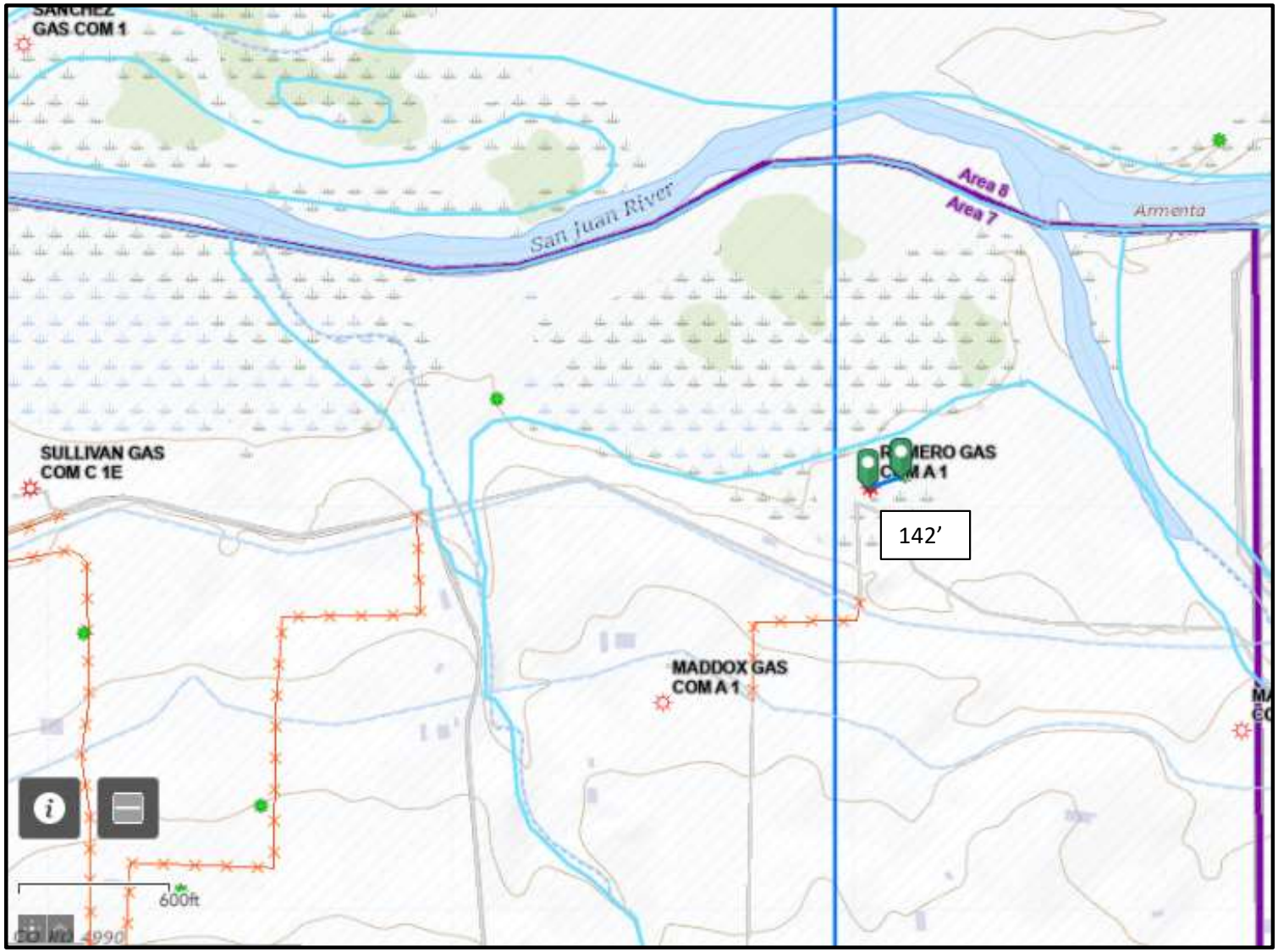
Determination of water sources and significant watercourses within ½ mile of the lateral extent of the release



Note 1: Release point is not within 300 ft of a continuously flowing watercourse or other significant water course.

Note 2: The lateral extents of the release point are within 300 feet of a mapped wetland.

Distance to mapped water wells.



Note: The lateral extents of the release point are not shown to be within 500 ft of a spring or domestic freshwater well used by less than 5 households (or stock watering) but are within 1,000 ft of any freshwater water well or spring.

Data table of soil contaminant concentrations

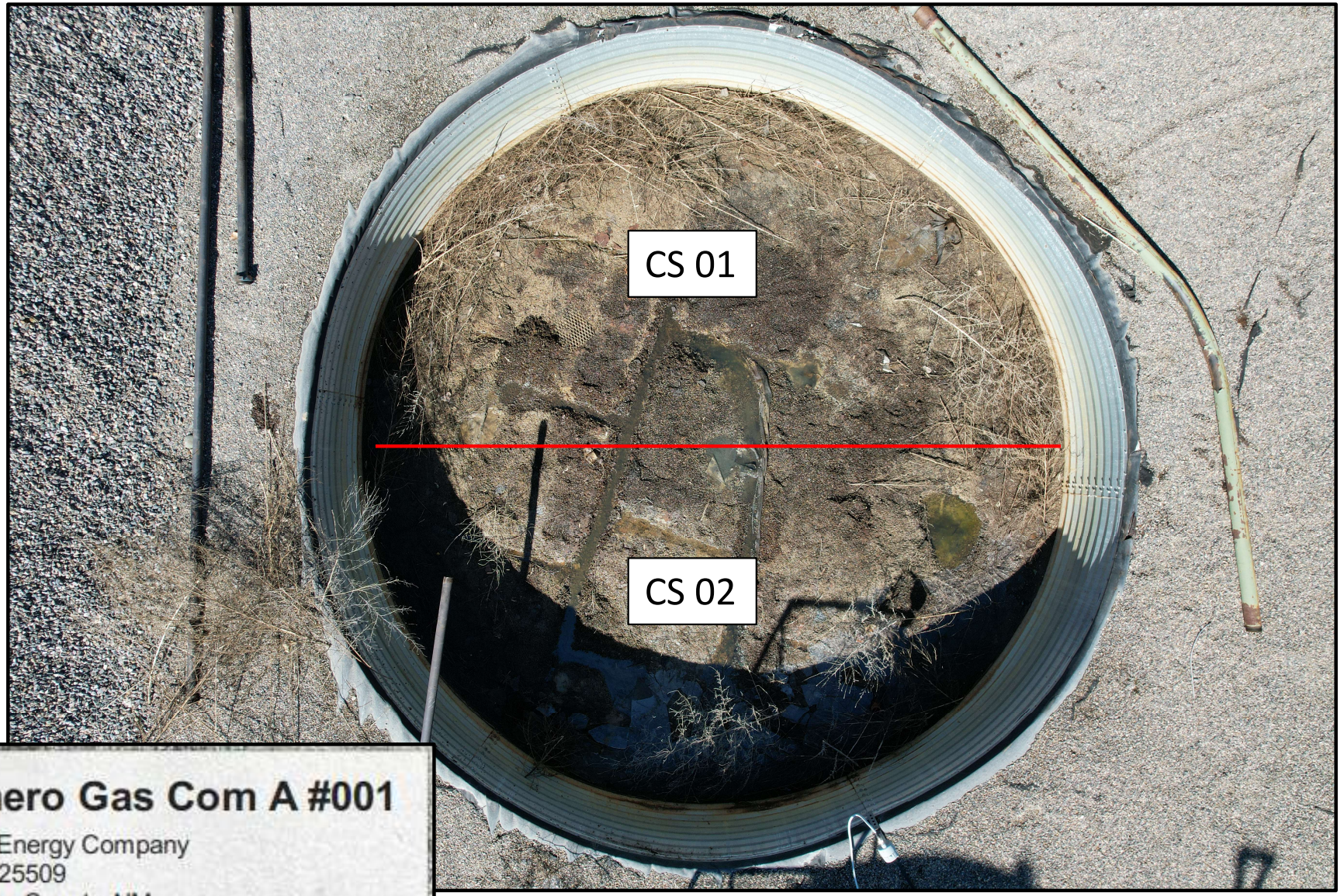
Sample Name	Sample Date	Romero Gas Com A1 Laboratory Results									
		Chloride (mg/kg)	TPH as DRO (mg/kg)	TPH as GRO (mg/kg)	TPH as MRO (mg/kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylene (mg/kg)	Total BTEX (mg/kg)
BGT Permit Closure Criteria < 50'		**600**	-	-	-	**100**	**10**	-	-	-	**50**
BGT Closure Sample	02/08/23	ND	120	58	55	233	ND	ND	ND	ND	ND
CS 01	06/01/23	NA	780	22	340	1142	ND	ND	ND	ND	ND
CS 02	06/01/23	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SW 1	06/01/23	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
CS01A	06/28/23	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND

Confirmation samples were collected on 6/1/2023 and 6/28/2023 by Ensolum. Composite Sample (CS) 01 was over closure standards on 6/1/2023. Additional impacted soil was removed, and the final sample collected at CS 01 on 6/28/2023 was below NMOCD 19.15.29.12.D Table 1 closure criteria.

NA = Not Analyzed
ND = Not Detected

Field Sample Diagram

Two 5-point composite samples were collected on 6/2/2023 and 6/28/2023.



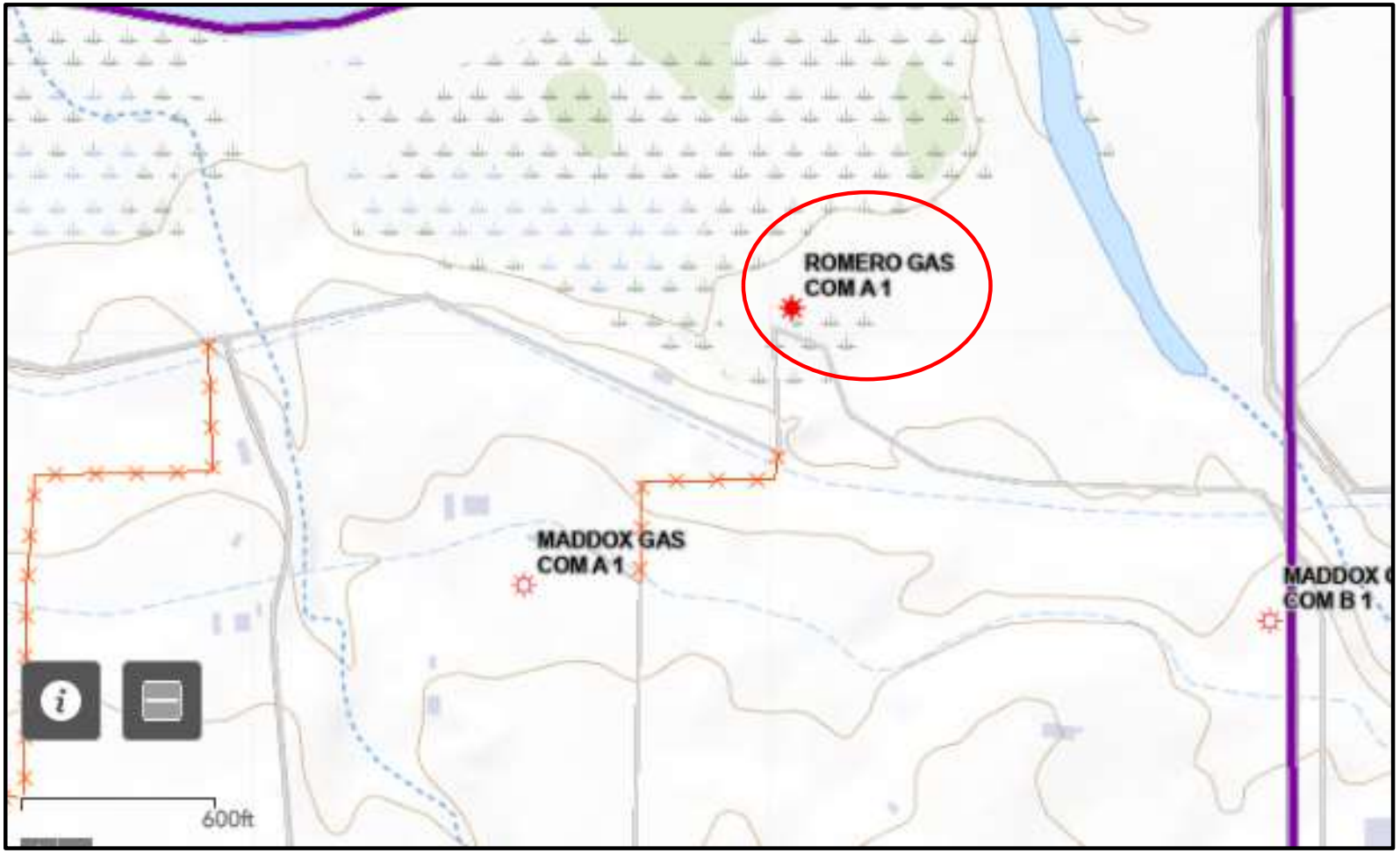
Romero Gas Com A #001

Hilcorp Energy Company
30-045-25509
San Juan County, NM
Site Map

Sample Photos – Post Excavation

Sample Photos – Post Excavation

Topographic Map



N

ESTIMATED RELEASE VOLUME TOOL
ROMERO GAS COM A1
HILCORP ENERGY COMPANY

This tool estimates a release volume based on the size and concentration of a dry excavation.

Tool Inputs	
Soil Density	99.88473696 *lbs/ft³*
Condensate Density	6.259053338 *lbs/gal*

Excavation Parameters	
Average Hydrocarbon Concentration	1040.75 *mg/kg*
Length	*ft*
Width	*ft*
Depth	*ft*
Expansion Factor	99.8 %
Total Soil Volume	**5** ***yds³***

Choose the appropriate column for the released product

	Crude Oil/Condensate	Produced Water
Hydrocarbon Concentration (Percent)	1 %	99 %

CALCULATED SPILL VOLUME

Hydrocarbon Mass	14 *lbs*	14 *lbs*
Hydrocarbon (Release) Volume	224 *gal* **5.3** ***bbls***	2 *gal* **0** ***bbls***

Notes

% - percent	ft - feet	kg - kilograms	mg - milligrams
bbls - barrels	gal -gallons	lbs - pounds	yd - yard

Red values are variable and can be changed according to site specific information.

Analytical Data, Samples Collected 6/1/2023 and 6/28/2023

See attached Lab Reports.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 13, 2023

Kate Kaufman
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX

RE: Romero GC A1 OrderNo.: 2306070

Dear Kate Kaufman:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/2/2023 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2306070**
Date Reported: **6/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: CS01
Project: Romero GC A1
Collection Date: 6/1/2023 10:30:00 AM
Lab ID: 2306070-001 **Matrix:** SOIL **Received Date:** 6/2/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	780	9.6		mg/Kg	1	6/8/2023 1:03:59 AM
Motor Oil Range Organics (MRO)	340	48		mg/Kg	1	6/8/2023 1:03:59 AM
Surr: DNOP	91.1	69-147		%Rec	1	6/8/2023 1:03:59 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	22	4.8		mg/Kg	1	6/10/2023 1:28:00 PM
Surr: BFB	184	15-244		%Rec	1	6/10/2023 1:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.024		mg/Kg	1	6/10/2023 1:28:00 PM
Toluene	ND	0.048		mg/Kg	1	6/10/2023 1:28:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	6/10/2023 1:28:00 PM
Xylenes, Total	0.34	0.097		mg/Kg	1	6/10/2023 1:28:00 PM
Surr: 4-Bromofluorobenzene	139	39.1-146		%Rec	1	6/10/2023 1:28:00 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2306070**
Date Reported: **6/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: CS02
Project: Romero GC A1
Collection Date: 6/1/2023 10:45:00 AM
Lab ID: 2306070-002 **Matrix:** SOIL **Received Date:** 6/2/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/8/2023 1:25:39 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/8/2023 1:25:39 AM
Surr: DNOP	76.4	69-147		%Rec	1	6/8/2023 1:25:39 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/10/2023 1:49:00 PM
Surr: BFB	103	15-244		%Rec	1	6/10/2023 1:49:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.024		mg/Kg	1	6/10/2023 1:49:00 PM
Toluene	ND	0.048		mg/Kg	1	6/10/2023 1:49:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	6/10/2023 1:49:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	6/10/2023 1:49:00 PM
Surr: 4-Bromofluorobenzene	95.6	39.1-146		%Rec	1	6/10/2023 1:49:00 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2306070**
Date Reported: **6/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: SW1
Project: Romero GC A1
Collection Date: 6/1/2023 10:50:00 AM
Lab ID: 2306070-003 **Matrix:** SOIL **Received Date:** 6/2/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2023 3:37:23 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2023 3:37:23 PM
Surr: DNOP	89.9	69-147		%Rec	1	6/7/2023 3:37:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/7/2023 10:03:35 PM
Surr: BFB	66.1	15-244		%Rec	1	6/7/2023 10:03:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	6/9/2023 12:46:04 PM
Toluene	ND	0.046		mg/Kg	1	6/9/2023 12:46:04 PM
Ethylbenzene	ND	0.046		mg/Kg	1	6/9/2023 12:46:04 PM
Xylenes, Total	ND	0.092		mg/Kg	1	6/9/2023 12:46:04 PM
Surr: 4-Bromofluorobenzene	94.1	39.1-146		%Rec	1	6/9/2023 12:46:04 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2306070**

13-Jun-23

Client: HILCORP ENERGY

Project: Romero GC A1

Sample ID: **LCS-75370**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **75370**	RunNo: **97270**
Prep Date: **6/6/2023**	Analysis Date: **6/7/2023**	SeqNo: **3533132** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	61.9	130			
Surr: DNOP	5.4		5.000		108	69	147			

Sample ID: **LCS-75399**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **75399**	RunNo: **97270**
Prep Date: **6/6/2023**	Analysis Date: **6/7/2023**	SeqNo: **3533133** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.8	61.9	130			
Surr: DNOP	4.3		5.000		86.4	69	147			

Sample ID: **MB-75370**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **75370**	RunNo: **97270**
Prep Date: **6/6/2023**	Analysis Date: **6/7/2023**	SeqNo: **3533136** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		109	69	147			

Sample ID: **MB-75399**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **75399**	RunNo: **97270**
Prep Date: **6/6/2023**	Analysis Date: **6/7/2023**	SeqNo: **3533137** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.3	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2306070**
13-Jun-23

Client: HILCORP ENERGY
Project: Romero GC A1

Sample ID: **lcs-75382** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **75382** RunNo: **97264**
Prep Date: **6/6/2023** Analysis Date: **6/7/2023** SeqNo: **3533433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.8	70	130			
Surr: BFB	5200		1000		517	15	244			S

Sample ID: **mb-75382** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **75382** RunNo: **97264**
Prep Date: **6/6/2023** Analysis Date: **6/7/2023** SeqNo: **3533434** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	860		1000		86.0	15	244			

Sample ID: **2306070-003ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SW1** Batch ID: **75382** RunNo: **97264**
Prep Date: **6/6/2023** Analysis Date: **6/8/2023** SeqNo: **3533436** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.6	22.94	0	92.6	70	130			
Surr: BFB	4700		917.4		512	15	244			S

Sample ID: **2306070-003amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SW1** Batch ID: **75382** RunNo: **97264**
Prep Date: **6/6/2023** Analysis Date: **6/8/2023** SeqNo: **3533437** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.6	23.00	0	93.2	70	130	0.965	20	
Surr: BFB	4700		920.0		508	15	244	0	0	S

Sample ID: **lcs-75364** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **75364** RunNo: **97349**
Prep Date: **6/5/2023** Analysis Date: **6/10/2023** SeqNo: **3537188** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.7	70	130			
Surr: BFB	2100		1000		206	15	244			

Sample ID: **mb-75364** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **75364** RunNo: **97349**
Prep Date: **6/5/2023** Analysis Date: **6/10/2023** SeqNo: **3537189** Units: **mg/Kg**

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2306070**
13-Jun-23

Client: HILCORP ENERGY
Project: Romero GC A1

Sample ID: **mb-75364** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **75364** RunNo: **97349**
Prep Date: **6/5/2023** Analysis Date: **6/10/2023** SeqNo: **3537189** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.1	15	244			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2306070**
13-Jun-23

Client: HILCORP ENERGY
Project: Romero GC A1

Sample ID: **LCS-75382**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **75382**	RunNo: **97264**
Prep Date: **6/6/2023**	Analysis Date: **6/7/2023**	SeqNo: **3533459** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.77	0.025	1.000	0	77.0	70	130			
Toluene	0.78	0.050	1.000	0	77.8	70	130			
Ethylbenzene	0.79	0.050	1.000	0	78.6	70	130			
Xylenes, Total	2.4	0.10	3.000	0	79.0	70	130			
Surr: 4-Bromofluorobenzene	0.86		1.000		85.9	39.1	146			

Sample ID: **mb-75382**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **75382**	RunNo: **97264**
Prep Date: **6/6/2023**	Analysis Date: **6/7/2023**	SeqNo: **3533460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.84		1.000		84.4	39.1	146			

Sample ID: **lcs-75364**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **75364**	RunNo: **97289**
Prep Date: **6/5/2023**	Analysis Date: **6/8/2023**	SeqNo: **3534107** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.8	70	130			
Toluene	0.83	0.050	1.000	0	83.0	70	130			
Ethylbenzene	0.81	0.050	1.000	0	80.7	70	130			
Xylenes, Total	2.4	0.10	3.000	0	79.6	70	130			
Surr: 4-Bromofluorobenzene	0.82		1.000		81.5	39.1	146			

Sample ID: **mb-75364**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **75364**	RunNo: **97289**
Prep Date: **6/5/2023**	Analysis Date: **6/8/2023**	SeqNo: **3534108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.82		1.000		81.7	39.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Hilcorp Energy | Work Order Number: 2306070 | RcptNo: 1

Received By: Tracy Casarrubias 6/2/2023 6:15:00 AM

Completed By: Tracy Casarrubias 6/2/2023 7:06:18 AM

Reviewed By: JN 6/2/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: TMC 6/2/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: Mailing address and phone number are missing on COC- TMC 6/2

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good	Yes	Yogi		

Chain-of-Custody Record

Client: HEC (Hilcorp)

Kate Kaufman

Mailing Address:

Phone #:

email or Fax#: KKaufman@hilcorp.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day

☒ Standard ☐ Rush

Project Name: Romero GC A1

Project #:

Project Manager: Stuart Hyde - Ensolum

Sampler: E. Carroll

On Ice: ☒ Yes ☐ No yogi

# of Coolers: 1

Cooler Temp(Including CF): 5.4-0.1=5.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2306070	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)
6-1	10:30	Soil	CS01	1 4oz	Cool	001	X	X								
6-1	10:45	Soil	CS02	1 4oz	Cool	002	X	X								
6-1	10:50	Soil	SW01	1 4oz	Cool	003	X	X								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6-1	1352	Eric Carroll	[signature]		6/1/23	1352
6/1/23	1750	[signature]	[signature]	Courier	6/2/23	6:15

Remarks:

CC: shyde@~~hilcorp~~ ensolum.com

ecarroll@ensolum.com

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 05, 2023

Kate Kaufman
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX:

RE: Romero GC 1 OrderNo.: 2306F11

Dear Kate Kaufman:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/29/2023 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2306F11**
Date Reported: **7/5/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: CSO1A
Project: Romero GC 1
Collection Date: 6/28/2023 10:15:00 AM
Lab ID: 2306F11-001 **Matrix:** SOIL **Received Date:** 6/29/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/3/2023 1:44:03 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/3/2023 1:44:03 PM
Surr: DNOP	94.0	69-147		%Rec	1	7/3/2023 1:44:03 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/3/2023 7:34:00 PM
Surr: BFB	97.2	15-244		%Rec	1	7/3/2023 7:34:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.024		mg/Kg	1	7/3/2023 7:34:00 PM
Toluene	ND	0.049		mg/Kg	1	7/3/2023 7:34:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/3/2023 7:34:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/3/2023 7:34:00 PM
Surr: 4-Bromofluorobenzene	94.0	39.1-146		%Rec	1	7/3/2023 7:34:00 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2306F11**

05-Jul-23

Client: HILCORP ENERGY

Project: Romero GC 1

Sample ID: **LCS-75963**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **75963**	RunNo: **97898**
Prep Date: **7/3/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561773** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.2	61.9	130			
Surr: DNOP	4.5		5.000		90.4	69	147			

Sample ID: **MB-75963**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **75963**	RunNo: **97898**
Prep Date: **7/3/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561774** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		88.0	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2306F11**

05-Jul-23

Client: HILCORP ENERGY

Project: Romero GC 1

Sample ID: **lcs-75950**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **75950**	RunNo: **97902**
Prep Date: **6/30/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561967** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.3	70	130			
Surr: BFB	2000		1000		203	15	244			

Sample ID: **mb-75950**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **75950**	RunNo: **97902**
Prep Date: **6/30/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561968** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.0	15	244			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2306F11**

05-Jul-23

Client: HILCORP ENERGY

Project: Romero GC 1

Sample ID: **lcs-75950**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **75950**	RunNo: **97902**
Prep Date: **6/30/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561991** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.5	70	130			
Toluene	0.91	0.050	1.000	0	90.5	70	130			
Ethylbenzene	0.92	0.050	1.000	0	91.9	70	130			
Xylenes, Total	2.7	0.10	3.000	0	91.4	70	130			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	39.1	146			

Sample ID: **mb-75950**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **75950**	RunNo: **97902**
Prep Date: **6/30/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561992** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.5	39.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2306F11 RcptNo: 1

Received By: Tracy Casarrubias 6/29/2023 7:00:00 AM

Completed By: Cheyenne Cason 6/29/2023 9:28:09 AM

Reviewed By: TMB 6/29/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: SCM 06/29/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

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

Chain-of-Custody Record

Client: Hilcorp

Attn: Kate Kaufmann

Mailing Address:

Phone #:

email or Fax#: KKaufmann@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
5day
☒ Standard ☐ Rush

Project Name: Romero GC 1

Project #:

Project Manager: Stuart Hyde - Ensolum

Sampler: E. Carroll

On Ice: ☒ Yes ☐ No 4001

# of Coolers: 1

Cooler Temp(Including CF): 2.6 -0 = 2.6 (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2306F11	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)
6-28	10:15	Soil	ESOIA	1 4oz	Cool	001	X	X								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6/28	1423	Eric Carroll				
6/28/22	1817	Christ Walls		courier	6/29/22	7:00

Remarks: cc: ecarroll@ensolum.com

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

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

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

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 249621
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	11/7/2023