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	nAPP2312345903
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Mitch Killough	Contact Telephone 713-757-5247
Contact email mkillough@hilcorp.com	Incident # nAPP2312345903
Contact mailing address 1111 Travis Street, Houston, Texas 77002	

Location of Release Source

Latitude 36.953434_

Longitude -108.1033783_ (NAD 83 in decimal degrees to 5 decimal places)

Site Name Culpepper Martin 103	Site Type Well
Date Release Discovered: 4/18/2023 @ 10:00 am (MT)	API# 30-045-27370

Unit Letter	Section	Township	Range	County
K	28	32N	12W	San Juan

Surface Owner: State Federal Tribal Private (*Name: Montoya Cattle Company*)

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) 0.20 bbl	Volume Recovered (bbls) 0 bbls
Produced Water	Volume Released (bbls) 0.21 bbl	Volume Recovered (bbls) 0 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ⊠ No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf) 85 mcf (reflects the NM pressure base conversion)	Volume Recovered (Mcf) 0 mcf
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Hilcorp discovered a 0.41-bbl release of oil/produced water at the Culpepper Martin 103 in San Juan County, NM. A Hilcorp Lease Operator found the compressor at the Culpepper Martin 103 running with a zero flow rate and proceeded to walk Hilcorp's flowline ROW between the well site and meter run to determine if a leak had occurred. Upon discovery of the leak, the compressor was shut-in and a One Call was made. The spilled fluids remained within Hilcorp's ROW, but did impact a dry wash that bisects the ROW. The area of the dry wash impacted measured approximately 22 ft long x 4 ft wide.

A volume of 85 mcf natural gas was released from the flowline. This was determined by Hilcorp's SCADA software.

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Oil Conservation Division

Incident ID	nAPP2312345903
District RP	
Facility ID	
Application ID	

Page 2 of 32

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?					
19.15.29.7(A) NMAC?	The spill amount was not ≥ 25 bbls, but did impact a dry, ephemeral water feature within Hilcorp's flowline					
	right-of-way.					
🛛 Yes 🗌 No						
If YES, was immediate no	ptice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?					
Mitch Killough notified the NMOCD vie 24 hour smell notification on 04/10/2022 at 0.44 am MT						
Mitch Killough notified the NMOCD via 24-hour email notification on 04/19/2023 at 9:44 am MT.						

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 \square 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: <u>Mitch Killough</u>	Title:Environmental Specialist
Signature:	Date:05/3/2023
email:mkillough@hilcorp.com	Telephone:713-757-5247
OCD Only	
Received by:	Date:

Page 6

Oil Conservation Division

Incident ID	nAPP2312345903
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.

<u>Closure Report Attachment Checklist</u> : Each of the following item	ns 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 must be notified 2 days prior to liner inspection)	the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC E	District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain remay endanger public health or the environment. The acceptance of a G should their operations have failed to adequately investigate and remender human health or the environment. In addition, OCD acceptance of a G compliance with any other federal, state, or local laws and/or regulation restore, reclaim, and re-vegetate the impacted surface area to the cond accordance with 19.15.29.13 NMAC including notification to the OCI Printed Name:Mttch Killough email:Mttch Killough@hilcorp.com	C-141 report by the OCD does not relieve the operator of liability diate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ons. The responsible party acknowledges they must substantially itions that existed prior to the release or their final land use in D when reclamation and re-vegetation are complete. Title:Environmental Specialist Date:7/5/2023
OCD Only	
Received by:	Date:
	liability should their operations have failed to adequately investigate and ter, human health, or the environment nor does not relieve the responsible regulations.
Closure Approved by: <u>Nelson Velez</u>	Date:09/26/2023
Printed Name: Nelson Velez	Title: Environmental Specialist - Adv

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July 5, 2023

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 Report and Closure Request Culpepper Martin 103 San Juan County, New Mexico Hilcorp Energy Company NMOCD Incident Number: nAPP2312345903

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Report and Closure Request* for a release from a flowline located between the Culpepper Martin 103 (Site) and Culpepper Martin 7B natural gas production wells. The Site is located on private land in Unit K, Section 28, Township 32 North, Range 12 West, in San Juan County, New Mexico (Figure 1). The work described in this report was performed in order to remediate crude oil and produced water impacted soil originating from a release at the Site. Based on the remediation activities performed and laboratory analytical results, Hilcorp is requesting closure and no further action for Incident Number nAPP2312345903.

SITE BACKGROUND

On April 18, 2023, Hilcorp personnel discovered the compressor for the Culpepper Martin 103 well had zero flow rate and proceeded to walk the flowline right-of-way between the compressor and the meter run. A leak was discovered originating from the flowline at a location between the Culpepper Martin 103 and the Culpepper Martin 7B well pads; as such, the compressor was immediately shut in. The released fluids remained within Hilcorp's right-of-way corridor; however, fluids did migrate into an unnamed dry wash that bisects the flowline at this location. Based on initial observations, the footprint of the release measured approximately 22 feet long by 4 feet wide. Upon discovery of the release, Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) on April 19, 2023 and submitted an initial *Form C-141 Release Notification* on May 3, 2023. NMOCD assigned the release incident number nAPP2312345903.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As part of the Site investigation, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 11 and 12 (19.15.29.11 and 12) of the New Mexico Administrative Code (NMAC).

The Site is located within the Nacimiento Geologic Formation. In the report titled "*Hydrogeology* and Water Resources of San Juan Basin, New Mexico" (Stone, et. al., 1983), the Nacimiento Formation is characterized by interbedded black carbonaceous mudstones and white, coarse-grained sandstones, which ranges in thickness from 418 feet to 2,232 feet. The hydrologic

properties of the Nacimiento Formation display variable hydrologic properties dependent on location. Where sufficient yield is present, the primary use of water from this formation is for domestic and/or livestock supply. The Nacimiento Formation is underlain by the Ojo Alamo sandstone (Stone et. al., 1983).

The nearest significant watercourse is an unnamed dry wash located at the Site and is a firstorder tributary of Hartley Wash, located south of the Site. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland (Figure 1). The nearest fresh-water well is New Mexico Office of the State Engineer (NMOSE) permitted well SJ-02163 (Appendix A), located approximately 8,910 feet north of the Site. The recorded depth to water on the NMOSE database is 15 feet below ground surface (bgs). No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile from the Site. The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as low potential karst by the Bureau of Land Management (BLM)). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site.

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 of the NMAC), the following Table I Closure Criteria is applied to the Site based on the proximity to a significant watercourse:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 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
- Chloride: 600 mg/kg

EXCAVATION SOIL SAMPLING ACTIVITIES

In response to the release, Hilcorp performed excavation activities in May 2022 to remove soil impacted by the released fluids. To direct excavation activities, Ensolum personnel field screened soil for volatile organic compounds (VOCs) using a calibrated photoionization detector (PID). Following removal of impacted soil, Ensolum notified the NMOCD on May 12, 2023 (Appendix B) and performed confirmation soil sampling on May 16, 2023. Five-point composite soil samples were collected from the sidewalls and floor of the excavation at a frequency of one sample per 200 square feet. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 6 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All soil samples were submitted for analyses of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Based on the area of the floor and sidewalls, two sidewall samples (SW-01 and SW-02) and one floor sample (FS-01) were collected. Because the release occurred in a wash at an elevation below surrounding ground surface, sidewall SW-02 represents a depth of approximately 9 feet below surround surface elevation. Sidewall SW-01 measured approximately 5 feet deep and floor sample FS01 was collected at a depth of approximately 5 feet below surrounding ground surface.



Based on the analytical results, all confirmation samples were in compliance with NMOCD Table I Closure Criteria. Analytical results are summarized in Table 1, with complete laboratory reports attached as Appendix C. Photographs taken by Hilcorp and Ensolum during the excavation work are included in Appendix D.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the release of produced water and crude oil that was discovered on April 18, 2023. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicate concentrations are compliant with the Site Closure Criteria and no further remediation is required. With NMOCD approval, Hilcorp will backfill the excavation with clean material and recontour the Site to match pre-existing conditions. Excavation of impacted soil has mitigated impacts at this Site and these remedial actions are protective of human health, the environment, and groundwater. As such, Hilcorp respectfully requests closure for Incident Number nAPP2312345903.

Sincerely,

ENSOLUM, LLC

Stuart Hyde, LG Senior Geologist (970) 903-1607 shyde@ensolum.com

Attachments:

- Figure 1: Site Location Map
- Figure 2: Soil Sample Locations
- Table 1:
 Excavation Soil Sample Analytical Results
- Appendix A: NMOSE Well Record
- Appendix B: NMOCD Correspondence
- Appendix C: Laboratory Analytical Reports
- Appendix D: Photographic Log

Ashley L. ager

Ashley Ager, MS, PG Principal, Geologist (970) 946-1093 aager@ensolum.com

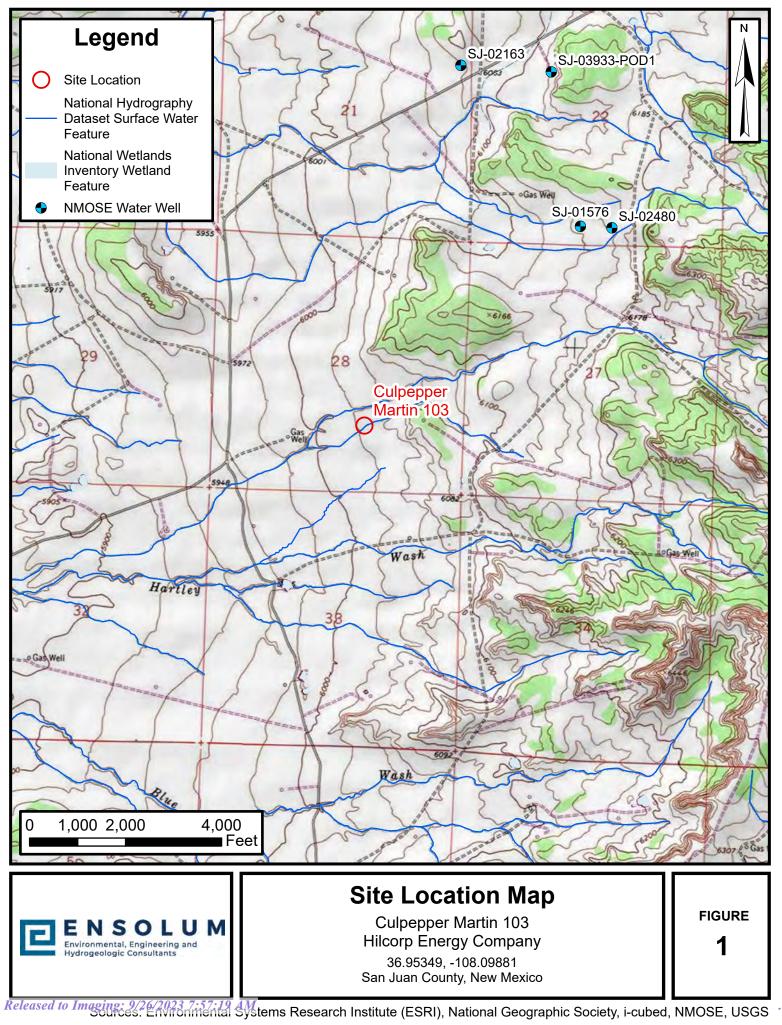
Page 3



FIGURES

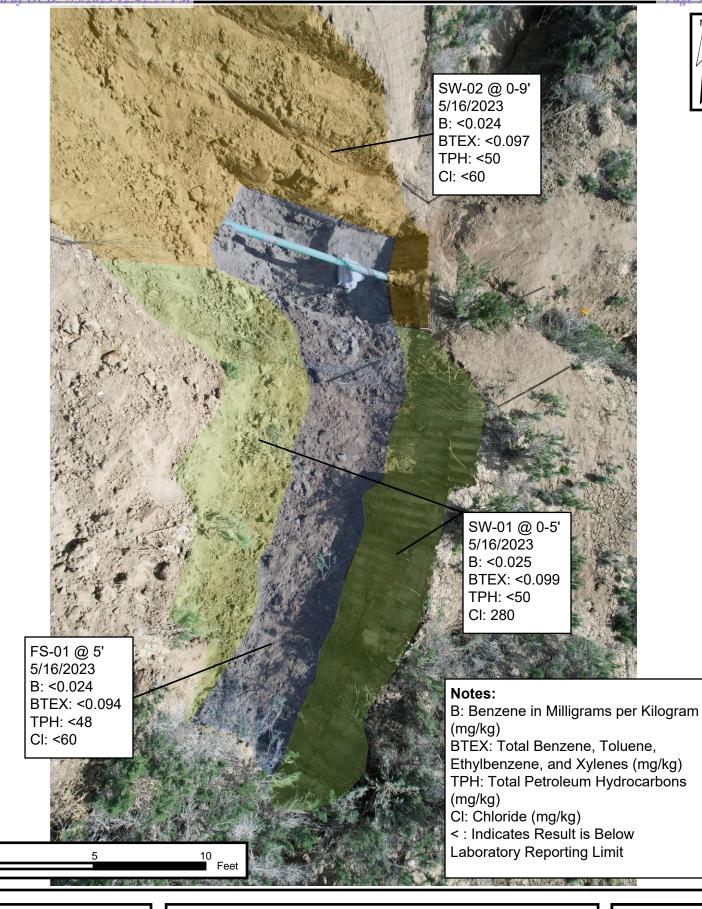
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FIGURE

2



Soil Sample Locations

Culpepper Martin 103 Hilcorp Energy Company 36.95349, -108.09881 San Juan County, New Mexico

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E N S O L U M

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TABLES

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	TABLE 1 EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS Culpepper Martin 103 Hilcorp Energy Company San Juan County, New Mexico											
Sample Designation												
	MOCD Closure Criteria for Soils Impacted by a Release (Groundwater <50 feet) NE NE NE NE NE So NE NE NE NE 100 600								600			
FS01	5/16/2023	5	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.6	<48	<48	<60
SW-01	5/16/2023	0-5	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<10	<50	<50	280
SW-02	5/16/2023	0-9	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.9	<50	<50	<60

Notes:

bgs: below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

mg/kg: milligrams per kilogram

NE: Not Established

0

NMOCD: New Mexico Oil Conservation Division

': feet

GRO: Gasoline Range Organics DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

< : indicates result less than the stated laboratory reporting limit (RL)

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APPENDIX A

NMOSE Well Record

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STATE ENGINEER OFFICE

WELL RECORD

ZZ 8707

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Section 1. GENERAL INFORMATION JOHN W. GRUBB

(A) Owner of	f well	HN W.	GRUBB			C	wner's Wel	1 No	
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b. Tract	No	of Map No.		of th	ne		ř. 1		
c. Lot N Subdi	o vision, recorded	of Block No 1 in		of th	ie County.				
d. X=		feet, Y=		feet, l	N.M. Coordina	ate System	· · · · · · · · · · · · · · · · · · ·		Zone ir Grant
B) Drilling (Contractor	TERRY H	4000			License N	W	1-717	
Address <u>F/C</u>	RA VIST	a, NM.	· .		, 	· · ·			
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Depth	in Feet To	Thickness in Feet	Color and Type of Material Encountered	
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20	31	17	WATER BEARING SAND + GRAVEL	
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Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

E.

INSTRUCTIONS: This form should be existent in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, existence of the state Engineer. All sections, existence of the section section for the section section for the sectio



APPENDIX B

NMOCD Correspondence

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Mitch Killough

From:	Enviro, OCD, EMNRD <ocd.enviro@emnrd.nm.gov></ocd.enviro@emnrd.nm.gov>
Sent:	Friday, May 12, 2023 5:10 PM
То:	Mitch Killough
Cc:	Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject:	RE: [EXTERNAL] 48-Hour Confirmation Sampling Notification - Culpepper Martin 103 - nAPP2312345903

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Mitch,

Please be aware that notification requirements are two business days, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.

JH

Jocelyn Harimon • Environmental Specialist Environmental Bureau EMNRD - Oil Conservation Division 1220 South St. Francis Drive | Santa Fe, NM 87505 (505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov http:// www.emnrd.nm.gov



From: Mitch Killough <mkillough@hilcorp.com> Sent: Friday, May 12, 2023 3:19 PM To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov> Cc: Christopher Bramwell <cbramwell@hilcorp.com>; Brandon Sinclair <Brandon.Sinclair@hilcorp.com>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov> Subject: [EXTERNAL] 48-Hour Confirmation Sampling Notification - Culpepper Martin 103 - nAPP2312345903

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Afternoon Nelson.

Hilcorp Energy Company (Hilcorp) is submitting this confirmation sampling notification for the Culpepper Martin 103 located at coordinates 36.953434, -108.1033783. Confirmation soil samples will be collected on Tuesday, May 16 at 9 am (MT).

I realize that this is technically inside the 48-hour business day window for notifications, but with the forecasted rain starting Wednesday of next week, we wanted to take advantage of the weather window. Please let us know if this is acceptable.

Thanks and have a nice weekend.

Mitch Killough Environmental Specialist Hilcorp Energy Company 1111 Travis Street Houston, TX 77002 713-757-5247 (office) 281-851-2338 (cell) mkillough@hilcorp.com

The information contained in this email message is confidential and may be legally privileged and is intended only for the use of the individual or entity named above. If you are not an intended recipient or if you have received this message in error, you are hereby notified that any dissemination, distribution, or copy of this email is strictly prohibited. If you have received this message immediately notify us by return email or telephone if the sender's phone number is listed above, then promptly and permanently delete this message.

While all reasonable care has been taken to avoid the transmission of viruses, it is the responsibility of the recipient to ensure that the onward transmission, opening, or use of this message and any attachments will not adversely affect its systems or data. No responsibility is accepted by the company in this regard and the recipient should carry out such virus and other checks as it considers appropriate.



APPENDIX C

Laboratory Analytical Reports

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May 26, 2023

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

RE: Culpepper Martin 103

OrderNo.: 2305874

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/17/2023 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: HILCORP ENERGY

Culpepper Martin 103

Project:

Analytical Report Lab Order 2305874

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/26/2023 Client Sample ID: FS01 Collection Date: 5/16/2023 12:34:00 PM Received Date: 5/17/2023 7.10.00 AM

Lab ID: 2305874-001	Matrix: SOIL	Rec	eived Date:	5/17/2	023 7:10:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/23/2023 12:48:44 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/23/2023 12:48:44 PM
Surr: DNOP	94.9	69-147	%Rec	1	5/23/2023 12:48:44 PM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/24/2023 1:10:55 AM
Surr: BFB	77.9	15-244	%Rec	1	5/24/2023 1:10:55 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	5/24/2023 1:10:55 AM
Toluene	ND	0.047	mg/Kg	1	5/24/2023 1:10:55 AM
Ethylbenzene	ND	0.047	mg/Kg	1	5/24/2023 1:10:55 AM
Xylenes, Total	ND	0.094	mg/Kg	1	5/24/2023 1:10:55 AM
Surr: 4-Bromofluorobenzene	94.3	39.1-146	%Rec	1	5/24/2023 1:10:55 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	5/23/2023 2:47:27 PM

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

Qualifiers:

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

Page 1 of 8

CLIENT: HILCORP ENERGY

2305874-002

Culpepper Martin 103

Project:

Lab ID:

Analytical Report Lab Order 2305874

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/26/2023 Client Sample ID: SW-01 Collection Date: 5/16/2023 12:37:00 PM

Received Date: 5/17/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/23/2023 2:25:36 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/23/2023 2:25:36 PM
Surr: DNOP	93.1	69-147	%Rec	1	5/23/2023 2:25:36 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/24/2023 2:21:15 AM
Surr: BFB	85.6	15-244	%Rec	1	5/24/2023 2:21:15 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	5/24/2023 2:21:15 AM
Toluene	ND	0.049	mg/Kg	1	5/24/2023 2:21:15 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/24/2023 2:21:15 AM
Xylenes, Total	ND	0.099	mg/Kg	1	5/24/2023 2:21:15 AM
Surr: 4-Bromofluorobenzene	96.9	39.1-146	%Rec	1	5/24/2023 2:21:15 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	280	60	mg/Kg	20	5/23/2023 2:59:48 PM

Matrix: SOIL

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

Qualifiers:

* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 8

CLIENT: HILCORP ENERGY

2305874-003

Culpepper Martin 103

Project:

Lab ID:

Analytical Report Lab Order 2305874

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/26/2023 Client Sample ID: SW-02 Collection Date: 5/16/2023 12:40:00 PM

Received Date: 5/17/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OI	RGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/23/2023 2:36:20 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/23/2023 2:36:20 PM
Surr: DNOP	97.8	69-147	%Rec	1	5/23/2023 2:36:20 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/24/2023 3:31:30 AM
Surr: BFB	81.0	15-244	%Rec	1	5/24/2023 3:31:30 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	5/24/2023 3:31:30 AM
Toluene	ND	0.049	mg/Kg	1	5/24/2023 3:31:30 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/24/2023 3:31:30 AM
Xylenes, Total	ND	0.097	mg/Kg	1	5/24/2023 3:31:30 AM
Surr: 4-Bromofluorobenzene	95.6	39.1-146	%Rec	1	5/24/2023 3:31:30 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	5/23/2023 3:12:10 PM

Matrix: SOIL

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

Qualifiers:

* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

Above Quantitation Range/Estimated Value Е

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 3 of 8

Client: Project:		CORP ENERGY epper Martin 10									
Sample ID:	MB-75123	SampTy	pe: ME	BLK	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 75	123	F	RunNo: 96	6982				
Prep Date:	5/23/2023	Analysis Da	ite: 5/	23/2023	S	SeqNo: 3	518858	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID: I	_CS-75123	SampTy	pe: LC	S	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID: I	CSS	Batch	ID: 75	123	F	RunNo: 96	6982				
Prep Date:	5/23/2023	Analysis Da	ite: 5/	23/2023	S	SeqNo: 3	518859	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.0	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of 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

- Page 4 of 8

2305874

26-May-23

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:		P ENERGY er Martin 103									
Sample ID:	LCS-75114	SampTyp	e: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch II	D: 75	114	F	RunNo: 9	6945				
Prep Date:	5/23/2023	Analysis Dat	e: 5/	23/2023	S	SeqNo: 3	517310	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	48	10	50.00	0	96.9	61.9	130			
Surr: DNOP		4.9		5.000		98.3	69	147			
Sample ID:	MB-75114	SampTyp	De: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch II	D: 75	114	F	RunNo: 9	6945				
Prep Date:	5/23/2023	Analysis Dat	e: 5/	23/2023	S	SeqNo: 3	517311	Units: mg/K	íg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	10								
Motor Oil Rang	ge Organics (MRO)	ND	50								
Surr: DNOP		12		10.00		122	69	147			
Sample ID:	2305874-003AMS	SampTyp	De: MS	6	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	SW-02	Batch II	D: 75	114	F	RunNo: 9	6945				
Prep Date:	5/23/2023	Analysis Dat	e: 5/	24/2023	S	SeqNo: 3	518178	Units: mg/K	íg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	43	9.6	47.80	0	89.8	54.2	135			
Surr: DNOP		4.4		4.780		92.2	69	147			
Sample ID:	2305874-003AMS) SampTyp	be: MS	5D	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	SW-02	Batch II	D: 75	114	F	RunNo: 9	6945				
Prep Date:	5/23/2023	Analysis Dat	e: 5/	24/2023	S	SeqNo: 3	518179	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	41	8.7	43.71	0	93.0	54.2	135	5.45	29.2	
Surr: DNOP		4.0		4.371		91.7	69	147	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of 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

26-May-23

2305874

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:		P ENERG [*] r Martin 1(
Sample ID:	: lcs-75096	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	LCSS	Batch	ID: 75	096	R	unNo: 9	6952				
Prep Date:	5/22/2023	Analysis D	ate: 5/	24/2023	S	eqNo: 3	518258	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	23	5.0	25.00	0	90.1	70	130			
Surr: BFB		5000		1000		504	15	244			S
Sample ID:	mb-75096	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 75	096	R	lunNo: 9	6952				
Prep Date:	5/22/2023	Analysis D	ate: 5/	24/2023	S	eqNo: 3	518259	Units: mg/ #	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	ND	5.0								
Surr: BFB		870		1000		87.3	15	244			
Sample ID:	2305874-001ams	SampT	ype: M \$	6	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	FS01	Batch	ID: 75	096	R	lunNo: 9	6952				
Prep Date:	5/22/2023	Analysis D	ate: 5/	24/2023	S	eqNo: 3	518261	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	22	4.7	23.34	0	94.2	70	130			
Surr: BFB		4800		933.7		512	15	244			S
Sample ID:	2305874-001amsd	I SampT	ype: MS	SD	Test	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	FS01	Batch	ID: 75	096	R	lunNo: 9	6952				
1					_			Units: mg/k			
Prep Date:	5/22/2023	Analysis D	ate: 5/	24/2023	S	SeqNo: 3	518262	Units. mg/r	(g		
Prep Date: Analyte	5/22/2023	Analysis D Result	ate: 5/ PQL		SPK Ref Val	seqNo: 3 %REC	LowLimit	HighLimit	% RPD	RPDLimit	Qual
Analyte	5/22/2023 ge Organics (GRO)							U	•	RPDLimit 20	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

Page 6 of 8

WO#: 2305874 26-May-23 **Client:**

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project:	Culpeppe	er Martin 1	.03								
Sample ID:	LCS-75096	SampT	Гуре: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batch	h ID: 750	096	R	RunNo: 9	6952				
Prep Date:	5/22/2023	Analysis D	Date: 5/	24/2023	S	SeqNo: 3	518273	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.84	0.025	1.000	0	84.5	70	130			
Toluene		0.86	0.050	1.000	0	86.1	70	130			
Ethylbenzene		0.87	0.050	1.000	0	87.2	70	130			
Xylenes, Total		2.6	0.10	3.000	0	87.2	70	130			
Surr: 4-Brom	nofluorobenzene	0.98		1.000		97.8	39.1	146			
Sample ID:	mb-75096	SampT	Гуре: МЕ	BLK	Test	tCode: EF	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	h ID: 750	096	R	RunNo: 9	6952				
Prep Date:	5/22/2023	Analysis D	Date: 5/	24/2023	S	SeqNo: 3	518274	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	nofluorobenzene	0.97		1.000		97.1	39.1	146			
						-					
Sample ID:	2305874-002ams	SampT	Гуре: МS	3	Tesi			8021B: Volat	tiles		
Sample ID: Client ID:			√ype: MS h ID: 75 0				PA Method		tiles		
•	SW-01		h ID: 750	096	R	tCode: Ef	PA Method				
Client ID:	SW-01	Batch	h ID: 750	096 24/2023	R	tCode: EF RunNo: 90 SeqNo: 3	PA Method	8021B: Vola		RPDLimit	Qual
Client ID: Prep Date:	SW-01	Batcl Analysis D	h ID: 75 0 Date: 5/ 2	096 24/2023	R	tCode: EF RunNo: 90 SeqNo: 3	PA Method 6952 518277	8021B: Volat Units: mg/k	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte	SW-01	Batch Analysis D Result	h ID: 75(Date: 5/ PQL	096 24/2023 SPK value	R S SPK Ref Val	tCode: EF RunNo: 9 GeqNo: 3 %REC	PA Method 6952 518277 LowLimit	8021B: Volat Units: mg/k HighLimit	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene	SW-01	Batch Analysis D Result 0.95	h ID: 75(Date: 5/ PQL 0.025	096 24/2023 SPK value 0.9872	R S SPK Ref Val 0	tCode: EF RunNo: 96 SeqNo: 38 %REC 96.0	PA Method 6952 518277 LowLimit 70	8021B: Volat Units: mg/k HighLimit 130	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene	SW-01	Batch Analysis D Result 0.95 0.98	h ID: 75 0 Date: 5 /2 <u>PQL</u> 0.025 0.049	096 24/2023 SPK value 0.9872 0.9872	R S SPK Ref Val 0 0	tCode: EF RunNo: 96 SeqNo: 39 %REC 96.0 99.3	PA Method 6952 518277 LowLimit 70 70	8021B: Volat Units: mg/k HighLimit 130 130	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	SW-01	Batch Analysis D Result 0.95 0.98 1.0	h ID: 75 0 Date: 5 /2 PQL 0.025 0.049 0.049	096 24/2023 SPK value 0.9872 0.9872 0.9872	R SPK Ref Val 0 0 0	tCode: Ef RunNo: 9 SeqNo: 3 %REC 96.0 99.3 101	PA Method 6952 518277 LowLimit 70 70 70 70	8021B: Volat Units: mg/k HighLimit 130 130 130	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	SW-01 5/22/2023	Batch Analysis D Result 0.95 0.98 1.0 3.0 0.95	h ID: 75 0 Date: 5 /2 PQL 0.025 0.049 0.049	096 24/2023 SPK value 0.9872 0.9872 0.9872 2.962 0.9872	R SPK Ref Val 0 0 0 0	tCode: EF RunNo: 96 SeqNo: 38 %REC 96.0 99.3 101 100 96.6	PA Method 5952 518277 LowLimit 70 70 70 70 39.1	8021B: Volat Units: mg/k HighLimit 130 130 130 130	Sg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	SW-01 5/22/2023 nofluorobenzene 2305874-002amsd	Batcl Analysis D Result 0.95 0.98 1.0 3.0 0.95	h ID: 75 0 Date: 5 / PQL 0.025 0.049 0.049 0.099	096 24/2023 SPK value 0.9872 0.9872 0.9872 2.962 0.9872 0.9872	R SPK Ref Val 0 0 0 0 0 Test	tCode: EF RunNo: 96 SeqNo: 38 %REC 96.0 99.3 101 100 96.6	PA Method 6952 518277 LowLimit 70 70 70 70 70 39.1 PA Method	8021B: Volat Units: mg/k HighLimit 130 130 130 130 146	Sg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID:	SW-01 5/22/2023 nofluorobenzene 2305874-002amsd	Batcl Analysis D Result 0.95 0.98 1.0 3.0 0.95	h ID: 75 0 Date: 5 / PQL 0.025 0.049 0.049 0.099	096 24/2023 SPK value 0.9872 0.9872 2.962 0.9872 0.9872 5D 096	R SPK Ref Val 0 0 0 0 Test	tCode: EF RunNo: 96 SeqNo: 39 %REC 96.0 99.3 101 100 96.6 tCode: EF	PA Method 5952 518277 LowLimit 70 70 70 39.1 PA Method 5952	8021B: Volat Units: mg/k HighLimit 130 130 130 130 146	Kg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID:	SW-01 5/22/2023 nofluorobenzene 2305874-002amsd SW-01	Batch Analysis D 0.95 0.98 1.0 3.0 0.95 I SampT Batch	h ID: 75 0 Date: 5 / PQL 0.025 0.049 0.049 0.099	096 24/2023 SPK value 0.9872 0.9872 2.962 0.9872 2.962 0.9872 5D 096 24/2023	R SPK Ref Val 0 0 0 0 Test	tCode: EF RunNo: 9 SeqNo: 3 %REC 96.0 99.3 101 100 96.6 tCode: EF RunNo: 9	PA Method 5952 518277 LowLimit 70 70 70 39.1 PA Method 5952	8021B: Volat Units: mg/k HighLimit 130 130 130 130 146 8021B: Volat	Kg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date:	SW-01 5/22/2023 nofluorobenzene 2305874-002amsd SW-01	Batch Analysis D 0.95 0.98 1.0 3.0 0.95 I SampT Batch Analysis D	h ID: 75 (Date: 5 / PQL 0.025 0.049 0.049 0.099 Type: MS h ID: 75 (Date: 5 /	096 24/2023 SPK value 0.9872 0.9872 2.962 0.9872 2.962 0.9872 5D 096 24/2023	R SPK Ref Val 0 0 0 0 Tes R S	tCode: EF RunNo: 9 SeqNo: 3 %REC 96.0 99.3 101 100 96.6 tCode: EF RunNo: 9 SeqNo: 3	PA Method 5952 518277 LowLimit 70 70 70 39.1 PA Method 5952 518278	8021B: Volat Units: mg/k HighLimit 130 130 130 130 146 8021B: Volat Units: mg/k	Kg %RPD tiles		
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte	SW-01 5/22/2023 nofluorobenzene 2305874-002amsd SW-01	Batch Analysis D 0.95 0.98 1.0 3.0 0.95 I SampT Batch Analysis D Result	h ID: 75 (Date: 5 / PQL 0.025 0.049 0.049 0.099 Fype: MS h ID: 75 (Date: 5 / PQL	096 24/2023 SPK value 0.9872 0.9872 2.962 0.9872 2.962 0.9872 5D 096 24/2023 SPK value	R SPK Ref Val 0 0 0 0 Test R SPK Ref Val	tCode: EF RunNo: 9 SeqNo: 3 %REC 96.0 99.3 101 100 96.6 tCode: EF RunNo: 9 SeqNo: 3 %REC	PA Method 5952 518277 LowLimit 70 70 70 39.1 PA Method 5952 518278 LowLimit	8021B: Volat Units: mg/k HighLimit 130 130 130 130 146 8021B: Volat Units: mg/k HighLimit	Sg %RPD tiles Sg %RPD	RPDLimit	
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte Benzene	SW-01 5/22/2023 nofluorobenzene 2305874-002amsd SW-01	Batch Analysis D 0.95 0.98 1.0 3.0 0.95 I SampT Batch Analysis D Result 0.88	h ID: 75 (Date: 5 / 0.025 0.049 0.049 0.099 Type: MS h ID: 75 (Date: 5 / PQL 0.025	096 24/2023 SPK value 0.9872 0.9872 2.962 0.9872 0.9872 30 50 50 50 50 50 50 50 50 50 50 50 50 50	SPK Ref Val 0 0 0 0 Test SPK Ref Val 0	tCode: EF RunNo: 96 SeqNo: 38 %REC 96.0 99.3 101 100 96.6 tCode: EF RunNo: 96 SeqNo: 38 %REC 89.5	PA Method 5952 518277 LowLimit 70 70 70 39.1 PA Method 5952 518278 LowLimit 70	8021B: Volat Units: mg/k HighLimit 130 130 130 130 146 8021B: Volat Units: mg/k HighLimit 130	5g %RPD tiles 5g %RPD 7.26	RPDLimit 20	
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte Benzene Toluene	SW-01 5/22/2023 nofluorobenzene 2305874-002amsd SW-01	Batch Analysis D 0.95 0.98 1.0 3.0 0.95 I SampT Batch Analysis D Result 0.88 0.91	h ID: 75 (Date: 5 / 0.025 0.049 0.049 0.099 Type: MS h ID: 75 (Date: 5 / PQL 0.025 0.049	096 24/2023 SPK value 0.9872 0.9872 2.962 0.9872 0.9872 30 50 50 50 50 50 50 50 50 50 50 50 50 50	SPK Ref Val 0 0 0 0 0 Test SPK Ref Val 0 0	tCode: EF RunNo: 96 SeqNo: 38 %REC 96.0 99.3 101 100 96.6 tCode: EF RunNo: 96 SeqNo: 38 %REC 89.5 92.5	PA Method 5952 518277 LowLimit 70 70 70 39.1 PA Method 5952 518278 LowLimit 70 70 39.1	8021B: Volat Units: mg/k HighLimit 130 130 130 146 8021B: Volat Units: mg/k HighLimit 130 130	5g %RPD tiles 5g %RPD 7.26 7.38	RPDLimit 20 20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of 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

WO#: 2305874

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: HILCO	RP ENERGY						
Project: Culpepp	per Martin 103						
Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EP	A Method	8021B: Volatile	es		
Client ID: LCSS	Batch ID: BS96952	RunNo: 96	952				
Prep Date:	Analysis Date: 5/23/2023	SeqNo: 35	18287	Units: %Rec			
Analyte	Result PQL SPK val	ue SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99 1.0	00 98.6	39.1	146			
Sample ID: mb	SampType: MBLK	TestCode: EP	A Method	8021B: Volatile	es		
Client ID: PBS	Batch ID: BS96952	RunNo: 96	952				
Prep Date:	Analysis Date: 5/23/2023	SeqNo: 35	18288	Units: %Rec			
Analyte	Result PQL SPK val	ue SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94 1.0	00 94.3	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

WO#: 2305874 26-May-23

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albu TEL: 505-345-3975 Website: www.ha	4901 Hawkins querque, NM 87 FAX: 505-345-4	NE 109 Sam 107	ple Log-In Check List
Client Name: Hilcorp Energy	Work Order Number:	2305874		RcptNo: 1
Received By: Juan Rojas Completed By: Tracy Casarrubias Reviewed By: TMA 5[17[13]	5/17/2023 7:10:00 AM 5/17/2023 7:48:24 AM		Guarria B	
<u>Chain of Custody</u>1. Is Chain of Custody complete?2. How was the sample delivered?		Yes <u> Courier</u>	No 🗹	Not Present
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)7. Are samples (except VOA and ONG) propertion		Yes 🗹 Yes 🗹	No 🗌 No 🗍	
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗌
9. Received at least 1 vial with headspace <1/410. Were any sample containers received broke		Yes □ Yes □	No 🗋 No 🗹	NA 🗹 # of preserved bottles checked
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗌	for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of	Custody?	Yes 🗹	No 🗌	Adjusted?
13. Is it clear what analyses were requested?14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹 Yes 🗹	No 🗌 No 🗌	Checked by: JN-3/17/2
<u>Special Handling (if applicable)</u>				
15. Was client notified of all discrepancies with t	this order?	Yes 🗌	No 🗌	NA 🔽
Person Notified: By Whom: Regarding: Client Instructions: Mailing address.	Date: Via: [Phone number aand Ema		hone 🗌 Fax	☐ In Person 5/17/23
		eal Date	Signed By	
1 1.7 Good Yes	s Morty			

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Page 28 of 32

Received by OCD: 7/5/2023 12:42:27 PM

Chain-of-Custody Record				Turn-Around Time:																	
Client: H:1 corp				∑-Jay ⊠ Standard □ Rush																	
Attn: Mitch Killough				Project Name:			ANALYSIS LABORATORY														
Mailing Address:				- Culpepper Martin 103			www.hallenvironmental.com														
				Project #:			4901 Hawkins NE - Albuquerque, NM 87109														
Phone #:				-				Tel. 505-345-3975 Fax 505-345-4107 Analysis Request													
Phone #: email or Fax#:				Project Manager: Charles In In																	
QA/QC Package:				Project Manager: Stuart HyJe Shyde Censolum.com			s (8021	TPH:8015D(GRO / DRO / MRO)	PCB's		or 8270SIMS		CI)F, Br, NO3, NO2, PO4, SO4			Total Coliform (Present/Absent)			7		
Accreditation: Az Compliance				Sampler: Reece (tanson				NA N	082	.	3270		$\tilde{\Phi}$			sen				20	
□ NELAC □ Other				On Ice: Ves 🗆 No			17	NO NO	es/8(504	- Lo	S	3. 1		(YO	(Pre					
) (Type) <u>-</u>	<u> </u>		# of Coolers: Cooler Temp		.7071.7 (°C)		19 D	ticide	Per	3310	leta	₽.	F	ni-V	orm					
					(Including Cr).	· TO -1. T (0)	N	015	Pest	Met	à	N 8 V	Ъ	Š	(Sen	Colif					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2305874	BTEX	EIPH:8	8081 Pesticides/8082	EDB (Method 504.1)	PAHs by 8310	RCRA 8 Metals	C) L	8260 (VOA)	8270 (Semi-VOA)	Total (
5/16/23	1234	5011	P501	1,402	1	001	X	X					X								
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5/16/23	1443	On	12	1. W	War	5/16/23 1443			C	C'	rh	in	551	0	en	5010	~~~	- 68	son		
Date:	Time:	Relinquish		Received by:) Via:	Date Time															
1/10/23	1811	1/1	v Wa	Kat	Tourier	5/17/23 7/10								Ċ,	Ĩ.			-			

If necessary, san bles 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. Released to Imaging: 9/26/2023 7:57:19 AM



APPENDIX D

Photographic Log

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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:	OGRID:					
HILCORP ENERGY COMPANY	372171					
1111 Travis Street	Action Number:					
Houston, TX 77002	236029					
	Action Type:					
	[C-141] Release Corrective Action (C-141)					

CONDITIONS

Created By		Condition Date
nvelez	None	9/26/2023

Page 32 of 32

Action 236029