District 1 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-144 Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office. For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

PoD 2 Proposed Alternative Method Permit or Closure Plan Application Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
1. Operator: OGRID #:OGRID #:
Facility or well name: San Juan 32-8 Unit 230 POD 2 SE Pit NMOCD API Number: 30-045-27970 OCD Permit Number: 15997 NMOCD
U/L or Qtr/QtrG Section _28 Township 32N Range08W County: San Juan APR 3 0 2019 Center of Proposed Design: Latitude 36.955851•N Longitude107.675157 •W NAD: []1927 []1983 Surface Owner: [] Federal [] State [] Private [] Tribal Trust or Indian Allotment DISTRICT []]1927 []1983
2. Pit: Subsection F, G or J of 19.15.17.11 NMAC Temporary: Drilling Workover Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other String-Reinforced Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W_x D
3. Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: 120 bbl Type of fluid: Produced Water Tank Construction material: Metal Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Visible sidewalls and liner Visible sidewalls only Other Liner type: Thickness 45 mil
 Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
 s. Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify

Oil Conservation Division

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)

Screen Netting Other

Monthly inspections (If netting or screening is not physically feasible)

Signs: Subsection C of 19.15.17.11 NMAC

12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.16.8 NMAC

Variances and Exceptions:

7.

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

T Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. -	Yes No NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ⊠ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes 🗌 No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	Yes 🗋 No
 Within an unstable area. (Does not apply to below grade tanks) Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Soclety; Topographic map 	Yes No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Yes 🗌 No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	🗋 Yes 🖾 No
 Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	🗋 Yes 🖾 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	🗋 Yes 🗌 No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	🗋 Yes 🗋 No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes 🗌 No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	🗋 Yes 🗌 No
 Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	🗌 Yes 🗌 No
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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗋 Yes 🗌 No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗍 No
<u>Permanent Pit or Multi-Well Fluid Management Pit</u>	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).	
- Topographic map; Visual inspection (certification) of the proposed site	∐ Yes ∐ No
 Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	🗌 Yes 🗌 No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
 Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	Yes No
 10. <u>Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist</u>: Subsection B of 19.15.17.9 N Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC 	MAC cuments are NMAC 15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
11. Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please Indicate, by a check mark in the box, that the doc attached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	numents are 15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	·

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12. <u>Permanent Pits Permit Application Checklist</u> : Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the attached	documents are	
 Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment 		
 Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC 		
 Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC 		
 Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H₂S, Prevention Plan 		
 Contracterization Monitoring and Inspection Plan 		
 Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC 		
is. <u>Proposed Closure</u> : 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.		
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F	luid Management Pit	
Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only)		
In-place Burial [] On-site Trench Burial Alternative Closure Method		
 Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC 		
15. <u>Siting Criteria (regarding on-site closure methods only)</u> : 19.15.17.10 NMAC Instructions: Each siling criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. I 19.15.17.10 NMAC for guidance.	rce material are Please refer to	
Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Ycs □ No □ NA	
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA	
Ground water is more than 100 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA	
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Topographic map; Visual inspection (certification) of the proposed site		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	🔲 Yes 🗌 No	
 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site 	🗋 Yes 🗋 No	
Written confirmation or verification from the municipality; Written approval obtained from the municipality	🛛 Yes 🗌 No	
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗋 Yes 🗋 No	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	l]	
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adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No
 Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division 	Yes No
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society: Topographic map 	
Within a 100-year flood plain	Yes No
- FEMA map	Yes No
 16. On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure play a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards canned Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of 19.15.17.13 NMAC 	an. Please indicate, 11 NMAC 15.17.11 NMAC ot be achieved)
17.	
Operator Application Certification:	of
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli	leI.
Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
18. OCD Approval: Permit Application (including closure plan) X Closure Plan (only) (OCD Conditions (see attachment)	
	/
OCD Representative Signature: and Approval Date: 5/6	6/19
OCD Representative Signature: Approval Date:	6/19
OCD Representative Signature: Approval Date: Title: OCD Permit Number:	6/19
OCD Representative Signature: Approval Date: Title: OCD Permit Number: 19. <u>Closure Report (required within 60 days of closure completion</u>): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. <u>N</u> Closure Completion Date:12/1/2018	the closure report.
OCD Representative Signature:	the closure report. complete this
OCD Representative Signature:	the closure report. complete this
OCD Representative Signature:	the closure report. complete this

Oil Conservation Division

22. Operator Closure Certification:		
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.		
Name (Print) Amanda Walker Title: Operations/Regulatory Technician S	Date: <u>4/4/2019</u>	
e-mail address: <u>mwalker@hilcorp.com</u> Telephone: (505) 324.5122		

Hilcorp Energy Company San Juan Basin: New Mexico Assets Below Grade Tank Closure Report

Lease Name: San Juan 32-8 Unit 230 POD 2 API No.: 30-045-27970

In accordance with Rule 19.15.17.13 NMAC, the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

General Plan Requirements:

 Prior to initiating any BGT closure, except in the case of an emergency, HILCORP will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or one week before closure and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner will be notified as soon as practical.

The surface owner was notified by <mark>email,</mark> of the closure process and the notification is attached.

- 2. Notice of closure will be given to the District Division office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
 - a. Operators Name
 - b. Well Name and API Number
 - c. Location

Notification is attached.

 All liquids will be removed from the BGT following cessation of operation. Produced water will be disposed of at one of HILCORP's approved Salt Water Disposal facilities or at a District Division approved facility.

All recovered liquids were disposed of at an approved SWD facility or an approved District Division facility within 60 days of cessation of operation.

 Solids and sludge's will be shoveled and/or vacuumed out for disposal at one of the District Division approved facilities, depending on the proximity of the BGT site: Envirotech Land Farm (Permit #NM-01-011), JFJ Land Farm % Industrial Ecosystems Inc. (Permit #NM-01-0010B), and Basin Disposal (Permit #NM-01-005).

Any sludge or soil required to be removed to facilitate closure was transported to Envirotech Land Farm (Permit # NM-01-011) and/or JFJ Landfarm % IEI (Permit# NM-01-0010B).

Revised 10/14/2015

5. HILCORP will obtain prior approval from District Division to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the District Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liner materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of 19.15.35 NMAC. Disposal will be at a licensed disposal facility, presently San Juan County Landfill operated by Waste Management under NMED Permit SWM-052426.

The below-grade tank was disposed of in a division-approved manner. The liner was cleaned per 19.15.35.8.C(1)(m) NMAC and disposed of at the San Juan County Regional Landfill located on CR 3100.

6. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure, will be removed.

All on-site equipment associated with the below-grade tank was removed.

- 7. Following removal of the tank and any liner material, HILCORP will test the soils beneath the BGT as follows:
 - a. At a minimum, a five-point composite sample will be taken to include any obvious stained or wet soils or any other evidence of contamination.
 - b. The laboratory sample shall be analyzed for the constituents listed in Table I of 19.15.17.13.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Table I of 19.15.17.13 and the results are attached.

 If the District Division and/or HILCORP determine there is a release, HILCORP will comply with 19.15.17.13.C.3b.

A release was not determined for the above referenced well.

9. Upon completion of the tank removal, pursuant to 19.15.17.13.C.3c, if all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot top soil or background thickness whichever is greater and to existing grade. The surface will be re-contoured to match the native grade and to prevent ponding.

The tank removal area passed all requirements of Table I of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material which included at least one foot of suitable material to establish vegetation at the site.

Revised 10/14/2015

10. For those portions of the former BGT area no longer required for production activities, HILCORP will seed the disturbed area the first favorable growing season after the BGT is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other District Division-approved methods. HILCORP will notify the District Division when reclamation and re-vegetation is complete.

Reclamation of the BGT shall be considered complete when:

- Vegetative cover reflects a life form ratio of +/- 50% of pre disturbance levels.
- Total percent plant cover of at least 70% of pre-disturbance levels (Excluding noxious weeds) OR
- Pursuant to 19.15.17.13.H.5d HILCORP will comply with obligations imposed by other applicable federal or tribal agencies in which there re-vegetation and reclamation requirements provide equal or better protection of fresh water, human health and the environment.

Provision 10 will be accomplished pursuant to 19.15.17.H.5d and notification will be submitted upon completion.

11. For those portions of the former BGT area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

The former BGT area is not required for production activities and reseeding will be / completed on 11/01/2019 per the procedure noted above.

Closure Report:

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the BGT closure on a Closure Report using District Division Form C-144. The Report will include the following:

- Proof of Closure Notice (surface owner and District Division) (Attached)
- Backfilling & cover installation (See Report)
- Confirmation Sampling Analytical Results (Attached)
- Application Rate & Seeding techniques (See Report)
- Photo Documentation of Reclamation (Attached)

Revised 10/14/2015

Mandi Walker

From:	Mandi Walker
Sent:	Friday, November 16, 2018 12:50 PM
То:	Smith, Cory, EMNRD; Fields, Vanessa, EMNRD
Cc:	Chad Perkins; Mandi Walker; Priscilla Shorty; Jennifer Deal; Clara Cardoza; 'Savage, Jack'
Subject:	SJ 32-8 Unit 230 POD (1&2) BGT 72 Hour Closure Notice
Attachments:	SJ 32-8 Unit 230 POD 1.pdf; SJ 32-8 Unit 230 POD 2.pdf
Importance:	High

The subject well has a below-grade tank that will begin the closure process between 72 hours and one week from this notification. I have attached both approved permits for reference. Please contact me at any time if you have any questions or concerns.

Well Name: San Juan 32-8 Unit 230 POD (1 & 2) API#: 30-045-27970 Location: G, Sec 28, T32N, R08W Footages: 2014' FNL & 1378' FEL Operator: Hilcorp Energy Surface Owner: BLM Scheduled Date & Time of Start: 11/21/2018 @ 9am

Mandi Walker

San Juan North Regulatory Technician Hilcorp Energy 505.324.5122 <u>mwalker@hilcorp.com</u> District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Amanda Walker	Contact Telephone (505) 324-5122
Contact email mwalker@hilcorp.com	Incident # (assigned by OCD)
Contact mailing address 382 Road 3100 Aztec NM 87410	······································

Location of Release Source

Latitude 36.955851

Longitude <u>-107.675157</u>

(NAD 83 in decimal degrees to 5 decimal places)

Site Name SJ 32-8 Unit 230 POD 2	Site Type Gas Well
Date Release Discovered N/A	API# 30-045-27970

Unit Letter	Section	Township	Range	County
G	28	32N	08W	San Juan

Surface Owner: State Federal Tribal Private (Name: _

Nature and Volume of Release

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
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)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

No release was encountered during the BGT Closure.

Form (Page 2	C-141	State of New Mexico Oil Conservation Division	Incident ID District RP Facility ID Application ID
Wa rele 19.	as this a major case as defined by 15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party	y consider this a major release?
	Yes 🛛 No	N/A	
If Y Not	ES, was immediate no Required	otice given to the OCD? By whom? To whom? Whe	n and by what means (phone, email, etc)?
	The responsible p	Initial Response	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:

N/A

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: Amanda Walker Title: Operations/Regulatory Technician – Sr.

Signature OA

email: mwalker@hilcorp.com

Date: 4/4/19

Telephone: (505) 324-5122

OCD Only

Received by:

Date:



ANALYTICAL REPORT November 30, 2018

> L1046816 11/23/2018

HilCorp-Farmington, NM

Sample Delivery Group:
Samples Received:
Project Number:
Description:
Site:
Report To:

SJ 32-8 POD Pit Closure SJ 32-8 POD Clara Cardoza 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By:

linio

Olivia Studebaker Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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ONE LAB. NATIONWIDE.

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Semi-Volatile Organic Compounds (GC) by Method 8015	10
GI: Glossary of Terms	11
AI: Accreditations & Locations	12
Sc: Sample Chain of Custody	13

PROJECT:

SDG: L1046816 DATE/TIME: 11/30/18 14:18

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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			Collected by	Collected date/time	Received date/time
NW PIT BASE L1046816-01 Solid			Chad Perkins	11/21/18 11:00	11/23/18 09:30
Method	Batch	Dilution	Preparation	Analysis	Analyst
			date/time	date/time	
Wet Chemistry by Method 9056A	WG1200933	1	11/24/18 11:00	11/29/18 00:04	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1201424	1	11/23/18 16:25	11/26/18 20:00	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1201271	1	11/27/18 07:59	11/29/18 07:46	KME
			Collected by	Collected date/time	Received date/time
SE PIT BASE L1046816-02 Solid			Chad Perkins	11/21/18 11:00	11/23/18 09:30
Method	Batch	Dilution	Preparation	Analysis	Analyst
			date/time	date/time	
Wet Chemistry by Method 9056A	WG1200933	1	11/24/18 11:00	11/29/18 00:13	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1201424	1	11/23/18 16:25	11/26/18 20:22	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1201271	1	11/27/18 07:59	11/29/18 08:02	KME

SDG: L1046816 DATE/TIME: 11/30/18 14:18

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

nía

Olivia Studebaker Project Manager

ACCOUNT: HilCorp-Farmington, NM PROJECT:

SDG: L1046816

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NW PIT BASE Collected date/time: 11/21/18 11:00

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch	C
Analyte	mg/kg	duamer	mg/kg	Direction	date / time	<u>Battin</u>	
Chloride	47.0		10.0	1	11/29/2018 00:04	WG1200933	² Te
Volatile Organic Comp	oounds (GC	c) by Meth	od 8015/8	021			³ S:
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg		date / time		4
Benzene	ND		0.000500	1	11/26/2018 20:00	WG1201424	
Toluene	ND		0.00500	1	11/26/2018 20:00	WG1201424	5
Ethylbenzene	ND		0.000500	1	11/26/2018 20:00	WG1201424	ι Sι
Total Xylene	ND		0.00150	1	11/26/2018 20:00	WG1201424	
TPH (GC/FID) Low Fraction	ND		0.100	1	11/26/2018 20:00	WG1201424	6
(S) a,a,a-Trifluorotoluene(FID)	91.6		77.0-120		11/26/2018 20:00	WG1201424	Q
(S) a,a,a-Trifluorotoluene(PID)	88.3		72.0-128		11/26/2018 20:00	WG1201424	7 G
Semi-Volatile Organic	Compound	ds (GC) by	Method 8	3015			
	Result	Qualifier	RDL	Dilution	Analysis	Batch	A
Analyte	mg/kg		mg/kg		date / time		
C10-C28 Diesel Range	292		4.00	1	11/29/2018 07:46	WG1201271	95
C28-C40 Oil Range	263		4.00	1	11/29/2018 07:46	WG1201271	50
(S) o-Terphenyl	86.5		18.0-148		11/29/2018 07:46	WG1201271	

SDG: L1046816 DATE/TIME: 11/30/18 14:18

SE PIT BASE Collected date/Lime: 11/21/18 11:00

SAMPLE RESULTS - 02

ONE LAB. NATIONWIDE.

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Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch	•
Analyte	mg/kg		mg/kg		date / time		2
Chloride	68.7		10.0	1	11/29/2018 00:13	WG1200933	2
Volatile Organic Comp	oounds (GC) by Meth	od 8015/8	021			3
	Result	Qualifier	RDL	Dilution	Analysis	Batch	·L
Analyte	mg/kg		mg/kg		date / time		4
Benzene	ND		0.000500	1	11/26/2018 20:22	WG1201424	
Toluene	ND		0.00500	1	11/26/2018 20:22	WG1201424	5
Ethylbenzene	ND		0.000500	1	11/26/2018 20:22	WG1201424	Ĩ
Total Xylene	ND		0.00150	1	11/26/2018 20:22	WG1201424	
TPH (GC/FID) Low Fraction	ND		0.100	1	11/26/2018 20:22	WG1201424	6
(S) a,a,a-Trifluorotoluene(FID)	91.0		77.0-120		11/26/2018 20:22	WG1201424	
(S) a,a,a-Trifluorotoluene(PID)	87.2		72.0-128		11/26/2018 20:22	WG1201424	7
Semi-Volatile Organic	Compound	ls (GC) by	Method 8	8015			L
	Result	Qualifier	RDL	Dilution	Analysis	Batch	8
Analyte	mg/kg		mg/kg		date / time		L
C10-C28 Diesel Range	ND		4.00	1	11/29/2018 08:02	WG1201271	9
C28-C40 Oil Range	16.7		4.00	1	11/29/2018 08:02	WG1201271	
(S) o-Terphenyl	97.6		18.0-148		11/29/2018 08:02	WG1201271	

PROJECT:

L1046816

SDG:

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1046816-01,02

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Method Blank (MB)

(1.40)	000000744	11/20/10	24.25	

(MB) R3363874-1 11/28/18 2	21:35			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chloride	U		0.795	10.0

L1046533-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1046533-05 11/28/18	22:01 · (DUP)	R3363874-3 11	/28/18 22	:10		
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	13600	14500	20	5.88		15

L1046821-06 Original Sample (OS) • Duplicate (DUP)

L1046821-06 Origi	nal Sample	(OS) • Dup	olicate ((DUP)			⁷ GI
(OS) L1046821-06 11/29/1	8 01:40 • (DUP) I	R3363874-6 1	1/29/18 01	:49			
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ Al
Analyte	mg/kg	mg/kg		%		%	
Chloride	191	148	1	24.9	<u>J3</u>	15	⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3363874-2 11/28/*	8 21:44					
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	CS Qualifier	
Analyte	mg/kg	mg/kg	%	%		
Chloride	200	208	104	80.0-120		

L1046816-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1046816-02 11/29/18 00:13 • (MS) R3363874-4 11/29/18 00:22 • (MSD) R3363874-5 11/29/18 00:30													
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
Chloride	500	68 7	609	589	108	104	1	80 0-120			3 31	15	

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
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Volatile Organic Compounds (GC) by Method 8015/8021

QUALITY CONTROL SUMMARY L1046816-01.02

ONE LAB. NATIONWIDE.

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Method Blank (MB)

(MB) R3363115-5 11/26/18 12:32							
	MB Result	MB Qualifier	MB MDL	MB RDL			
Analyte	mg/kg		mg/kg	mg/kg			
Benzene	0.000275	ī	0.000120	0.000500			
Toluene	0.000183	<u> </u>	0.000150	0.00500			
Ethylbenzene	0.000123	J	0.000110	0.000500			
Total Xylene	U		0.000460	0.00150			
TPH (GC/FID) Low Fraction	U		0.0217	0.100			
(S) a,a,a-Trifluorotoluene(FID)	92.0			77.0-120			
(S) a,a,a-Trifluorotoluene(PID)	87.4			72.0-128			

Laboratory Control Sample (LCS) - Laboratory Control Sample Duplicate (LCSD)

Laboratory Control	Sample (L	CS) · Labo	ratory Con	troi Sample	e Duplicate	(LCSD)						7
(LCS) R3363115-1 11/26/18 10:46 • (LCSD) R3363115-2 11/26/18 11:08									GI			
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits		
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%		⁸ Al
Benzene	0.0500	0.0511	0.0508	102	102	76.0-121			0.471	20		
Toluene	0.0500	0.0519	0.0513	104	103	80.0-120			1.18	20		9
Ethylbenzene	0.0500	0.0513	0.0508	103	102	80.0-124			0.879	20		SC
Total Xylene	0.150	0.160	0.158	107	105	37.0-160			1.51	20		
(S) a,a,a-Trifluorotoluene(FID)				91.6	91.3	77.0-120						
(S) a,a,a-Trifluorotoluene(PID)				84.7	85.0	72.0-128						

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3363115-3 11/26/18	CS) R3363115-3 11/26/18 11:29 • (LCSD) R3363115-4 11/26/18 11:50									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.89	5.46	107	99.2	72.0-127			7.66	20
(S) a,a,a-Trifluorotoluene(FID)				107	106	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				98.9	98.9	72.0-128				

SDG: L1046816

Volatile Organic Compounds (GC) by Method 8015/8021

QUALITY CONTROL SUMMARY

L1046674-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1046674-01 11/26/1	8 16:50 • (MS) R	3363115-6 11/2	6/18 21:04 · (N	ASD) R3363115-	7 11/26/18 21:2	5								54
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	Г	7
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%		TC
Benzene	0.0500	ND	0.431	0.540	34.1	42.8	25	10.0-155			22.5	32		
Toluene	0.0500	ND	0.474	0.592	37.9	47.4	25	10.0-160			22.2	34		355
Ethylbenzene	0.0500	ND	0.526	0.657	42.1	52.6	25	10.0-160			22.1	32	l	00
Total Xylene	0.150	ND	1.64	2.05	43.8	54.6	25	10.0-160	JG	<u> 16</u>	22.0	32	ſ	4
(S) a,a,a-Trifluorotoluene(FID)					95.0	92.1		77.0-120					Į	Cn
(S) a,a,a-Trifluorotoluene(PID)					87.4	86.5		72.0-128					Γ	⁵ Sr

L1046674-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1046674-01 11/26/18 16:50 • (MS) R3363115-8 11/26/18 21:46 • (MSD) R3363115-9 11/26/18 22:07									7				
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	GI
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	_
TPH (GC/FID) Low Fraction	5.50	ND	60.1	64.6	43.7	47.0	25	10.0-151			7.24	28	A
(S) a,a,a-Trifluorotoluene(FID)					100	101		77.0-120					
(S) a,a,a-Trifluorotoluene(PID)					94.3	94.4		72.0-128					Sc

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Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

L1046816-01,02

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3363864-1 11/29/18 04:53									
	MB Result	MB Qualifier	MB MDL	MBRDL					
Analyte	mg/kg		mg/kg	mg/kg					
C10-C28 Diesel Range	U		1.61	4.00					
C28-C40 Oil Range	U		0.274	4.00					
(S) o-Terphenyl	86.8			18.0-148					

Laboratory Control Sample (LCS) · Laboratory Control Sample Duplicate (LCSD)

(LCS) R3363864-2 11/29/1	8 05:09 · (LCSI	D) R3363864-3	3 11/29/18 05:2	4						
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
C10-C28 Diesel Range	50.0	38.0	40.8	76.0	81.6	50.0-150			7.11	20
(S) o-Terphenyl				85.9	90.5	18.0-148				

L1046071-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1046071-17 11/29/18	08:47 • (MS) R3	363864-4 11/2	9/18 09:23 · (M	SD) R3363864	4-5 11/29/18 09	9:37							
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	9
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	L
C10-C28 Diesel Range	55.0	13000	12300	13100	0.000	200	10	50.0-150	EV	EV	6.06	20	
(S) o-Terphenyl					0.000	0.000		18.0-148	<u>J2</u>	<u>J2</u>			

DATE/TIME: 11/30/18 14:18

Tc Ss Cn Sr Qc GI ⁸Al Sc

3

GLOSSARY OF TERMS

Cp

Tc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The Information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
JG	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

PROJECT:

SDG: L1046816

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE. * Not all certifications held by the laboratory are applicable to the results reported in the attach report.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New JerseyNELAP	TN002
California	2932	New Mexico 1	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina 1	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia 1	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee 14	2006
Louisiana 1	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	ТN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789		
A2LA - ISO 17025 5	1461.02	DOD	1461.01		
Canada	1461.01	USDA	P330-15-00234		
EPA-Crypto	TN00003				

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



¹Cp ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al

Sc

PAGE:

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		Billing Information:			le.	Analysis / Container / Preservative						Chain of Custody Page of	
						Pres			能地动力				5
		cperkins	Al IN: Chad Perkins coercies@bilcom.com					1150-240 17.989-2				Pace Analytical*	
Char I				sermer p.win		•			5. M.C.				
Report to: Clara Cardoza		ccardoza	au io: ardoza@hilcorp.com;									120165 Lobenoni Rd	
Project				City/State	<u>.</u>								Phone: 615-758-5858 Phone: 805-767-5859
Description: SJ 32-8 POD Pit Closure			Collected: Aztec, NM									Fat: 613-759-5659	
Phone: 5055640733	Client Project	8		Lab Project #			in an				and the second		H LI 646810
Fax:										1 34 6 2			H193
Collected by (print):	Site/Facility I)#	<u> </u>	P.O. #			12			AL PARTY AND A			
Chad Perkins	SJ 32-8 PO	D								a starting a	in all an		Accumune HILCORANM
Collected by (signature):	Rush? (1	Lab MUST Be	Notified)	Quote #			N.		an in the second				Template
	Same D	avy <u>X</u> Fivre (v 5 Dav	ay Rad Onlei	Date Perri	ite Noodad		-	×	A de la	Ac Magazin			Prelogin:
Immediately X	Two Da	v 10 Da	(Rad Only)	0000 11240		No.	E.	31	8				20 5
Packed on Ice NY	1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/	1	<u>r</u>	<u></u>	<u> </u>	of circu		E	6		朝鮮		
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time			80	5	ang Gi	10-10-10-10 10-10-10-10 10-20-10-10 10-20-10-10-10-10 10-20-10-10-10-10-10	in the second	Remarks Sumple # (ab only)
NW Pit Base	Сотр	SS		11/21/2018	11:00 a.m.	54	×	×	X				
SE Pit Base	Сотр	SS		11/21/2018	11:00 a.m.	1	X	X	X				
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