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.

	Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application		
99	<ul> <li>99</li> <li>Type of action: Below grade tank registration</li> <li>Permit of a pit or proposed alternative method</li> <li>Closure of a pit, below-grade tank, or proposed alternative method</li> <li>Modification to an existing permit/or registration</li> </ul>		
	Closure plan only submitted for an existing permitted or non-permitted pit, below-grade t or proposed alternative method	ank,	
	Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request		
Please be advised tha environment. Nor do	hat approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground wa does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulation	ter or the as or ordinances.	
	orp Energy Company OGRID #: 372171	<u>.</u>	
	382 Road 3100 Aztec, NM 87410	1	
	name: <u>Angel Peak 180</u>		
	30-045-29537OCD Permit Number:		
U/L or Qtr/Qtr	<u>M</u> Section <u>12</u> Township <u>28N</u> Range <u>11</u> County: <u>SAN JUAN</u>		
Center of Proposed	sed Design: Latitude <u>36.67203°N</u> Longitude <u>-107.9602°W</u>	NAD27	
Surface Owner: 🛛	🛛 Federal 🔲 State 🛄 Private 🛄 Tribal Trust or Indian Allotment		
Permanent Unl Lined Unl String-Reinford Liner Seams:	Drilling       Workover         Emergency       Cavitation       P&A       Multi-Well Fluid Management       Low Chloride Drilling Fluid       yes         Inlined       Liner type:       Thickness      mil       LLDPE       HDPE       PVC       Other		
3. Below-grade t	e tank: Subsection I of 19.15.17.11 NMAC		
Volume:	120 bbl Type of fluid: Produced Water		
	on material: <u>Metal</u>		
Secondary cor	containment with leak detection 🛛 Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off		
Visible sidewa	walls and liner 🗌 Visible sidewalls only 🗌 Other		
Liner type: Thick	sknessmil     HDPE     PVC     OtherUnspecified		
4. <u>Alternative M</u> Submittal of an ex-	Method: exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration	of approval.	
1	ection 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. Plea	lease specify		

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

Screen Netting Other

6.

7.

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:

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.
- 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
<ul> <li>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)</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within the area overlying a subsurface mine. (Does not apply to below grade tanks)</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	🗌 Yes 🗌 No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	🗋 Yes 🗌 No
Below Grade Tanks	
<ul> <li>Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗋 Yes 🛛 No
<ul> <li>Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🛛 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
<ul> <li>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.)</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
<ul> <li>application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	
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

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         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         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         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         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         Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial a	Yes   No Yes   No Yes   No Yes   No Yes   No
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       -         Within 300 feet form 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       -         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       -         Within 300 feet of a wetland.       -       US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site       -         Permanent Pit or Multi-Well Fluid Management Pit       - <t< td=""><td>Yes 🗌 No Yes 🗌 No</td></t<>	Yes 🗌 No Yes 🗌 No
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.       -         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;       -         Within 300 feet of a wetland.       -       US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site       -         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       -       -         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; Aerial photo; Satellite image       -         Within 300 feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.       -         Visual inspection (certification) of the propo	Yes 🗌 No Yes 🗌 No
Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  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  Permanent Pit or Multi-Well Fluid Management Pit  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  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  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  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  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  NM Office of the State Engineer - iWATERS database search; Visual in	Yes 🗌 No
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       .         Within 300 feet of a wetland.       .       .         US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site       .         Permanent Pit or Multi-Well Fluid Management Pit       .         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       .         Within 1000 feet for 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       .         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       .         Within 500 horizontal feet of a wetland.       .       US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site       . <td< td=""><td></td></td<>	
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site     Permanent Pit or Multi-Well Fluid Management Pit     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     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     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     Within 500 feet of a wetland.     US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site     Imstructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docume     attached.     Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC     Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC     Hydrogeologic Chemponary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC     Hydrogeologic Compliance Demonstrations - based upon the appropriate requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC     Hydrogeologic Chemponary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC     Sting Criteria Compliance Demonstrations - based upon the appropriate requirements of Paragraph (2) of Subsect	Yes 🗌 No
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       -         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       -         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       -         Within 500 feet of a wetland.       -       US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site       -         10.       -       -       -       -         110.       -       -       -       -         110.       -       -       -       -       -         110.       -       -       -       -       -       -         110.       -       -       -       -       -       -       -         110.       -       -       -	
lake (measured from the ordinary high-water mark).	
<ul> <li>Topographic map; Visual inspection (certification) of the proposed site</li> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> <li>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docume attached.</li> <li>Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC</li> <li>Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of 19.15.17.10 NMAC</li> </ul>	
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> <li>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docume attached.</li> <li>Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC</li> <li>Hydrogeologic Data (Temporary and Emergency Pits) - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>	Yes 🗌 No
<ul> <li>initial application.         <ul> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> <li>Within 500 feet of a wetland.</li></ul></li></ul>	Yes 🗌 No
<ul> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> <li>10.</li> <li>Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment 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 docume attached.</li> <li>Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>	
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site     US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site     Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docume 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	Yes 🗌 No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment 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 docume 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	Yes 🗌 No
<ul> <li>Design France obsect upon the appropriate requirements of 19:15:17:12 NMAC</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19:15:17:12 NMAC</li> <li>Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19:15:17</li> <li>and 19:15:17:13 NMAC</li> <li>Previously Approved Design (attach copy of design) API Number: or Permit Number:</li> </ul>	AAC 1AC 17.9 NMAC
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 docume 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 19.15.17             and 19.15.17.13 NMAC             Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC             B reviously Approved Design (attach copy of design) API Number:	

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 do	cuments are
attached.         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         Quality Control/Quality Assurance Construction and Installation Plan         Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC         Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC         Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan         Emergency Response Plan         Oil Field Waste Stream Characterization	
<ul> <li>Monitoring and Inspection Plan</li> <li>Erosion Control Plan</li> <li>Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC</li> </ul>	
13.         Proposed Closure:       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 Flu         Alternative         Proposed Closure Method:       Waste Excavation and Removal         Waste Removal (Closed-loop systems only)         On-site Closure Method (Only for temporary pits and closed-loop systems)         In-place Burial       On-site Trench Burial         Alternative Closure Method	id Management Pit
<ul> <li><sup>14.</sup> Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be at closure plan. Please indicate, by a check mark in the box, that the documents are attached.</li> <li></li></ul>	ttached to the
<sup>15.</sup> Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Pl 19.15.17.10 NMAC for guidance.	ce material are lease 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	□ Yes □ 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
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>	🗌 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	

		1
<ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtained to a section of the municipality of the section of th</li></ul>	from the municipality	🗋 Yes 🗌 No
<ul><li>Within the area overlying a subsurface mine.</li><li>Written confirmation or verification or map from the NM EMNRD-Mining and Minera</li></ul>	l Division	🗌 Yes 🗌 No
Within an unstable area.		
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Society; Topographic map</li> </ul>	Resources; USGS; NM Geological	🗌 Yes 🗌 No
Within a 100-year floodplain. - FEMA map		$\Box Yes \Box No$
<ul> <li>16.</li> <li>On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following by a check mark in the box, that the documents are attached.</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection</li> <li>Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based</li> <li>Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NM</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings</li> <li>Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17</li> </ul>	f 19.15.17.10 NMAC E of 19.15.17.13 NMAC equirements of Subsection K of 19.15.17. upon the appropriate requirements of 19. AC f 19.15.17.13 NMAC or in case on-site closure standards canr (7.13 NMAC 17.13 NMAC	.11 NMAC 15.17.11 NMAC
17. Operator Application Contifications		
<b>Operator Application Certification:</b> I hereby certify that the information submitted with this application is true, accurate and comp	lete to the best of my knowledge and be	lief
Name (Print): Title:		
Signature: Da	ate:	
Signature:       Data         e-mail address:       Teleph		
e-mail address:	10ne:	
e-mail address: Telepi 18. OCD Approval:  Permit Application (including closure plan)  Closure <u>Plan (only)</u>	10ne:	
e-mail address:	OCD Conditions (see attachment)	
e-mail address:       Telepil         18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)         OCD Representative Signature:       Image: Closure Plan (only)       Closure Plan (only)         Title:       Environmental Specalist       OCD Permits         19.       Closure Report (required within 60 days of closure completion):       19.15.17.13 NMAC         Instructions:       Operators are required to obtain an approved closure plan prior to implementat         The closure report is required to be submitted to the division within 60 days of the completion section of the form until an approved closure plan has been obtained and the closure division	none: ] OCD Conditions (see attachment) Approval Date:9/1 nit Number: ing any closure activities and submitting on of the closure activities. Please do no	7/19 g the closure report.
e-mail address: Telepi 18. OCD Approval:  Permit Application (including closure plan)  Closure Plan (only) [ OCD Representative Signature:	none: ] OCD Conditions (see attachment) Approval Date:9/1 nit Number: ing any closure activities and submitting on of the closure activities. Please do not ies have been completed.	7/19 g the closure report.
e-mail address:       Teleph         18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)         OCD Representative Signature:       Image: Closure Plan (only)       Closure Plan (only)         Title:       Environmental Specalist       OCD Perm         19.       Closure Report (required within 60 days of closure completion):       19.15.17.13 NMAC         Instructions:       Operators are required to obtain an approved closure plan prior to implement         The closure report is required to be submitted to the division within 60 days of the completion         section of the form until an approved closure plan has been obtained and the closure activiti [main approved closure plan has been obtained and the closure activities         20.         Closure Method:	none: ] OCD Conditions (see attachment) Approval Date:9/1 nit Number: ing any closure activities and submitting on of the closure activities. Please do not ies have been completed.	7/19 g the closure report. ot complete this
e-mail address:       Teleph         18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)         OCD Representative Signature:       Image: Closure Plan       OCD Permit         Title:       Environmental Specalist       OCD Permit         19.       Closure Report (required within 60 days of closure completion):       19.15.17.13 NMAC         Instructions:       Operators are required to obtain an approved closure plan prior to implement         The closure report is required to be submitted to the division within 60 days of the completion         section of the form until an approved closure plan has been obtained and the closure activities         20.         Closure Method:         Waste Excavation and Removal       On-Site Closure Method	Image:	7/19 g the closure report. of complete this
e-mail address:	Image:	7/19 g the closure report. of complete this loop systems only)

22. Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure republic. I also certify that the closure complies with all applicable closure requirement	
Name (Print):Cherylene Weston	Title:Operations/Regulatory Technician - Sr.
Signature: Cherylene Werton	Date: 9-6-19
e-mail address: cweston@hilcorp.com	Telephone:(505) 564-0779

### Hilcorp Energy Company San Juan Basin Below Grade Tank Closure Report

### Lease Name: Angel Peak #180 API No.: 30-045-29537

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:

 HILCORP shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, HILCORP will file the C144 Closure Report as required.

### The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.

 HILCORP shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.

3. HILCORP will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

### The below-grade tank was disposed of in a division-approved manner.

4. If there is any on-site equipment associated with a below-grade tank, then HILCORP shall remove the equipment, unless the equipment is required for some other purpose.

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

5. HILCORP will test the soils beneath the below-grade tank to determine whether a release has occurred. HILCORP shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. Hilcorp shall notify the division of its results on form C-141.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

Components	Tests Method	Limit (mg/kg)	
Benzene	EPA SW-846 8021B or 8260B	0.2	
BTEX	EPA SW-846 8021B or 8260B	50	
TPH	EPA SW-846 418.1	100	
Chlorides	EPA 300.0	250	

6. If HILCORP or the division determines that a release has occurred, then HILCORP shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

### A release was not determined for the above referenced well.

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then HILCORP shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and revegetate the site.

The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.

- 8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

### Notification is attached.

9. The surface owner shall be notified of HILCORP's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

### The closure process notification to the landowner was sent via email. (See Attached) (Well located on Federal Land, certified mail is not required for Federal Land per BLM/OCD MOU.)

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.

11. HILCORP shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will be used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre- disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. Hilcorp will repeat seeding or planting will be continued until successful vegetative growth occurs. Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

- 13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
  - Soil Backfilling and Cover Installation (See Report)
  - Re-vegetation application rates and seeding techniques (See Report)
  - Photo documentation of the site reclamation (Included as an attachment)
  - Confirmation Sampling Results (Included as an attachment)
  - Proof of closure notice (Included as an attachment)

### **Cheryl Weston**

From:Cheryl WestonSent:Friday, July 19, 2019 10:44 AMTo:'Smith, Cory, EMNRD'Cc:'Adeloye, Abiodun'; Kandis Roland; Clara Cardoza; Eufracio Trujillo; Christine BrockSubject:72 Hour notification - Angel Peak 180 / API 30-045-29537

### Subject: 72 Hour BGT Closure Notification

Anticipated Start Date: Monday, July 22, 2019 at approximately 10:00 a.m.

The subject well has <u>one</u> below-grade tank that will begin the closure process between 72 hours and one week from this notification. Please contact me at any time if you have any questions or concerns.

Well Name: Angel Peak #180

API#: 30-045-29537

Location: Unit M (SWSW), Section 12, T28N, R11W

Footages: 960' FSL & 1015' FWL

Operator: Hilcorp Energy Surface Owner: Federal (Lease #NMSF-047017A)

Reason: Tank is out of service and is being removed from location.

Thanks,

Cheryl Weston San Juan South Regulatory 505-564-0779 <u>cweston@hilcorp.com</u>

Hilcorp Energy Company

State of New Mexico Energy Minerals and Natural Resources Department

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

)

Incident ID	
District RP	
Facility ID	
Application ID	

### **Release Notification**

### **Responsible Party**

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Cherylene Weston	Contact Telephone (505) 564-0779
Contact email cweston@hilcorp.com	Incident # (assigned by OCD)
Contact mailing address 382 Road 3100 Aztec NM 87410	

### Location of Release Source

Latitude <u>36.67203° N</u>

Longitude <u>-107.9602° W</u>

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Angel Peak #180		Site Type Gas Well
	Date Release Discovered N/A	API# (if applicable) 30-045-29537

Unit Letter	Section	Township	Range	County
М	12	28N	11W	San Juan

Surface Owner: State Federal Tribal Private (Name: \_\_\_\_

### Nature and Volume of Release

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

	Tail(s) Released (Select all that apply and attach calculations of specific	
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 encounted	ered during the BGT Closure.	

Form C-141 Page 2 State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
🗌 Yes 🖾 No	N/A
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Not Required	

### **Initial Response**

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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

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: Cherylene Weston	Title:Operations/Regulatory Technician – Sr
Signature: Cherybene Werdon	Date: 9-6-19
email:cweston@hilcorp.com	Telephone:(505) 564-0779
OCD Only	
Received by:	Date:



### ANALYTICAL REPORT

July 30, 2019

### HilCorp-Farmington, NM

Sample Delivery Group: Samples Received: Project Number: Description: Site: Report To: L1121843 07/24/2019 ANGEL PEAK #180 Angel Peak #180 BGT Closure Sample ANGEL PEAK #180 Clara Cardoza 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By:

Dapline R Richards

Daphne Richards 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 Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

ACCOUNT: HilCorp-Farmington, NM PROJECT: ANGEL PEAK #180 SDG: L1121843 DATE/TIME: 07/30/19 16:14 PAGE: 1 of 11

Tc

Ss

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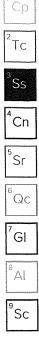
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### SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

BGT PIT L1121843-01 Solid			Collected by K. Hoekstra	Collected date/time 07/22/19 10:20	Received da 07/24/19 08:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0 Volatile Organic Compounds (GC) by Method 8015/8021 Semi-Volatile Organic Compounds (GC) by Method 8015	WG1317425 WG1319455 WG1319186	1 1.01 1	07/25/19 21:15 07/28/19 20:48 07/28/19 17:07	07/26/19 02:40 07/29/19 17:19 07/29/19 11:00	LDC JAH KME	Mt. Juliet, TN Mt. Juliet, TN Mt. Juliet, TN



DATE/TIME: 07/30/19 16:14

### 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.

Dapline R Richards

Daphne Richards Project Manager

BGT	DIT	
DUI	FII	

### SAMPLE RESULTS - 01

Collected date/time: 07/22/19 10:20

### Wet Chemistry by Method 300.0

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg		date / time		
Chloride	ND		10.0	1	07/26/2019 02:40	WG1317425	

### Volatile Organic Compounds (GC) by Method 8015/8021

0							
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg		date / time		
Benzene	ND		0.000505	1.01	07/29/2019 17:19	WG1319455	
Toluene	ND		0.00505	1.01	07/29/2019 17:19	WG1319455	
Ethylbenzene	ND		0.000505	1.01	07/29/2019 17:19	WG1319455	
Total Xylene	ND		0.00152	1.01	07/29/2019 17:19	WG1319455	
TPH (GC/FID) Low Fraction	ND		0.101	1.01	07/29/2019 17:19	WG1319455	
(S) a,a,a-Trifluorotoluene(FID)	105		77.0-120		07/29/2019 17:19	WG1319455	
(S) a,a,a-Trifluorotoluene(PID)	98.9		72.0-128		07/29/2019 17:19	WG1319455	

### Semi-Volatile Organic Compounds (GC) by Method 8015

	Result	Qualifier	RDL	Dilution	Analysis	Batch	Ă
Analyte	mg/kg		mg/kg		date / time		
C10-C28 Diesel Range	4.64		4.00	1	07/29/2019 11:00	WG1319186	<sup>9</sup> Sc
C28-C40 Oil Range	ND		4.00	1	07/29/2019 11:00	WG1319186	00
(S) o-Terphenyl	79.4		18.0-148		07/29/2019 11:00	WG1319186	

WG1317425 Wet Chemistry by Method 300.0			Q	UALIT	QUALITY CONTROL SUMMARY	SOL SUI	MMAR	~			ONE LAB. I	ONE LAB. NATIONWIDE.	*
Method Blank (MB)													D_
(MB) R3434492-1 07/25/19 23:01 MB Result Mnalvta	MB Qualifier	MB MDL ma/ka	MB RDL ma/ka										<sup>2</sup> Tc
1.67	71	0.795	10.0										Ss
L1120870-06 Original Sample (OS) • Duplicate (DUP)	ole (OS) • Dup	olicate (DI	UP)										
(OS) L1120870-06 07/26/19 00:25 • (DUP) R3434492-3 07/26/19 00:32	DUP) R3434492-3	07/26/19 0	0:32										5
Original Result (dry) mg/kg	sult DUP Result (dry) mg/kg	Dilution DUP RPD %	D	DUP Qualifier	DUP RPD Limits %								° Sr
2.38	3.43	<del>ر</del>	36.3	H L	20								å
L1122133-02 Original Sample (OS) • Duplicate (DUP)	le (OS) • Dupl	licate (DL	(dr										<sup>7</sup> GI
(OS) L1122133-02 07/26/19 03:49 • (DUP) R3434492-6 07/26/19 03:57	UP) R3434492-6	07/26/19 03	:57										
Original Re	Original Result DUP Result	Dilution DUP RPD		DUP Qualifier	DUP RPD Limits								"AI
mg/kg	mg/kg	0	%		%								
Chloride 84.9 82.	82.0	-	3.49		20								Šc
	1		3										
(LCS) K3434492-2 07/25/19 23:10 Spike Amount	unt LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	ifier								
mg/kg	mg/kg	%	%										1
Chloride 200 193 96.6 90.0-110 1 11:218:41-05 Original Samula (OS) • Matrix Shike (MS) • Matrix Shike	193 e (OS) • Matri	96.6 V Shike /	90.0-110 MSV • Matri	N C AXIC	Duplicate (MSD)	í.							
(OS) L1121841-05 07/26/19 01:15 • (MS) R3434492-4 07/26/19 01:24 • (MSD) R3434492-5 07/	s) R3434492-4 07	/26/19 01:24	• (MSD) R3434	492-5 07/20	26/19 01:49						VE * Constants p		
Spike Amount ma/ka	unt Original Result MS Result ma/ka ma/ka	t MS Result ma/ka	MSD Result ma/ka	t MS Rec. %	MSD Rec. %	Dilution Re %	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %		
200	3.28	534	229	106	105	~	80.0-120			0.961	20		I
ACCOUNT: HilCorn-Farmington NM	2		F	PROJECT: ANGEL PEAK #180		SD L1121	SDG: L1121843		DATE/TIME: 07/30/19 16:14	IME: 16:14		PAGE: 6 of 11	

QUALITY CONTROL SUMMARY

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### Method Blank (MB)

Method Blank (MB)	(									Cp C
(MB) R3435733-3 07/29/19 16:34	19 16:34									
	MB Result	MB Qualifier	MB MDL	MB RDL						2TC
Analyte	mg/kg		mg/kg	mg/kg						ر -
Benzene	D		0.000120	0.000500						ſ
Toluene	n		0.000150	0.00500						Ss
Ethylbenzene	D		0.000110	0.000500						
Total Xylene	D		0.000460	0.00150						4 C C
TPH (GC/FID) Low Fraction	0.0508	ار	0.0217	0.100						5
(S) a,a,a-Trifluorotoluene(FID)	107			77.0-120		a I				5 Sr
(S) a,a,a-Trifluorotoluene(PID)	102			72.0-128						

## Laboratory Control Sample (LCS)

(LCS) R3435733-1 07/29/19 15:27	19 15:27									
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier					
Analyte	mg/kg mg/kg	mg/kg	%	%						
Benzene	0.0500	0.0523	105	76.0-121						
Toluene	0.0500	0.0545	109	80.0-120						
Ethylbenzene	0.0500	0.0560	112	80.0-124						
Total Xylene	0.150	0.160	106	37.0-160						
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120						
(S) a,a,a-Triffuorotoluene(PID)			103	72.0-128						

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# Laboratory Control Sample (LCS)

	c. Rec. Limits LCS Qualifier	8	1 72.0-127	108 77.0-120	9 72.0-128
	ult LCS Rec	%	87.1	10	109
	ount LCS Result LCS Rec	mg/kg	4.79 87.	10	10,
(LCS) R3435733-2 07/29/19 15:50	Spike Amount LCS Result LCS Rec.				

DATE/TIME: 07/30/19 16:14

	(GC) by Method 8015
WG1319186	Semi-Volatile Organic Compounds

# QUALITY CONTROL SUMMARY

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## Method Blank (MB)

Method Blank (MB)	B)				<u>ප</u> 
(MB) R3435232-1 07/25	9/19 10:03				
	MB Result	MB Qualifier	MB MDL	MB RDL	270
Analyte	mg/kg		mg/kg	mg/kg	
C10-C28 Diesel Range	n		1.61	4.00	
C28-C40 Oil Range	n		0.274	4.00	ŠS
(S) o-Terphenyl	82.7			18.0-148	
					4 0 0
					5

# Laboratory Control Sample (LCS)

_	_		-	-		
ي ک	کر ا		ç		<sup>7</sup> G	
		LCS Qualifier				
		Rec. Limits	%	50.0-150	18.0-148	
		LCS Rec.	%	93.2	115	
(2)		Spike Amount LCS Result	mg/kg	46.6		
ol sample (L	29/19 10:18	Spike Amount	mg/kg	50.0		
Laboratory Control Sample (LCS)	(LCS) R3435232-2 07/29/19 10:18		Analyte	C10-C28 Diesel Range	(S) o-Terphenyl	

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DATE/TIME: 07/30/19 16:14

### GLOSSARY OF TERMS

TC

Ss

Cn

Sr

Qc

AI

Sc

### 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.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### 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.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
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 fo 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

 Qualifier
 Description

 J
 The identification of the analyte is acceptable; the reported value is an estimate.

 P1
 RPD value not applicable for sample concentrations less than 5 times the reporting limit.

### **ACCREDITATIONS & LOCATIONS**

Cp

Tc

Ss

Cn

Sr

Qc

GI

Sc

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 attached report. \* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

### **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 Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina 1	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>16</sup>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>14</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

### Third Party Federal Accreditations

ACCOUNT:

HilCorp-Farmington, NM

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		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> 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.



PROJECT:

ANGEL PEAK #180

SDG:

L1121843

07/30/19 16:14

ATTN: Clara Clarada     One       Final 10:     Final 10:       Final 10: <th></th> <th></th> <th>ā</th> <th>Billing Information</th> <th>ation:</th> <th></th> <th></th> <th></th> <th>An</th> <th>alysis / Loni</th> <th>Analysis / Container / Preservative</th> <th></th> <th></th> <th>- 5 </th>			ā	Billing Information	ation:				An	alysis / Loni	Analysis / Container / Preservative			- 5 
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Chr/State         Chr/State         Chr/State         Chr/State         Chr/State           Collected:         Jab Project #         Collected:         Collected:         Chr/State         Chr/State           No         P.O. #         Collected:         Chr/State         No         Chr/State         Chr/State           Dor         P.O. #         Chr/State         No         No         Chr/State         Chr/State           Dor         P.O. #         Chr/State         No         No         Chr/State         Chr/State           Dor         P.O. #         No         No         No         No         No         No           Dor         P.O. #         No         No         No         No         No         No         No         No           Dor         P.O. #         No         No <td>ža</td> <td></td> <td><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></td> <td>ail To: ardoza@</td> <td>ohilcorp.com;</td> <td>khoekstra@</td> <td>Į Į</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>12065 Lebanon Rd Mount Juliet, TN 37 Phone: 615,758-581</td> <td></td>	ža		<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	ail To: ardoza@	ohilcorp.com;	khoekstra@	Į Į						12065 Lebanon Rd Mount Juliet, TN 37 Phone: 615,758-581	
Lab Project #         Allo Project #           P.O. #         P.O. #           P.O. #         No.           Depth         Date           Time         No.           No.         No.           Depth         Date           Time         No.           Distribution         No.           Distron         No.           <	Angel Peak # 180 B	3GT Closure 5	Sample		Dity/State Collected: Aztec,	WN							Phone 800 767-58 Fax: 615-758-5859	
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Ltd     Date:     Received by: (Signature)     Trip Blank Received: Yes/QO       ACL/MeoH     7-23-19     6:50     PCL/MeoH       Date:     7-23-19     6:50     Received by: (Signature)     Temp: °C       Date:     7-23-19     6:50     Received by: (Signature)     Temp: °C	g Water	Samples return			Traci	SST # BUD	à	Ye y		55		Sufficient VOA Zero H	volume sent: If Applicat	ñi *
Date: Time: Received by: (Signature) Temp: °C Bottles Received:	18		Date: 7-23-	à	8	ived by: (Signat							on Correct/Ch	s mtint - v
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