

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-144
Revised April 3, 2017

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.

16387
Pit, Below-Grade Tank, or
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: HALLADOR PETROLEUM LLP OGRID #: 1267
Address: 1660 LINCOLN ST., SUITE 2700, DENVER, CO 80264
Facility or well name: HORTON 10
API Number: 30-045-22395 / 22935 OCD Permit Number: _____
U/L or Qtr/Qtr H Section 13 Township 32 N Range 12 W County: SAN JUAN
Center of Proposed Design: Latitude 36.98763° N Longitude 108.04211° W NAD83
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

NMOCD
MAY 24 2018
DISTRICT III

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: 25 bbl Type of fluid: produced water
Tank Construction material: single wall fiberglass
☐ 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 _____ mil ☐ HDPE ☐ PVC ☐ Other _____

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
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 48" high (= 36" hog wire + rebar top)

6.
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)

7.
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

8.
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.

9.
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.

- ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells

☐ 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 Society; 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

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

☐ 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.

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 documents are 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 19.15.17.11 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 19.15.17.9 NMAC and 19.15.17.13 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 documents are 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 19.15.17.9 NMAC 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

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.

Permanent Pits Permit Application 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 documents 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
☐ 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
☐ Emergency Response Plan
☐ Oil Field Waste Stream Characterization
☐ 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

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 Fluid Management Pit
☐ 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

14.

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☒ 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.

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 material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
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. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

<input type="checkbox"/> Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
<input type="checkbox"/> Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
<input type="checkbox"/> Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
<input type="checkbox"/> Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
<input type="checkbox"/> Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
<input type="checkbox"/> Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
<input type="checkbox"/> Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
<input type="checkbox"/> Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
<input type="checkbox"/> Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
<input type="checkbox"/> Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
<input type="checkbox"/> Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

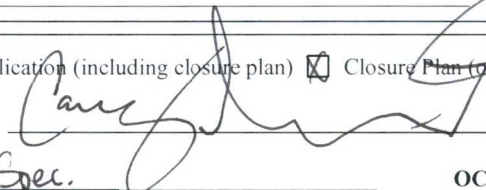
17.
Operator Application Certification:
 I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature:  Approval Date: 6/14/18

Title: Environmental Spec. OCD Permit Number: _____

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 implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: February 15, 2018

20.
Closure Method:
☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain. **Sample returned results below the regulatory limits for all constituents analyzed, confirming no release. No further excavation required. Tank removed for re-use in an above-ground setup.**

21.
Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

<input checked="" type="checkbox"/> Proof of Closure Notice (surface owner and division)
<input type="checkbox"/> Proof of Deed Notice (required for on-site closure for private land only)
<input type="checkbox"/> Plot Plan (for on-site closures and temporary pits)
<input checked="" type="checkbox"/> Confirmation Sampling Analytical Results (if applicable)
<input type="checkbox"/> Waste Material Sampling Analytical Results (required for on-site closure)
<input type="checkbox"/> Disposal Facility Name and Permit Number
<input type="checkbox"/> Soil Backfilling and Cover Installation
<input type="checkbox"/> Re-vegetation Application Rates and Seeding Technique
<input type="checkbox"/> Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude 36.98763 Longitude 108.04211 NAD: ☐ 1927 ☒ 1983

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): Timothy Lovseth Title: Manager
Signature: [Signature] Date: 5-22-18
e-mail address: tlovseth@helladonenergy.com Telephone: 303 550 3226

BELOW-GRADE TANK CLOSURE REPORT

Hallador Petroleum LLP

Horton #10

API No. 30-045-22935

CLOSURE STEPS:

- 1) Notified the surface owners (Kenneth Roddy and Joyce Roddy, Trustees) by certified mail, return receipt requested, of the plans to close the below-grade tank. Letter and Receipt Attached.
- 2) Notified the OCD District III Office (Cory Smith – 505.334.6178, ext. 115) verbally and by e-mail prior to the planned closure operation.
- 3) The tank contained no liquids at the time of the work.
- 4) Removed the below-grade tank for reuse in an above-ground setup.
- 5) Tested the soils beneath the below-grade tank to determine if release has occurred. Envirotech Letter, Below-Grade Tank Closure Documentation, Vicinity Map, Site Map, Field Notes and Analytical Results Attached

- Collected a five-point composite sample;

Analyzed for benzene, BTEX, TPH and chlorides – Analyses Attached

- Benzene concentration – ND
- Total BTEX concentrations – ND
- TPH concentration – ND
- Chloride – 134 ppm

- 6) The soil analyses showed the soils did not exceed the benzene concentration (U.S. EPA Method 8021B); the Total BTEX concentrations (U.S. EPA Method 8021B); TPH concentration (U.S. EPA Method 8015B (GRO, DRO, ORO); or the chloride concentration (U.S. EPA Method 300.0). The sample returned results below the regulatory limits for all constituents analyzed, confirming a release had not occurred. Analytical Results Attached
- 7) Backfilled the excavation with compacted, non-waste containing, earthen material, in a manner that will prevent ponding of water or erosion.
- 8) The area is needed for operation as the tank will be set above ground in the same location. Seeding and final reclamation will take place upon P&A.

BELOW-GRADE TANK CLOSURE REPORT

Hallador Petroleum LLP

Horton #10

API No. 30-045-22935

FINAL CLOSURE REPORT:

- 1) Notified by OCD District III Office (Cory Smith – 505.334.6178, ext. 115) by e-mail of approved closure and request for final closure report on Form C-144. E-mail Attached.
- 2) A closure report on Form C-144 with necessary attachments documenting all closure activities including sampling, analysis, and analytical results described above was submitted. Form C-144 Attached.



HALLADOR ENERGY COMPANY
"COAL KEEPS YOUR LIGHTS ON"



February 13, 2018

Certified No. 7016 2070 0000 6447 9326
Return Receipt Requested

Mr. Kenneth E. Roddy and
Ms. Joyce Roddy, Trustees
P. O. Box 133197
Tyler, TX 75713

Re: Commencement of Closure Operations
Horton #10, API 3004522935
SENE Section 13 T32N R12W
San Juan County, New Mexico

Dear Mr. and Ms. Roddy:

Regarding the below-grade tank at the referenced location, this letter is your notification as surface owners that closure operations commenced February 2, 2018, at the Horton #10 well, API 3004522935, located in the SENE Section 13 T32N R12W.

If you have any questions regarding this matter, please call me on my cell at 303 550-3226. Thanks you

Yours truly,

Timothy Lovseth
Exploration Manager

1660 LINCOLN STREET, SUITE 2700, DENVER, COLORADO 80264-2701
303.839.5504 WWW.HALLADORENERGY.COM NASDAQ: HNRG

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">■ Complete items 1, 2, and 3.■ Print your name and address on the reverse so that we can return the card to you.■ Attach this card to the back of the mailpiece, or on the front if space permits.	<p>A. Signature <input checked="" type="checkbox"/> <i>Joyce Roddy</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>Joyce Roddy</i></p> <p>C. Date of Delivery <i>2/13/18</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to: Mr. Kenneth E. Roddy and Ms. Joyce Roddy P. O. Box 133197 Tyler, TX 75713</p> <p>9590 9402 2501 6306 8057 34</p>	<p>3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p> <p><input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery</p>
<p>2. Article Number (Transfer from service label) 7016 2070 0000 6447 9326</p>	

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Hallador Petroleum LLP	Contact Tim Lovseth	
Address 16660 Lincoln St. Ste 2700	Telephone No. 303 839- 5504 x 317	
Facility Name Horton #10	Facility Type gas well	
Surface Owner Roddy	Mineral Owner BLM	API No. 30-045-22935

LOCATION OF RELEASE

Unit Letter H	Section 13	Township 32N	Range 12W	Feet from the 1820	North/South Line North	Feet from the 1120	East/West Line East	County San Juan
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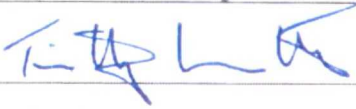
Latitude 36.98763 Longitude 108.04211 NAD83

NATURE OF RELEASE

Type of Release NA	Volume of Release NA	Volume Recovered NA
Source of Release NA	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* BGT sample analysis attached		
Describe Area Affected and Cleanup Action Taken.*		

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist:	
Printed Name: Timothy Lovseth		
Title: Manager	Approval Date:	Expiration Date:
E-mail Address: tlovseth@halladorenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 4-9-18 Phone: 303 839-5504		

* Attach Additional Sheets If Necessary

From: **Tim Lovseth** tlovseth@halladoreenergy.com
Subject: **Fw: Below-Grade Tank Closure Documentation**
Date: February 23, 2018 at 3:21 PM
To: Smith, Cory, EMNRD Cory.Smith@state.nm.us
Cc: brian@permitswest.com



Cory

Based on the attached Envirotech risk assessment and report we are requesting permission to backfill the pit at the Horton #3B site. We are still waiting on report and risk assessment for the Horton #3 site from Envirotech. Once we receive the Horton #3 report we will schedule excavation and disposal operations.

Tim Lovseth

From: enviro admin <enviroadmin@envirotech-inc.com>
Sent: Friday, February 23, 2018 9:08 AM
To: Tim Lovseth
Cc: Felipe Aragon; Brittany Hall
Subject: Below-Grade Tank Closure Documentation

Good Morning,

Please find attached the Below Grade Tank Closure Documentation for the Horton #3B well site and the Horton #10 well site.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Sincerely,
Tamara

Environmental Administrator
Envirotech, Inc. | 5796 US Highway 64 | Farmington, NM 87401
505.632.0615 Office | 505.632.1865 Fax | 505.947.8326 Cell



<http://envirotech-inc.com/>

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Below Grade
Tank Cl...3B.pdf



Below Grade
Tank Cl...10.pdf



February 22, 2018

Project Number 18010-0002

Mr. Timothy Lovseth
Hallador Energy
1660 Lincoln Street, Suite 2700
Denver, Colorado 80264

Email: tlovseth@halladorenergy.com
Phone: (303) 550-3226

**RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE HORTON #10 WELL SITE
LOCATED AT SECTION 13, TOWNSHIP 32 NORTH, RANGE 12 WEST, SAN JUAN COUNTY,
NEW MEXICO**

Dear Mr. Lovseth:

Enclosed please find the *Vicinity Map*, *Site Map*, *Field Notes* and *Analytical Results* for below-grade tank (BGT) closure activities conducted at the Horton #10 well site located in Section 13, Township 32 North, Range 12 West, San Juan County, New Mexico (site).

Upon Envirotech personnel's arrival on February 2, 2018, a brief site assessment and Job Safety Analysis (JSA) was conducted. The BGT closure standard for the site was determined to be 100 parts per million (ppm) total petroleum hydrocarbons (TPH), 0.2 ppm benzene, and 50 ppm total benzene, toluene, ethylbenzene, and xylene (total BTEX), and 250 ppm chlorides in accordance with the New Mexico Oil and Gas Conservation Division (NMOCD) regulatory standards.

Prior to Envirotech's arrival, the BGT was removed and staged on-site. One (1) five (5)-point composite sample was collected from directly beneath the former BGT and analyzed in the field for organic vapors (OVM) using a photoionization detector (PID), under the supervision of New Mexico Oil and Gas Conservation Division (NMOCD) representative Cory Smith. The sample returned a result of 0.00 ppm OVM; see enclosed ***Field Notes***. The sample was placed into a four (4)-ounce glass jar, capped headspace free and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015B (GRO, DRO, ORO), benzene and total BTEX using USEPA Method 8021B, and for chlorides using USEPA Method 300.0. The sample returned results below the regulatory limits for all constituents analyzed, confirming a release had not occurred; see enclosed ***Analytical Results***.

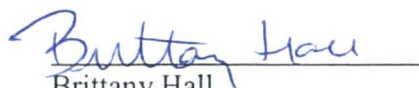
Based on the field screening and analytical results, Envirotech recommends *No Further Action* in regards to this incident.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.



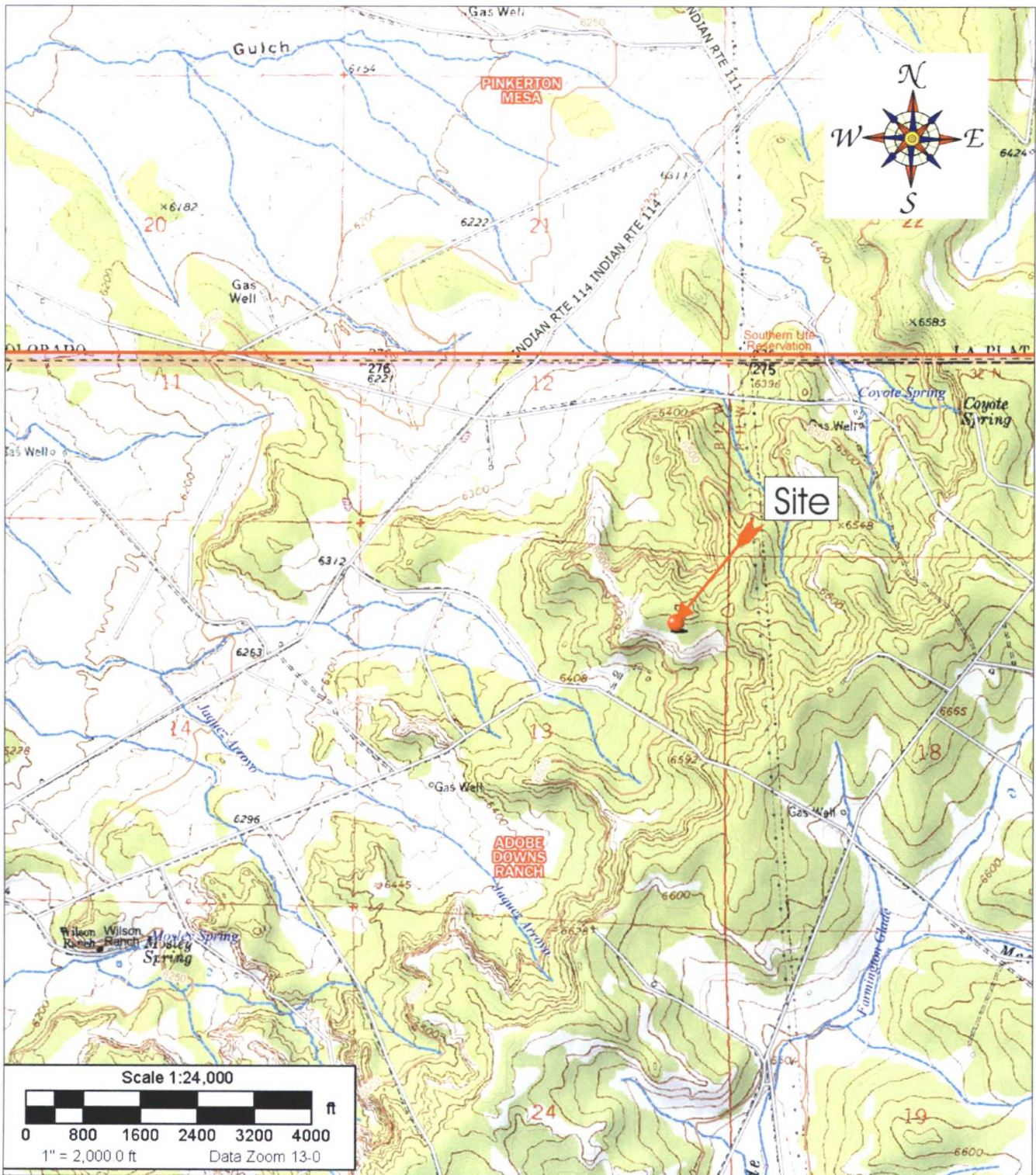
Hallador Energy
BGT Closure Documentation
Horton #10 Well Site
Project Number 18010-0002
February 2018
Page 2

Respectfully submitted,
ENVIROTECH, INC.


Brittany Hall
Environmental Field Technician
bhall@envirotech-inc.com

Enclosure(s): Vicinity Map
Site Map
Field Notes
Analytical Results

Cc: Client File Number 18010



Source: 7.5 Minute, Adobe Downs Ranch, New Mexico U.S.G.S. Topographic Quadrangle Map
 Scale: 1:24,000 1" = 2,000

Hallador Energy Horton #10 Well Site Section 13, Township 32N, Range 12W, San Juan County, New Mexico	 ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 Farmington, New Mexico 87401 505.632.0615	Vicinity Map	
Project Number: 18010-0002 Date Drawn: 2/15/18		Figure #1 DRAWN BY: Brittany Hall	PROJECT MANAGER: Felipe Aragon



LEGEND

X BGT Sample
Location

⊕ Well Head

SITE MAP Hallador Energy Horton #10 Well Site

SECTION 13, TWP 32 NORTH, RANGE 12 WEST
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS

PROJECT NO18010-0002

FIGURE NO. 2

REV

REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP DRWN	BH	2/15/18	BASE DRWN IG 11/7/17



5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

CLIENT: Hallador
CLIENT/JOB #: 19010-0002
START DATE: 2/2/19
FINISH DATE: _____



Environmental Specialist: B Hall
LAT: 36.9976251, -109.042045
LONG: _____

Page # _____ of _____

FIELD REPORT: BELOW GROUND TANK VERIFICATION

LOCATION NAME Horton WELL # 10 Temp Pit _____ PERM Pit _____
QUAD/UNIT 4 SEC 13 TWP 32N RNG 12W PM _____
QTR/FOOTAGE _____ CNTY San Juan ST NM
Excavation Approx 9 Feet X 9 Feet X 2 Feet Deep 34 Cubic Yardage _____
Disposal Facility _____ Remediation Method _____
Land Owner Private API 30-045-2293 Has Volume 25 bbl
Construction Material Single wall fiberglass Double Walled, With Leak Detection

Temporary Pit Closure NMAC 19 15 17 Table II (Permitted after 6/28/2013)

BGT Closure NMAC 19 15 17 Table I (Permitted after 6/28/2013)

X BGT Closure BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, TPH (418.1) ≤ 100 mg/kg, CHLORIDES ≤ 250 mg/kg (Permitted before 6/28/2013)

FIELD 418.1 ANALYSIS

SAMPLE DESCRIPTION	TIME	SAMPLE ID	LAB #	WEIGHT	mL FREON	DILUTION	READING	CALC (mg/kg)
<u>+25 bbl</u>								

PID RESULTS

SAMPLE ID	RESULTS (mg/kg)
<u>BGT Comp</u>	<u>0.00</u>

FIELD CHLORIDES RESULTS

SAMPLE ID	READING	CALC (mg/kg)

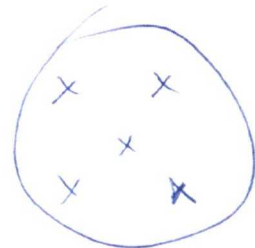
SAMPLE ID	ANALYSIS	US EPA
<u>BGT Comp</u>	<u>BENZENE</u>	<u>8021B/8015</u>
<u>BGT Comp</u>	<u>BTEX</u>	<u>8021B/80260B</u>
<u>BGT Comp</u>	<u>GRO & DRO</u>	<u>8015</u>
<u>BGT Comp</u>	<u>CHLORIDES</u>	<u>EPA300</u>
	<u>TPH</u>	<u>418.1</u>

SITE PERIMETER

N

BGT
0 well head
74'

SAMPLE PROFILE



Britten Hall
Analyst Signature
Britten Hall
Printed Name

NOTES: BGT pulled prior to envirotech + NMOC arrival

WO # _____ Who ordered/Site Rep _____

Analytical Report

Report Summary

Client: Hallador

Chain Of Custody Number:

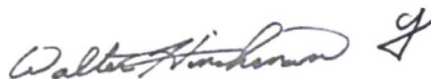
Samples Received: 2/2/2018 1:50:00PM

Job Number: 18010-0002

Work Order: P802009

Project Name/Location: BGT Sample

Report Reviewed By:



Date: 2/13/18

Walter Hinchman, Laboratory Director



Date: 2/13/18

Tim Cain, Quality Assurance Officer

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

Hallador
 1660 Lincoln St Suite 2700
 Colorado NM, 87401

Project Name: BGT Sample
 Project Number: 18010-0002
 Project Manager: E.Aragon

Reported:
 13-Feb-18 16:28

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Horton 10 API 3004522935	P802009-01A	Soil	02/02/18	02/02/18	Glass Jar, 4 oz.
	P802009-01B	Soil	02/02/18	02/02/18	Glass Jar, 4 oz.

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envirotech-inc.com
 laboratory@envirotech-inc.com

Hallador
 1660 Lincoln St Suite 2700
 Colorado NM, 87401

 Project Name: BGT Sample
 Project Number: 18010-0002
 Project Manager: F.Aragon

 Reported:
 13-Feb-18 16:28

Horton 10 API 3004522935
P802009-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1806002	02/05/18	02/08/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1806002	02/05/18	02/08/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1806002	02/05/18	02/08/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1806002	02/05/18	02/08/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1806002	02/05/18	02/08/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1806002	02/05/18	02/08/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1806002	02/05/18	02/08/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		96.9 %		50-150	1806002	02/05/18	02/08/18	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1806002	02/05/18	02/08/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1805024	02/05/18	02/06/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1805024	02/05/18	02/06/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		96.6 %		50-150	1806002	02/05/18	02/08/18	EPA 8015D	
Surrogate: n-Nonane		88.4 %		50-200	1805024	02/05/18	02/06/18	EPA 8015D	
Anions by 300.0									
Chloride	134	20.0	mg/kg	1	1807003	02/12/18	02/12/18	EPA 300.0	

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Hallador
1660 Lincoln St Suite 2700
Colorado NM, 87401

Project Name: BGT Sample
Project Number: 18010-0002
Project Manager: F.Aragon

Reported:
13-Feb-18 16:28

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1806002 - Purge and Trap EPA 5030A

Blank (1806002-BLK1)

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Benzene	ND	100	ug/kg							
Toluene	ND	100	"							
Ethylbenzene	ND	100	"							
p,m-Xylene	ND	200	"							
o-Xylene	ND	100	"							
Total Xylenes	ND	100	"							
Total BTEX	ND	100	"							
Surrogate: 4-Bromochlorobenzene-PID	7720		"	8000		96.5	50-150			

LCS (1806002-BS1)

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Benzene	4980	100	ug/kg	5000		99.7	70-130			
Toluene	4900	100	"	5000		98.0	70-130			
Ethylbenzene	4910	100	"	5000		98.3	70-130			
p,m-Xylene	9820	200	"	10000		98.2	70-130			
o-Xylene	4830	100	"	5000		96.6	70-130			
Total Xylenes	14600	100	"	15000		97.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7850		"	8000		98.1	50-150			

Matrix Spike (1806002-MS1)

Source: P802007-01

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Benzene	4960	100	ug/kg	5000	ND	99.2	54.3-133			
Toluene	4880	100	"	5000	ND	97.7	61.4-130			
Ethylbenzene	4890	100	"	5000	ND	97.9	61.4-133			
p,m-Xylene	9770	200	"	10000	ND	97.7	63.3-131			
o-Xylene	4800	100	"	5000	ND	96.0	63.3-131			
Total Xylenes	14600	100	"	15000	ND	97.2	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7790		"	8000		97.3	50-150			

Matrix Spike Dup (1806002-MSD1)

Source: P802007-01

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Benzene	4950	100	ug/kg	5000	ND	99.1	54.3-133	0.177	20	
Toluene	4860	100	"	5000	ND	97.3	61.4-130	0.354	20	
Ethylbenzene	4880	100	"	5000	ND	97.7	61.4-133	0.168	20	
p,m-Xylene	9750	200	"	10000	ND	97.5	63.3-131	0.195	20	
o-Xylene	4790	100	"	5000	ND	95.9	63.3-131	0.0834	20	
Total Xylenes	14500	100	"	15000	ND	97.0	63.3-131	0.158	20	
Surrogate: 4-Bromochlorobenzene-PID	7800		"	8000		97.5	50-150			

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laboratory@envirotech-inc.com

Hallador
 1660 Lincoln St Suite 2700
 Colorado NM, 87401

 Project Name: BGT Sample
 Project Number: 18010-0002
 Project Manager: E.Aragon

 Reported:
 13-Feb-18 16:28

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1805024 - DRO Extraction EPA 3570
Blank (1805024-BLK1)

Prepared & Analyzed: 05-Feb-18

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40+)	ND	50.0	"							
Surrogate: n-Nonane	58.5		"	50.0		117	50-200			

LCS (1805024-BS1)

Prepared & Analyzed: 05-Feb-18

Diesel Range Organics (C10-C28)	491	25.0	mg/kg	500		98.2	38-132			
Surrogate: n-Nonane	40.7		"	50.0		81.4	50-200			

Matrix Spike (1805024-MS1)

Source: P801048-01

Prepared & Analyzed: 05-Feb-18

Diesel Range Organics (C10-C28)	4780	250	mg/kg	500	4300	95.7	38-132			
Surrogate: n-Nonane	78.9		"	50.0		158	50-200			

Matrix Spike Dup (1805024-MSD1)

Source: P801048-01

Prepared & Analyzed: 05-Feb-18

Diesel Range Organics (C10-C28)	5210	250	mg/kg	500	4300	181	38-132	8.51	20	SPK2
Surrogate: n-Nonane	74.6		"	50.0		149	50-200			

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Hallador	Project Name:	BGT Sample	Reported: 13-Feb-18 16:28
1660 Lincoln St Suite 2700	Project Number:	18010-0002	
Colorado NM, 87401	Project Manager:	E.Aragon	

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1806002 - Purge and Trap EPA 5030A

Blank (1806002-BLK1)

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.75		"	8.00		96.9	50-150			

LCS (1806002-BS2)

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Gasoline Range Organics (C6-C10)	46.7	20.0	mg/kg	50.0		93.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.00		"	8.00		99.9	50-150			

Matrix Spike (1806002-MS2)

Source: P802007-01

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Gasoline Range Organics (C6-C10)	46.9	20.0	mg/kg	50.0	ND	93.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.11		"	8.00		101	50-150			

Matrix Spike Dup (1806002-MSD2)

Source: P802007-01

Prepared: 05-Feb-18 Analyzed: 08-Feb-18

Gasoline Range Organics (C6-C10)	47.6	20.0	mg/kg	50.0	ND	95.3	70-130	1.63	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.22		"	8.00		103	50-150			

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laboratory@envirotech-inc.com

Hallador 1660 Lincoln St Suite 2700 Colorado NM, 87401	Project Name: BGT Sample Project Number: 18010-0002 Project Manager: E.Aragon	Reported: 13-Feb-18 16:28
--	---	------------------------------

Anions by 300.0 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1807003 - Anion Extraction EPA 300.0/9056A

Blank (1807003-BLK1)				Prepared & Analyzed: 12-Feb-18						
Chloride	ND	20.0	mg/kg							
LCS (1807003-BS1)				Prepared & Analyzed: 12-Feb-18						
Chloride	246	20.0	mg/kg	250		98.6	90-110			
Matrix Spike (1807003-MS1)				Source: P802010-01 Prepared & Analyzed: 12-Feb-18						
Chloride	400	20.0	mg/kg	250	115	114	80-120			
Matrix Spike Dup (1807003-MSD1)				Source: P802010-01 Prepared & Analyzed: 12-Feb-18						
Chloride	379	20.0	mg/kg	250	115	106	80-120	5.30	20	

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Hallador	Project Name:	BGT Sample	Reported: 13-Feb-18 16:28
1660 Lincoln St Suite 2700	Project Number:	18010-0002	
Colorado NM, 87401	Project Manager:	E.Aragon	

Notes and Definitions

SPK2 The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to native analyte concentration at 4 times or greater than the spike concentration.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

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Project Information

Chain of Custody

Page 1 of 9

Client: <u>Hallator</u>		Report Attention		Lab Use Only		TAT		EPA Program							
Project: <u>66th Sample</u>		Report due by:		Lab WO#		Job Number		1D	3D	RCRA	CWA	SDWA			
Project Manager: <u>F. Aragon</u>		Email:		<u>P802009-01</u>		<u>18010-002</u>									
Address:		Address:		Analysis and Method								State			
City, State, Zip		City, State, Zip		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	RCRA Metals	8270	418.1	Chlorides	NM	CO	UT	AZ
Phone:		Phone:										X			
Email: <u>Gcrabtree Admin Bhall Faragon</u>															

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	RCRA Metals	8270	418.1	Chlorides	Remarks
1130	2/2/2018	S	2	Horton 10 API 3004522935		X	X	X			41	X	X	g-ve, less

Additional Instructions:

Vis ice in cooler

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Bethany Hall

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
<u>Bethany Hall</u>	<u>2/2/18</u>	<u>1:50</u>	<u>[Signature]</u>	<u>2.2.18</u>	<u>1:50</u>	Received on ice: <u>Y</u> / <u>N</u>
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	T1 T2 T3
						AVG Temp °C <u>4.0</u>

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



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laboratory@envirotech-inc.com

Tim Lovseth

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, February 15, 2018 11:02 AM
To: Tim Lovseth
Cc: Fields, Vanessa, EMNRD
Subject: RE: BGT soil analyses for Horton 3, Horton 3B, Horton 10

Tim,

OCD approves backfill and no further action on the Horton 10. Please complete form C-144 and include all necessary attachments for closure.

For the Horton 3B Hallador needs to indicate that a release did occur, and can either remediate the release or request the OCD for alternative closure standards. If the latter is chosen Hallador needs to justify why leaving contaminants in place is not a threat to human health and the environment.

For the Horton 3, additional remediation is required. After reviewing the site ranking the site is within 200' of a surface body water(Intermittent Arroyo) as is ranked a 20. Setting the closure standards for 100 mg/kg TPH, 50mg/kg BTEX and 10 mg/kg Benzene.

If you have any additional questions please give me a call.

Cory Smith
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Energy, Minerals, & Natural Resources
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From: Tim Lovseth [mailto:tlovseth@halladorenergy.com]
Sent: Thursday, February 15, 2018 9:53 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: BGT soil analyses for Horton 3, Horton 3B, Horton 10

The sampling reports should be completed by EnviroTech by early next week.

NMOCB

JUN 20 2018

DISTRICT III

Hallador Petroleum, LLP

Horton #10

SE/NE SEC. 13 T32N R12W

**San Juan County
New Mexico**

SF-078147A



OCD

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DISTRICT III

