District I
625 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.

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: EPIC ENERGY, LLC OGRID #: 372834
Address: 7415 E. Main Street Farmington, NM 87402
Facility or well name: Horton #002C
API Number: 30-045-31435 OCD Permit Number:
U/L or Qtr/Qtr I Section 22 Township 32N Range 11W County: San Juan
Center of Proposed Design: Latitude 36.9682808 Longitude -107.9702148 NAD83
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

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: 95 bbl Type of fluid: Produced Water
Tank Construction material: single wall steel
☐ 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 rebar and hog wire

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

☐ Screen ☐ Netting ☒ Other____expanded metal _____

☐ 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 H_2S, 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	☐ 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
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	☐ 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 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

dopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

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

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☐ 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
- ☐ 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 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☐ Soil Cover Design - 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

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:** _____

Title: _____ **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: 12/5/2018**

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.

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.***

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

On-site Closure Location: Latitude 36.9682808 Longitude -107.9702148 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): Vanessa Fields Title: Regulatory Compliance Manager

Signature: Date: 7/22/2020

e-mail address: vanessa@walsheng.net Telephone: 505-787-9100

Vanessa Fields

From: Michael Dean <michael.dean@walsheng.net>
Sent: Friday, May 24, 2019 7:56 AM
To: 'Vanessa'
Subject: FW: [EXT] RE: Hallador BGT's

From: vern@walsheng.net [mailto:vern@walsheng.net]
Sent: Thursday, December 20, 2018 11:40 AM
To: 'Smith, Cory, EMNRD'; 'Michael Dean'; 'Fields, Vanessa, EMNRD'; 'John Hampton Jr.'
Cc: 'Powell, Brandon, EMNRD'
Subject: RE: [EXT] RE: Hallador BGT's

This is on fee surface and the landowner has been notified.

Thank you,
Vern Andrews
505-320-1763
vern@walsheng.net

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, December 20, 2018 10:02 AM
To: Michael Dean <michael.dean@walsheng.net>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; 'Vern Andrews' <vern@walsheng.net>; 'John Hampton Jr.' <jdhampton@walsheng.net>
Cc: Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: [EXT] RE: Hallador BGT's

Michael,

Tomorrow at 8:30 AM works for me if this is on federal land please make sure you notify the land owner of the sampling event.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Michael Dean <michael.dean@walsheng.net>
Sent: Thursday, December 20, 2018 10:01 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; 'Vern

Andrews' <vern@walsheng.net>; 'John Hampton Jr.' <jdhampton@walsheng.net>
Cc: Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: [EXT] RE: Hallador BGT's

That works for me 8:30 am work for you.

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Thursday, December 20, 2018 9:36 AM
To: Michael Dean; Fields, Vanessa, EMNRD; Vern Andrews; 'John Hampton Jr.'
Cc: Powell, Brandon, EMNRD
Subject: RE: [EXT] RE: Hallador BGT's

Michael,

OCD Requires 2 business day notification for release confirmation sampling. As I mentioned on the phone earlier it was a possibility that I could make it for sampling today however due to the sampling times and distance between the sites I will not be able to accommodate your request for sampling day. The earliest I can sampling is first thing tomorrow morning would that work for you?

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Michael Dean <michael.dean@walsheng.net>
Sent: Thursday, December 20, 2018 8:22 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Vern Andrews <vern@walsheng.net>; 'John Hampton Jr.' <jdhampton@walsheng.net>
Subject: [EXT] RE: Hallador BGT's

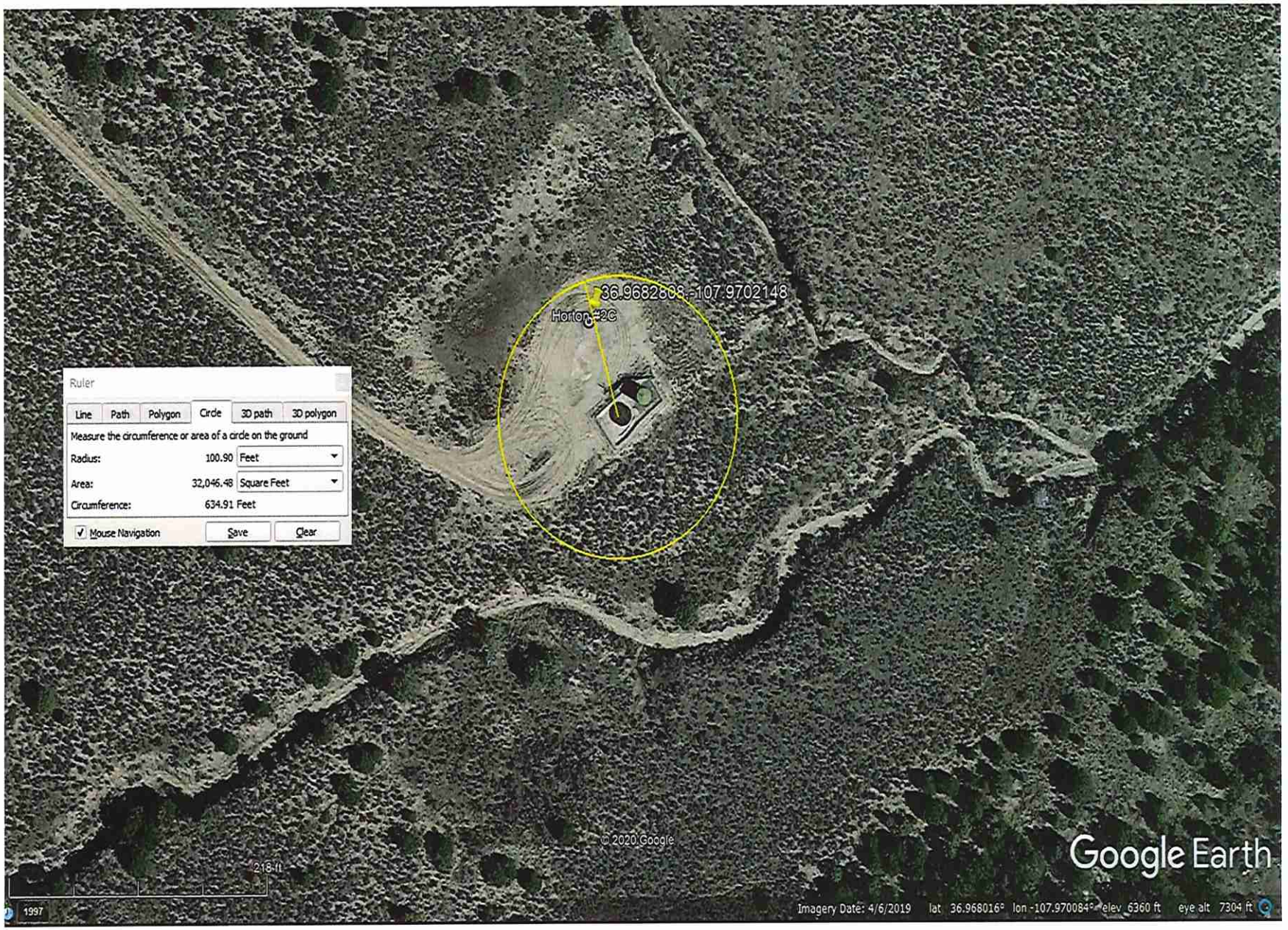
Cory
We have got the Horton #9 listed below ready for the second sampling after the initial samples did not meet the closer numbers could we set a time for this afternoon please.
Thanks!

From: Michael Dean [mailto:michael.dean@walsheng.net]
Sent: Tuesday, November 27, 2018 8:13 AM
To: 'Smith, Cory, EMNRD'; 'Fields, Vanessa, EMNRD'; Vern Andrews; 'John Hampton Jr.'
Subject: Hallador BGT's

Horton 2A API (30-045-23392)
Horton 2C API (30-045-31435)
Horton 7 API (30-045-21362)
Horton 9 API (30-045-22671)
Horton 2B API (30-045-30160)
I would like to get these pits pulled and sampled Friday November 30, 2018 at 9:00 am on location at the Horton 2B.

Michael L. Dean
Walsh Engineering
505-860-0481

Horton #002C Sitting Criteria
API# 30-045-31435



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00339		SJLP	SJ	1	1	4	22	32N	13W	216027	4096502*	50	12	38
SJ 00340		SJLP	SJ	3	1	4	22	32N	13W	216027	4096302*	50	12	38
SJ 00736		SJLP	SJ		1	4	22	32N	13W	216128	4096403*	40	15	25
SJ 00906 X		SJLP	SJ		4	3	22	32N	13W	215702	4096009*	86	26	60
SJ 00922		SJLP	SJ	4	1	3	22	32N	13W	215415	4096322*	27	12	15
SJ 02704		SJLP	SJ	2	4	1	22	32N	13W	215840	4096916*	25	12	13
SJ 02705		SJLP	SJ	2	4	1	22	32N	13W	215840	4096916*	25	12	13
SJ 02847		SJLP	SJ	1	4	4	22	32N	13W	216408	4096089*	1255	0	1255
SJ 02848		SJLP	SJ	3	4	2	22	32N	13W	216444	4096695*	608	50	558
SJ 02918		SJLP	SJ	2	4	3	22	32N	13W	215801	4096108*	51	30	21
SJ 03111		SJLP	SJ	4	1	2	22	32N	13W	216270	4097108*	19	6	13

Average Depth to Water: **17 feet**

Minimum Depth: **0 feet**

Maximum Depth: **50 feet**

Record Count: 11

PLSS Search:

Section(s): 22 **Township:** 32N **Range:** 13W

***UTM location was derived from PLSS - see Help**

7/22/20 11:17 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 22 **Township:** 32N **Range:** 11W

7/22/20 11:13 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: Hallador

Chain Of Custody Number:

Samples Received: 11/30/2018 12:30:00PM

Job Number: 18010-0004

Work Order: P811087 Project Name/

Location: Below Grade Pits

Horton 9,2B,2C,7,2A

Report Reviewed By: Date: 12/5/18

Walter Hinchman, Laboratory Director

Date: 12/5/18

Tim Cain, Project Manager

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

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Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
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Analytical Laboratory

Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Horton #9	P811087-01A	Soil	11/30/18	11/30/18	Glass Jar, 4 oz.
Horton 2B	P811087-02A	Soil	11/30/18	11/30/18	Glass Jar, 4 oz.
Horton 2C	P811087-03A	Soil	11/30/18	11/30/18	Glass Jar, 4 oz.
Horton 7	P811087-04A	Soil	11/30/18	11/30/18	Glass Jar, 4 oz.
Horton 2A	P811087-05A	Soil	11/30/18	11/30/18	Glass Jar, 4 oz.

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Analytical Laboratory

Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

Horton #9 API# 30-045-22671
P811087-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*1848028*	*11/30/18*	*12/01/18*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1848028	11/30/18	12/01/18	EPA 8015D	
Diesel Range Organics (C10-C28)	**808**	50.0	mg/kg	2	1848029	11/30/18	12/03/18	EPA 8015D	
Oil Range Organics (C28-C40+)	**998**	100	mg/kg	2	1848029	11/30/18	12/03/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*103 %*		*50-150*	*1848028*	*11/30/18*	*12/01/18*	*EPA 8015D*	
Surrogate: n-Nonane		*102 %*		*50-200*	*1848029*	*11/30/18*	*12/03/18*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1849004	12/04/18	12/04/18	EPA 300.0/9056A	

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Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

Horton 2B API# 30-045-30160

P811087-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1848028	11/30/18	12/01/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1848029	11/30/18	12/04/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1848029	11/30/18	12/04/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*102 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8015D*	
Surrogate: n-Nonane		*94.8 %*	*50-200*		*1848029*	*11/30/18*	*12/04/18*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**20.3**	20.0	mg/kg	1	1849004	12/04/18	12/04/18	EPA 300.0/9056A	

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Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

Horton 2C API# 30-045-31435

P811087-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1848028	11/30/18	12/01/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1848029	11/30/18	12/03/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1848029	11/30/18	12/03/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*102 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8015D*	
Surrogate: n-Nonane		*93.0 %*	*50-200*		*1848029*	*11/30/18*	*12/03/18*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1849004	12/04/18	12/04/18	EPA 300.0/9056A	

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Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

Horton 7 API# 30-045-21362

P811087-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1848028	11/30/18	12/01/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1848029	11/30/18	12/03/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1848029	11/30/18	12/03/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*103 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8015D*	
Surrogate: n-Nonane		*91.5 %*	*50-200*		*1848029*	*11/30/18*	*12/03/18*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1849004	12/04/18	12/04/18	EPA 300.0/9056A	

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Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

Horton 2A API# 30-045-23392

P811087-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1848028	11/30/18	12/01/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1848028	11/30/18	12/01/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1848029	11/30/18	12/03/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1848029	11/30/18	12/03/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*50-150*		*1848028*	*11/30/18*	*12/01/18*	*EPA 8015D*	
Surrogate: n-Nonane		*97.5 %*	*50-200*		*1848029*	*11/30/18*	*12/03/18*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1849004	12/04/18	12/04/18	EPA 300.0/9056A	

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Analytical Laboratory

Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

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 1848028 - Purge and Trap EPA 5030A										
Blank (1848028-BLK1)				Prepared: 11/30/18 1 Analyzed: 12/01/18 0						
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	*8200*		"	*8000*		*103*	*50-150*			
LCS (1848028-BS1)				Prepared: 11/30/18 1 Analyzed: 12/01/18 0						
Benzene	5360	100	ug/kg	5000		107	70-130			
Toluene	5390	100	"	5000		108	70-130			
Ethylbenzene	5430	100	"	5000		109	70-130			
p,m-Xylene	11100	200	"	10000		111	70-130			
o-Xylene	5370	100	"	5000		107	70-130			
Total Xylenes	16500	100	"	15000		110	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8170*		"	*8000*		*102*	*50-150*			
Matrix Spike (1848028-MS1)	**Source: P811087-01**			Prepared: 11/30/18 1 Analyzed: 12/01/18 1						
Benzene	5350	100	ug/kg	5000	ND	107	54.3-133			
Toluene	5360	100	"	5000	ND	107	61.4-130			
Ethylbenzene	5390	100	"	5000	ND	108	61.4-133			
p,m-Xylene	11000	200	"	10000	ND	110	63.3-131			
o-Xylene	5300	100	"	5000	ND	106	63.3-131			
Total Xylenes	16300	100	"	15000	ND	109	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8010*		"	*8000*		*100*	*50-150*			
Matrix Spike Dup (1848028-MSD1)	**Source: P811087-01**			Prepared: 11/30/18 1 Analyzed: 12/01/18 1						
Benzene	5390	100	ug/kg	5000	ND	108	54.3-133	0.675	20	
Toluene	5400	100	"	5000	ND	108	61.4-130	0.825	20	
Ethylbenzene	5430	100	"	5000	ND	109	61.4-133	0.780	20	
p,m-Xylene	11100	200	"	10000	ND	111	63.3-131	0.645	20	
o-Xylene	5350	100	"	5000	ND	107	63.3-131	0.865	20	
Total Xylenes	16400	100	"	15000	ND	109	63.3-131	0.717	20	
Surrogate: 4-Bromochlorobenzene-PID	*8010*		"	*8000*		*100*	*50-150*			

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Analytical Laboratory

Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

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 1848028 - Purge and Trap EPA 5030A										
Blank (1848028-BLK1)				Prepared: 11/30/18 1 Analyzed: 12/01/18 0						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.21*		"	*8.00*		*103*	*50-150*			
LCS (1848028-BS2)				Prepared: 11/30/18 1 Analyzed: 12/01/18 0						
Gasoline Range Organics (C6-C10)	50.6	20.0	mg/kg	50.0		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.44*		"	*8.00*		*105*	*50-150*			
Matrix Spike (1848028-MS2)		**Source: P811087-01**		Prepared: 11/30/18 1 Analyzed: 12/01/18 1						
Gasoline Range Organics (C6-C10)	49.3	20.0	mg/kg	50.0	ND	98.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.39*		"	*8.00*		*105*	*50-150*			
Matrix Spike Dup (1848028-MSD2)		**Source: P811087-01**		Prepared: 11/30/18 1 Analyzed: 12/01/18 1						
Gasoline Range Organics (C6-C10)	50.3	20.0	mg/kg	50.0	ND	101	70-130	2.14	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.31*		"	*8.00*		*104*	*50-150*			

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Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

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 1848029 - DRO Extraction EPA 3570										
Blank (1848029-BLK1)				Prepared: 11/30/18 1 Analyzed: 12/03/18 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40+)	ND	50.0	"							
Surrogate: n-Nonane	*44.9*		"	*50.0*		*89.7*	*50-200*			
LCS (1848029-BS1)				Prepared: 11/30/18 1 Analyzed: 12/03/18 1						
Diesel Range Organics (C10-C28)	480	25.0	mg/kg	500		96.1	38-132			
Surrogate: n-Nonane	*45.5*		"	*50.0*		*91.0*	*50-200*			
Matrix Spike (1848029-MS1)	**Source: P811087-01**			Prepared: 11/30/18 1 Analyzed: 12/03/18 1						
Diesel Range Organics (C10-C28)	1310	50.0	mg/kg	500	808	100	38-132			
Surrogate: n-Nonane	*53.8*		"	*50.0*		*108*	*50-200*			
Matrix Spike Dup (1848029-MSD1)	**Source: P811087-01**			Prepared: 11/30/18 1 Analyzed: 12/03/18 1						
Diesel Range Organics (C10-C28)	1260	50.0	mg/kg	500	808	90.7	38-132	3.68	20	
Surrogate: n-Nonane	*54.8*		"	*50.0*		*110*	*50-200*			

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Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1849004 - Anion Extraction EPA 300.0/9056A										
Blank (1849004-BLK1)				Prepared: 12/04/18 0 Analyzed: 12/04/18 1						
Chloride	ND	20.0	mg/kg							
LCS (1849004-BS1)				Prepared: 12/04/18 0 Analyzed: 12/04/18 1						
Chloride	256	20.0	mg/kg	250		102	90-110			
Matrix Spike (1849004-MS1)	**Source: P811080-01**			Prepared: 12/04/18 0 Analyzed: 12/04/18 1						
Chloride	1300	20.0	mg/kg	250	1460	NR	80-120			SPK2
Matrix Spike Dup (1849004-MSD1)	**Source: P811080-01**			Prepared: 12/04/18 0 Analyzed: 12/04/18 1						
Chloride	1560	20.0	mg/kg	250	1460	40.6	80-120	18.3	20	SPK2

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Hallador	Project Name:	Below Grade Pits	
1660 Lincoln St Suite 2700	Project Number:	18010-0004	**Reported:**
Denver CO, 80264	Project Manager:	Micheal l. Dean	12/05/18 16:53

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
**	Methods marked with ** are non-accredited methods.

Project Information

Chain of Custody

Page 1 of 1

Client:	HALLADOR
Project:	BELOW GRADE PITS
Project Manager:	MICHAEL L DEAN
Address:	7415 EAST MAIN
City, State, Zip	FARMINGTON N.M. 87402
Phone:	505-860-0481
Email:	MICHAEL.DEAN@WALSHENG.NET

Report Attention	
Report due by:	12-5-18
Attention:	VERN ANDREWS
Address:	7415 E MAIN
City, State, Zip	FARMINGTON N, NM
Phone:	505-320-1763
Email:	VERN@WALSHENG.NET

Lab Use Only		TAT		EPA Program		
Lab WO#	Job Number	1D	3D	RCRA	CWA	SDWA
P86087	18010-0004		X			

State			
NM	CO	UT	AZ
X			

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	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
9:00AM	11-30-18	S	6	#9	1	X	X	X			X		
9:30	11-30-18	S	6	2B	2								
10:00	11-30-18	S	6	2C	3								
10:30	11-30-18	S	6	7	4								
10:45	11-30-18	S	6	2A	5								

Additional Instructions: W/ ice in cooler

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

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
Michael Dean	11-30-18	12:30pm		11/30/18	1230
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4.0

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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EPIC Energy L.L.C

Below Grade Tank Closure Plan

Horton #002C

U/L: I, Section 22, TWN: 32N. RNG: 11W

San Juan County, New Mexico

30-045-31435

As stipulated in Rule 19 .15 .17 .13 NMAC, the following information adheres to the requirements established in closing below-grade tanks (BGTs) on EPIC Energy L.L.C well sites. This plan will address the standard protocols and procedures for closure of BGTs.

EPIC Energy L.L.C proposes to close its existing BGTs that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or are not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC in accordance with this closure plan and the transitional provisions of Subsection E of 19.15.17.17 NMAC, or within five (5) years after the effective date (June 16, 2008) of 19.15.17 NMAC.

The following outline addresses all requirements for closure of EPIC Energy L.L.C BGTs:

1.Prior notification of EPIC Energy L.L.C intent to close the BGT will follow 19.15.17.13J (I) and (2).

a. EPIC Energy L.L.C will notify the surface owner by certified mail, return receipt requested, of closure plans. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is enough to demonstrate compliance with this requirement.

b. notification will also be given to the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice will include the operator's name and the well's name, number, and API number, in addition to the well's legal description, including the unit letter, section, township, and range.

Notification was provided to the NMOCD District III office. Attached is a copy of the notification. Notification to the surface owner is Fee land. Records of notification were not identified during the records search.

2.EPIC Energy L.L.C will remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. A list of EPIC Energy L.L.C approved disposal facilities is below:

Fluid disposal:

Agua Moss

Sunco well #1

U/L=E, SWNW, Section 2, T29N-Rl2W San Juan, New Mexico

Permit #NM-01-0009

Basin Disposal Inc.

Basin Disposal well # 1

U/L=F, SWNW, Section 3, T29N-Rl 1 W San Juan, New Mexico

Permit #NM-01-0005

Solid disposal:

Envirotech Land Farm

Disposal Facility

Section 6, T26N-R10W, County Road #7175 San Juan, New Mexico

Permit #NM-01-0011

3.EPIC Energy L.L.C will remove the BGT from the pit and place it at ground level adjacent to the original BGT site.

The Below Grade tank was transported for recycling

4.EPIC Energy L.L.C will hook up necessary equipment and piping for temporary tank use. At this time, any on-site equipment not necessary to the operation of the tank will be removed from the site.

All Equipment associated with the below Grade Tank removal was removed. An above ground tank was instated in the same area where the below grade tank was removed.

5.EPIC Energy L.L.C will test the soils beneath the original BGT location to determine whether a release has occurred. At a minimum, a five (5) point composite sample will be collected in addition to individual grab samples from areas that are wet, discolored, or showing other evidence of a release. The samples will be analyzed for BTEX, TPH, and chlorides to demonstrate that they do not exceed certain concentrations. The testing methods and closure standards for those constituents are as follows:

All analytical results that were collected during the removal of the Below Grade Tank came back Non-Detect demonstrating a release did not occur.

Constituents	Testing Method	Closure Standards (mg/Kg)
Benzene	US EPA SW-846 methods 8021B or 8260B	0.2
total BTEX	US EPA SW-846 methods 8021B or 8260B	50
TPH	US EPA method 418.1	100
Chlorides	US EPA method 300.1	250 or background

Notes: mg/Kg= milligram per kilogram; BTEX = benzene, toluene, ethylbenzene, and total xylenes; TPH = total petroleum hydrocarbons. Other EPA methods that the division approves may be applied to all constituents listed. The Chlorides closure standards will be determined by whichever concentration level is greatest.

6. EPIC Energy L.L.C will notify the division District III office of the soil test results on Form C-14 I. It is understood that the NMOCD may require additional delineation upon review of the results.

All analytical results that were collected during the removal of the Below Grade Tank came back Non-Detect demonstrating a release did not occur.

7. If it is determined that a release has occurred, then EPIC Energy L.L.C will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

A C-141 is attached for Closure demonstrating an analytical result of non-detect.

8. If the confirmation sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then EPIC Energy L.L.C will backfill the · excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; re-contour the site; and move the fiberglass tank onto the newly backfilled and compacted site. The division-prescribed soil cover, re-contouring, and re-vegetation requirements shall comply with Subsections G, H, and I of 19.15.17.13

NMAC.

The area has been backfilled and will be reclaimed once the well has been plugged and abandoned.

9.Reclamation will follow 19.15.17.130 (1) and (2).

a. The BGT location and all areas associated with the BGT, including associated access roads, if applicable, will be reclaimed to a safe and stable condition that blends with the surrounding undisturbed area. It is understood that EPIC Energy L.L.C shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19 .15 .1 7 .13 NMA C and re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography.

b. Re-vegetation will not be completed at the time the BGT pit is reclaimed but will instead be applied for as part of the P&A process when the well is plugged and abandoned.

10.Soil cover will follow 19.15.17.13H (1) and (3).

a. The soil cover for closures where the BGT has been removed or contaminated soil has been remediated to the NMOCD's satisfaction will consist of the background thickness of topsoil or one (1) foot of suitable material to establish vegetation at the site, whichever is greater.

b. The soil cover will be constructed to the site's existing grade, and all possible efforts will be conducted to prevent ponding of water and erosion of the cover material.

The area has been backfilled and will be reclaimed once the well has been plugged and abandoned.

11.Within 60 days of closure completion, EPIC Energy L.L.C will submit a closure report on NMOCD's Form C-144, with necessary attachments to document all closure activities, including sampling results; information required by 19.15.17 NMAC; and details on backfilling, capping, and covering, where applicable. EPIC Energy L.L.C will certify that all information in the report and attachments is correct and that EPIC Energy L.L.C has complied with all applicable closure requirements and conditions specified in the approved closure plan.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 9340

COMMENTS

Operator:	OGRID:	Action Number:	Action Type:
EPIC ENERGY, L.L.C. 7415 E Main St Farmington, NM87402	372834	9340	C-144

Created By	Comment	Comment Date
csmith	1 @ 30-045-31435 General Pit Information Edit Well: [30-045-31435] HORTON #002C Facility: Operator: [372834] EPIC ENERGY, L.L.C. Status: Inactive Type: Production Construction Material: Steel District: Aztec Fluid Type: Produced Water Surface Owner: County: San Juan (45) Location: I-22-32N-11W 1865 FSL 725 FEL Lat/Long: 36.9682808,-107.9702148 NAD83	12/15/2020

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CONDITIONS

Action 9340

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
EPIC ENERGY, L.L.C. 7415 E Main St Farmington, NM87402	372834	9340	C-144

OCD Reviewer	Condition
csmith	None