

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 June 6, 2013

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

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

11339

- 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: HPOC, LLC OGRID #: 246238
Address: 322 N. Railroad Ave; PO Box 5046; Buena Vista, CO 81211
Facility or well name: Ojo Encino 31 Federal SWD I
API Number: 30-031-21112 OCD Permit Number: _____
U/L or Qtr/Qtr B Section 31 Township 20N Range 5W County: McKinley
Center of Proposed Design: Latitude Approx. 35.92630 Longitude Approx. 107.40532 NAD: 1927 1983
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 20 mil LLDPE HDPE PVC Other _____
 String-Reinforced
Liner Seams: Welded Factory Other _____ Volume: 6412 bbl Dimensions: L 180' x W 20' x D 10'

3.
 Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: _____ **OIL CONS. DIV DIST. 3**
Tank Construction material: _____
 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off **JUL 29 2013**
 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
 Alternat. Please specify: Four foot height, square box-wire fencing _____

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. **Variations 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

<p>Within 100 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p><u>Temporary Pit Non-low chloride drilling fluid</u></p>	
<p>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).</p> <ul style="list-style-type: none"> - Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <ul style="list-style-type: none"> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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;</p> <ul style="list-style-type: none"> - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><u>Permanent Pit or Multi-Well Fluid Management Pit</u></p>	
<p>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).</p> <ul style="list-style-type: none"> - Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <ul style="list-style-type: none"> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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.</p> <ul style="list-style-type: none"> - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 500 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

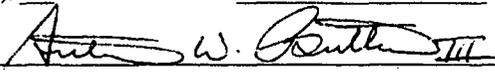
adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" 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.*

- 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

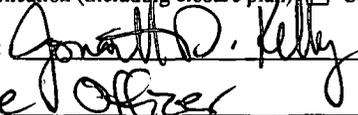
17. **Operator Application Certification:**
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Arthur W. Butler III Title: Manager

Signature:  Date: July 29, 2013

e-mail address: bbutler@highplainsop.com Telephone: 719-395-8059 719-207-0164 (Cell)

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

OCD Representative Signature:  Approval Date: 8/1/2013

Title: Compliance Officer 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: _____

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 _____ Longitude _____ NAD: 1927 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

HPOC, LLC
Ojo Encino 31 Federal SWD #1
Information to accompany Form C-144—Modification to an existing permit or registration
On-site Trench Burial Permit and Closure Application
July 29, 2013 Submittal

Purpose:

HPOC, LLC, operator of the Ojo Encino 31 Federal SWD #1 well, seeks to permit an on-site trench burial closure for mixed drill cuttings and fill material currently contained above the four foot required cover within the temporary lined reserve pit for this well. This well is located on Federal Lease NMNM-113426, Unit B-Section 31-T20N-R5W. Fresh water resources, correlative rights, human health and the environment will be protected through the approval of this on-site trench burial. This on-site trench closure method appears to be the most appropriate closure method given a review of the limited available options.

The Ojo Encino 31 Federal SWD #1 was drilled as a salt water disposal well with a fresh-water based mud system (< 15,000 ppm Cl-). No hydrocarbons were encountered during the drilling of this well, and no hydrocarbons ever reached the temporary lined reserve pit.

Following approval of this on-site trench burial operation, there will be two (2) temporary lined pits on the Ojo Encino 31 Federal SWD #1 well location. The location of the original reserve pit is contained on the attached pad plat, along with the proposed on-site trench burial closure location. Actual GPS coordinates for the on-site trench will be obtained following the on-site trench construction.

This application for an on-site trench burial will allow for all cuttings and materials to be properly controlled from this lease to ensure protection of fresh water resources, human health and the environment. This on-site trench will be located on the southern portion of the well location, away from the existing closure. See accompanying pad plat.

Plans are to construct the on-site trench with a bull dozer. The approximate trench width is 20', to a depth of approximately 10'. This trench will have a length of approximately 180'. Material excavated from the trench will be used in back-fill and/or contouring of the excavations for both this trench and the original temporary lined reserve pit. Construction of this on-site trench in this manner, will allow for placement of the required liner material, with sufficient overlap to be folded over the top of the on-site trench, prior to covering the on-site trench closure with a minimum of 3' feet of cover and 1' of top soil material (minimum 4' cover material). This will allow for a potential burial volume of 180' x 20' x 6' = 21,600 cu ft, or approximately 800 cubic yards of material. This size of on-site trench is sufficient to handle the estimated volume of material to be removed from the original Ojo Encino 31 Federal SWD #1 temporary lined reserve pit down to 4', which is 130' X 40' X 4' = 20,800 cu ft, or approximately 770 cu yards. Both pits will be covered with a minimum of 4' of non-waste containing, uncontaminated earthen material.

Photographs of the pre-construction, construction phase, on-site trench burial operation, and closure phase will be taken, in addition to any regulatory supervision for file documentation purposes.

Review of average depth to water

In preparation of this on-site trench closure application, a review of the existing in-place temporary reserve pit closure on the Ojo Encino 31 Federal SWD #1 well was performed. The original search showed no water wells within a 2,000 meter radius. An updated review on this date of the New Mexico Office of the State Engineer's data base, also indicates no wells within the 2,000 meter radius. An expanded search with a radius of 6,000 meters shows a well approximately 3 miles west of our location in section 34 of T20N-R6W with a depth to water greater than 100'.

Review of Available Sampling

Sampling was performed from the mixed material used to fill the original temporary lined reserve pit. Both a 5-point composite surface sample and a composite sample from test holes dug under the supervision of Mr. Bob Switzer, Environmental Protection Specialist from the Farmington Field office of the BLM's were collected. Analysis of these samples was conducted at Envirotech in Farmington, NM.

Test Date: 6/14/2013 Five Point Top Soil Sample (P306071-01)
Chloride Reading: 59.6 mg/kg Method EPA (300.0)
Total BTEX: Not Detected Method EPA (8021B)
Total GRO & DRO Combined Fractions: Not Detected Method EPA (8015D)
TPH: 39.9mg/kg Method EPA (418.1)

Test Date: 6/15/2013 Composite sample from test holes (P306077-01)–Sampling
Witnessed by Mr. Bob Switzer of BLM
Chloride Reading: 48.8 mg/kg Method EPA (300.0)
Total BTEX: Not Detected Method EPA (8021B)
Total GRO & DRO Combined Fractions: 13.6 mg/kg Method EPA (8015D)
TPH: 39.9 mg/kg Method EPA (418.1)

These samples of the mixed material used to cover the current temporary lined reserve pit indicate that the required thresholds are met for on-site trench burial contained within Table II of NMAC Title 19, Chapter 15, Part 17, Closure Criteria for Burial Trenches and Waste Left in Place In Temporary Pits. The Table 2 standards for in-place burial where Ground Water is greater than 100 feet are: 80,000 mg/kg Chloride (EPA Method 300.0), 2,500 mg/kg TPH (EPA SW-846 Method 418.1), 50 mg/kg BTEX and 10 mg/kg Benzene.

Copies of the sampling test results are included with this application.

Siting Criteria

1. According to an updated review of the iWaters database of the State Engineer's Office, the ground water depth is located at a depth greater than 100 feet. This is consistent with the prior application and other area information on ground water depths. The area is in an arid, desert environment as is typical in this part of the San Juan Basin.
2. The updated aerial photograph and an onsite investigation indicate that the planned on-site trench burial is not within 100 feet of a continuously flowing watercourse, or within 200 feet

of any other significant watercourse, lakebed, sinkhole or playa lake (measured from the ordinary high water mark).

3. The updated aerial photograph and an onsite investigation indicate that the planned on-site trench burial is not within 300 feet of a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

4. The planned on-site trench burial is not within the boundary of any municipality.

5. Onsite investigation and a review of the prior FEMA wetland map information, also attached herewith, indicate that the planned on-site trench burial is not within 300 feet of a wetland, nor within a 100-year floodplain.

6. The planned on-site trench burial is not located in an area that is unstable, nor overlying a subsurface mine.

Pit Design and Construction Plan

As previously discussed, above, in compliance with Rule 19.15.17, this on-site trench burial will be constructed as follows:

a) HPOC, LLC will design and construct this on-site trench burial to protect fresh water resources, human health and the environment in compliance with Rule 19.15.17.11(A). This on-site trench burial is also in compliance with Rule 19.15.17.13(D), "A nearby temporary pit or burial trench that receives waste from another temporary pit must be onsite within the same lease."

b) When originally constructed, the top soil for the pad construction was pushed to the south side of this location. Any top soil present in the on-site burial trench will be initially removed and stock piled to be used for closure and re-vegetation purposes in compliance with Rule 19.15.17.11(B).

c) HPOC, LLC will ensure that a well sign with the required information in compliance with Rule 19.15.17.11(C) is present.

d) HPOC, LLC will fence this on-site trench burial as required in Rule 19.15.17.11(D). Fencing will be taken down daily as required to access the on-site trench and put back up at the end of the day. Any Livestock will be protected from entering the on-site trench during daily operational activity.

e) HPOC, LLC will ensure that the geomembrane liner material will consist of at least a 20-mil string reinforced LLDPE or equivalent liner material resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions, including resistance to ultraviolet light. The liner compatibility shall comply with EPA SW-846 Method 9090A as listed in Rule 19.15.17.11(F)(3) and Rule 19.15.17.11(K)(3).

f) HPOC, LLC shall minimize liner seams and orient them up and down, not across slope, utilizing factory welded seams wherever possible pursuant to Rule 19.15.17.11(F)(4) and Rule 19.15.17.11(K)(4). HPOC shall avoid excessive stress-strain on the liner in compliance with Rule 19.15.17.11(F)(5) and Rule 19.15.17.11(K)(5).

- g) HPOC, LLC may utilize geotextile material if necessary to reduce localized stress-strain or protuberances that may otherwise compromise the liner's integrity during installation of the liner within the on-site trench in compliance with Rule 19.15.17.11(F)(6) and Rule 19.15.17.11(K)(2).
- h) HPOC, LLC will not be anchoring the liner edges in this on-site trench burial application. Sufficient liner material will be utilized to fold the edges of the liner material over the top of the closure, prior to installation of the four (4) feet of cover material. In the construction phase process, native soils will be placed on top of the edges of the liner material to protect them from mechanical damage and to allow operational access to the on-site trench directly by the trucks and earth moving equipment. This request of HPOC, LLC is consistent with Rule 19.15.17.11(K)(6).
- i) The volume of this on-site trench burial will not exceed 10 acre feet, including freeboard pursuant to Rule 19.15.17.11(F)(10).
- k) HPOC, LLC shall construct the on-site trench properly, with foundation and sidewalls consisting of a firm unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear pursuant to Rule 19.15.17.11(K)(1).

Operational Requirements

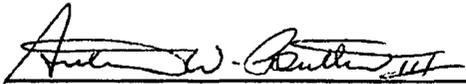
- a) HPOC, LLC shall operate and maintain this on-site trench burial in compliance with Rule 19.15.17.12(A).

Closure and Site Reclamation Requirements

- a) HPOC, LLC shall close this on-site trench burial in compliance with Rule 19.15.17.13(D) to protect fresh water resources, human health and the environment.
- b) HPOC, LLC will not commence construction or closure activities without obtaining approval of this closure plan with an approved permit application pursuant to Rule 19.15.17.13(D)(1).
- c) HPOC, LLC, through this application, has demonstrated compliance with the siting criteria as allowed within Rule 19.15.17.13(D)(2) and Rule 19.15.17.10(C).
- d) HPOC, LLC will stabilize or solidify the on-site trench burial pit contents to a capacity sufficient to support the final cover and which will meet a paint filter test (EPA SW-846, Method 9095) of the burial trench pursuant to Rule 19.15.17.13(D)(4).
- e) HPOC, LLC has already collected a five point composite surface sample and a composite test holes sample of the contents to be placed into the on-site trench which are not higher than the concentrations allowed for parameters listed in Table II of Rule 19.15.17.13 and in compliance with Rule 19.15.17.13(D)(5).
- f) HPOC, LLC shall fold the outer edges of the trench liner to overlap the waste material in the trench, prior to installation of a geomembrane liner cover pursuant to Rule 19.15.17.13(D)(8)(a).

- g) HPOC, LLC shall cover the waste material in the lined trench with a geomembrane liner consisting of 20-mil string reinforced LLDPE liner or equivalent cover approved by the district office. Such liner will be an impervious synthetic material resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions (in compliance with EPA SW-846 Method 9090A) pursuant to Rule 19.15.17.13(D)(8)(b).
- h) HPOC, LLC shall cover the burial trench with non-waste containing, uncontaminated, earthen materials and construct a soil cover prescribed by the division, effectively ensuring 1 foot of topsoil on top and a minimum of 3 additional feet of soil cover to achieve the minimum 4 feet of soil cover.
- i) HPOC, LLC shall install a steel marker at the center of the on-site trench burial pit in accordance with Rule 19.15.17.13(F)(3). The steel marker shall be not less than four inches in diameter and shall be cemented in a three-foot deep hole at a minimum. The steel marker shall extend at least four feet above mean ground level and at least three feet below ground level. The operator name, lease name and well number and location, including unit letter, section, township and range, and that the marker designates an onsite burial location shall be welded, stamped or otherwise permanently engraved into the metal of the steel marker.
- j) HPOC, LLC shall notify the surface owner (Bureau of Land Management) via e-mail at least 72 hours prior to any closure operation pursuant to Rule 19.15.17.13(E)(1).
- k) HPOC, LLC shall notify the division office in Aztec via e-mail at least 72 hours prior to any closure operation pursuant to Rule 19.15.17.13(E)(2).
- l) HPOC, LLC shall within 60 days of closure file the closure report on form C-144 with all necessary attachments to document the closure activities including any additional sampling where applicable pursuant to Rule 19.15.17.13(F). All closure sampling reports will be supplied with the closure report.
- m) HPOC, LLC shall reclaim the onsite burial location pursuant to Rule 19.15.17.13(H), notifying all regulatory agencies with the appropriate information and timing.

The following information is submitted this 29th day of July 2013, along with additional attachments and the C-144 form to secure a permit for an on-site trench burial on the Ojo Encino 31 Federal SWD #1 well location in Section 31, T20N-R5W, McKinley County, New Mexico by Arthur W. Butler III, Owner/Manager for HPOC, LLC. Such information is true and correct to the best of my knowledge.



Arthur W. Butler III
Owner/Manager
HPOC, LLC

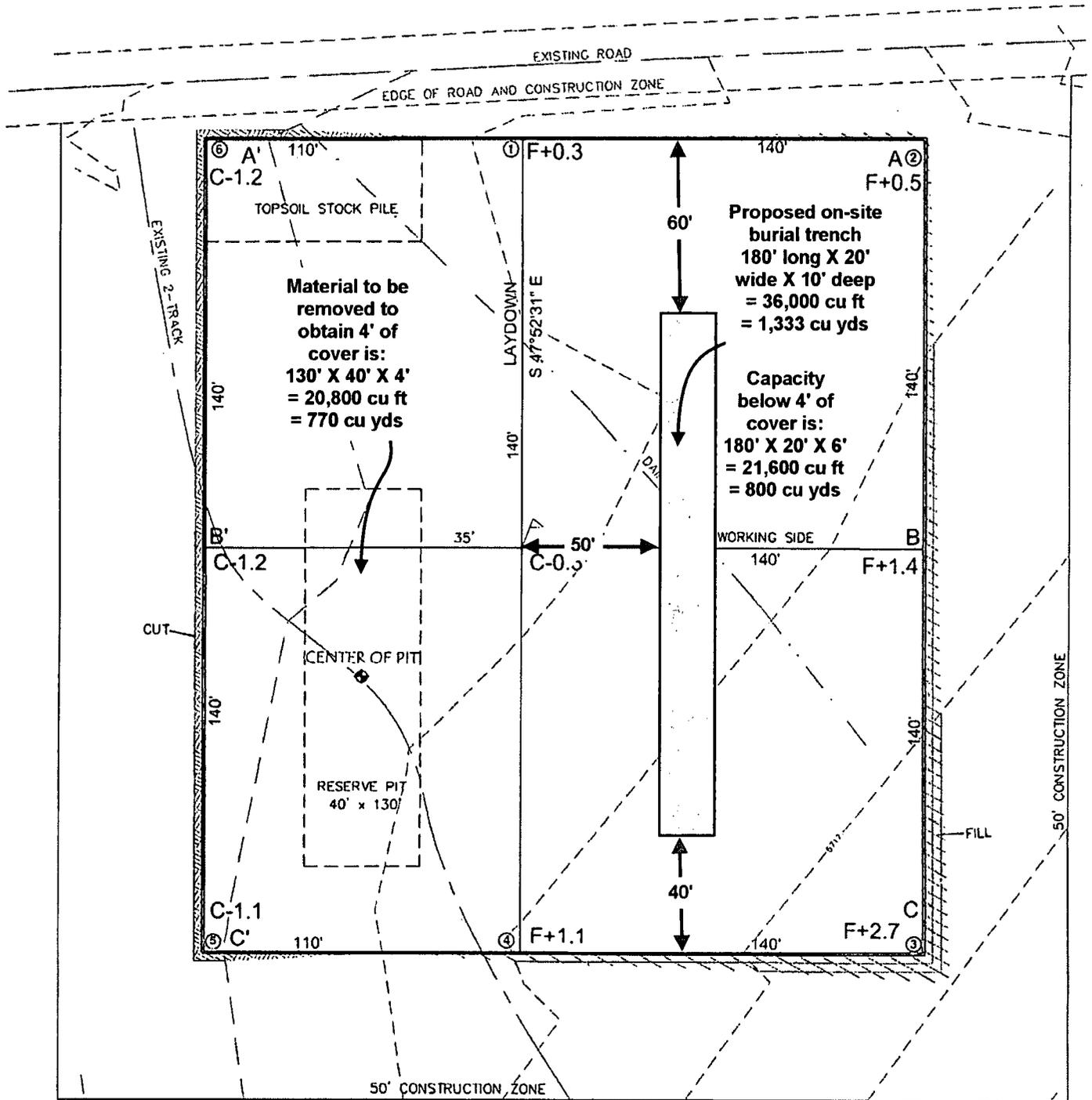
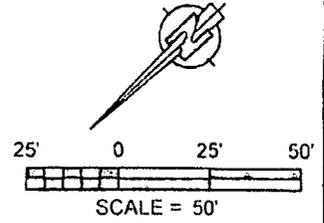
July 29, 2013
Date

WELL FLAG

LATITUDE: 35.92648° N
LONGITUDE: 107.40532° W
DATUM: NAD 83
CENTER OF PIT
LATITUDE: 35.92667° N
LONGITUDE: 107.40545° W
ELEVATION: 6707.0'
NAD83 & NAVD88

HPOC, LLC

OJO ENCINO 31 FEDERAL-SWD #1
340' FNL & 2300' FEL
LOCATED IN THE NW/4 NE/4 OF SECTION 31,
T20N, R5W, N.M.P.M.,
MCKINLEY COUNTY, NEW MEXICO
GROUND ELEVATION: 6719', NAVD 88
FINISHED PAD ELEVATION: 6719.0', NAVD 88



Drawing modified July 29, 2013 by Butch Butler

1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 50'
JOB No.: HPOC004
DATE: 09/27/11
DRAWN BY: GRR

Russell Surveying
1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637





HPOC, LLC Ojo Encino 31 Federal SWD 1

Five-point sample collected June 14, 2013 from surface area of filled in pit

HPOC, LLC Operating LLC 200 Box 5049 Buena Vista CO, 81211-9620	Project Name: 31 FED #1 SWD Project Number: 08169-0002 Project Manager: Butch Butler	Reported: 24-Jun-13 15:13
---	--	------------------------------

Top Soil
P306071-01 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
<i>Surrogate: Bromochlorobenzene</i>		104 %		80-120	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		110 %		80-120	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
<i>Surrogate: Fluorobenzene</i>		110 %		80-120	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg	1	1325009	17-Jun-13	23-Jun-13	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	4.98	mg/kg	1	1325009	17-Jun-13	23-Jun-13	EPA 8015D	
GRO and DRO Combined Fractions	ND	4.98	mg/kg	1	1325009	17-Jun-13	23-Jun-13	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	39.9	20.0	mg/kg	1	1325016	18-Jun-13	18-Jun-13	EPA 418.1	
Cation/Anion Analysis									
Chloride	59.6	9.99	mg/kg	1	1325006	17-Jun-13	17-Jun-13	EPA 300.0	

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5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

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



HPOC, LLC Ojo Encino 31 Federal SWD 1

Composite sample collected June 15, 2013 from test holes dug in filled in pit

HPOC, LLC 12708 Avenida Drive Buena Vista CO, 81211-9620	Project Name: 31 FED #1 SWD Project Number: 08169-0002 Project Manager: Michcal Allen	Reported: 24-Jun-13 15:42
--	---	------------------------------

**4' Depth Sample
P306077-01 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
<i>Surrogate: Bromochlorobenzene</i>		106 %		80-120	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		109 %		80-120	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
<i>Surrogate: Fluorobenzene</i>		113 %		80-120	1325007	17-Jun-13	23-Jun-13	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg	1	1325009	17-Jun-13	23-Jun-13	EPA 8015D	
Diesel Range Organics (C10-C28)	13.6	4.98	mg/kg	1	1325009	17-Jun-13	23-Jun-13	EPA 8015D	
GRO and DRO Combined Fractions	13.6	4.98	mg/kg	1	1325009	17-Jun-13	23-Jun-13	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	56.0	20.0	mg/kg	1	1325016	18-Jun-13	18-Jun-13	EPA 418.1	
Cation/Anion Analysis									
Chloride	48.8	9.99	mg/kg	1	1325006	17-Jun-13	17-Jun-13	EPA 300.0	

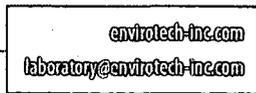
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5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

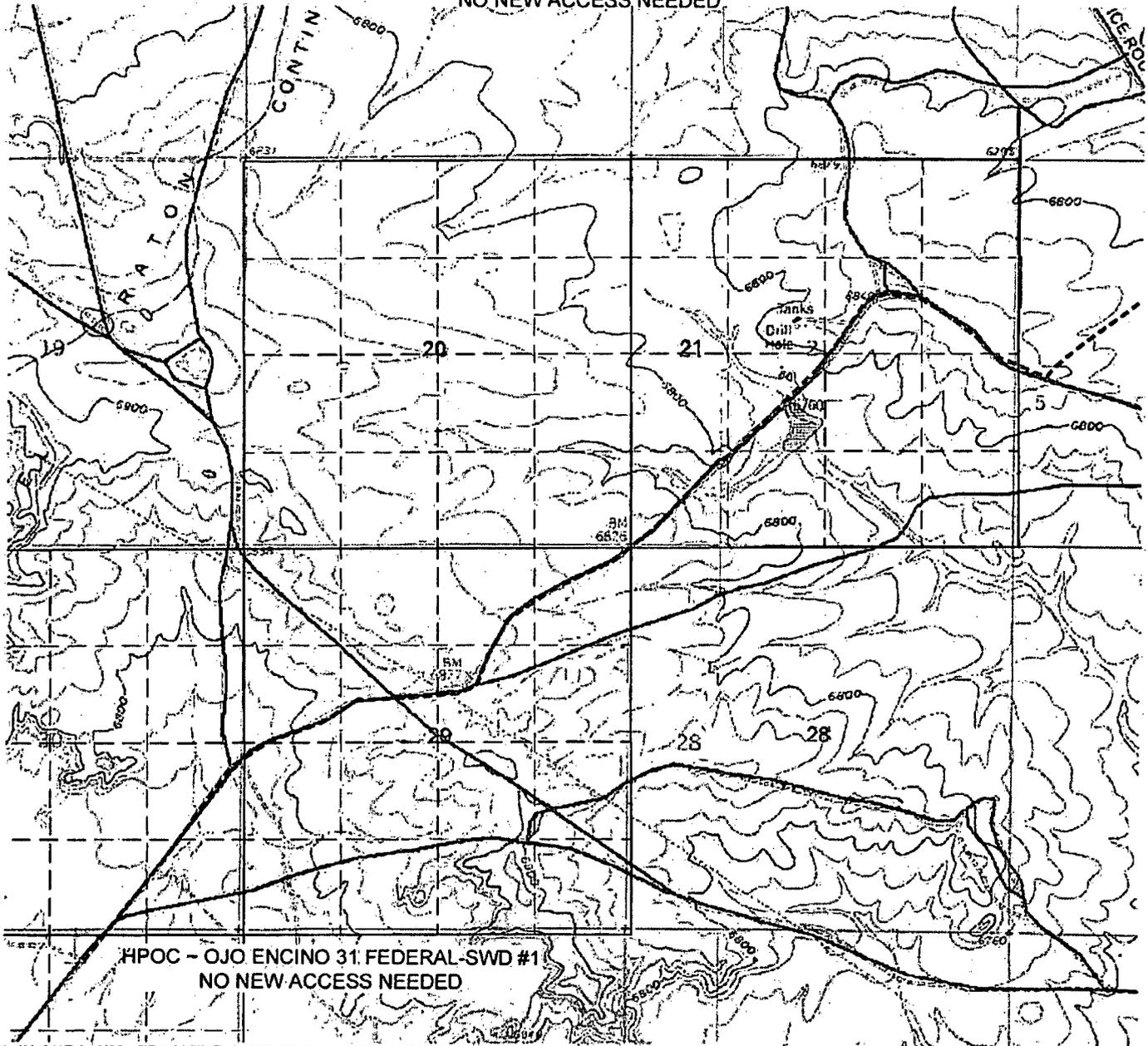
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879



HPOC, LLC

OJO ENCINO 31 FEDERAL-SWD #1
340' FNL & 2300' FEL
LOCATED IN THE NW/4 NE/4 OF SECTION 31,
T20N, R5W, N.M.P.M.,
MCKINLEY COUNTY, NEW MEXICO
GROUND ELEVATION: 6719', NAVD 88
NO NEW ACCESS NEEDED



HPOC - OJO ENCINO 31 FEDERAL-SWD #1
NO NEW ACCESS NEEDED

- 1) IN CUBA, NM., FROM THE INTERSECTION OF HWY 550 & HWY 197, TRAVEL WEST ON HWY 197 FOR 15.3 MILES TO THE OJO ENCINO SCHOOL ROAD (PAVED ROAD).
- 2) TURN RIGHT (WEST) ON OJO ENCINO SCHOOL ROAD AND TRAVEL FOR 13 MILES TO WHERE THE ROAD CURVES FROM DUE WEST TO DUE NORTH.
- 3) TURN LEFT, AT THE REC CENTER, ONTO DIRT ROAD AND GO 0.2 MILES.
- 4) TURN RIGHT AND GO 0.7 MILES.
- 5) TURN RIGHT, OVER CATTLE GUARD AND GO 3.3 MILES TO PROPOSED WELL PAD.

WELL FLAG LOCATED AT LAT. 35.94916° N, LONG. 107.37200° W (NAD 83)

U.S.G.S. QUAD: OJO ENCINO MESA
SCALE: 1" = 2000' (1:24,000)
JOB No.: HPOC004
DATE: 09/27/11

NEW OR RECONSTRUCTED ROADS MUST MEET
SMA DESIGN STANDARDS
INSTALL CULVERTS AS NEEDED



Russell Surveying
1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637



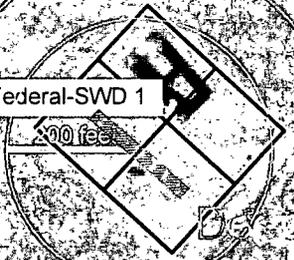
1000 feet

500 feet

300 feet

Section 31

HPOC's 31 Federal-SWD 1



HPOC's 31 Federal-SWD#1 Deep Trench Location
Update 7/29/2013



New Mexico Office of the State Engineer
Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 282980.93

Northing (Y): 3978468.32

Radius: 2000



New Mexico Office of the State Engineer
Wells Without Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 282980.93

Northing (Y): 3978468.32

Radius: 2000



New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

UTMNA83 Radius Search (in meters):

Easting (X): 282980.93

Northing (Y): 3978468.32

Radius: 2000

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer
Point of Diversion with Meter Attached

No PODs found.

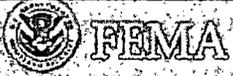
UTMNA83 Radius Search (in meters):

Easting (X): 282980.93

Northing (Y): 3978468.32

Radius: 2000

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



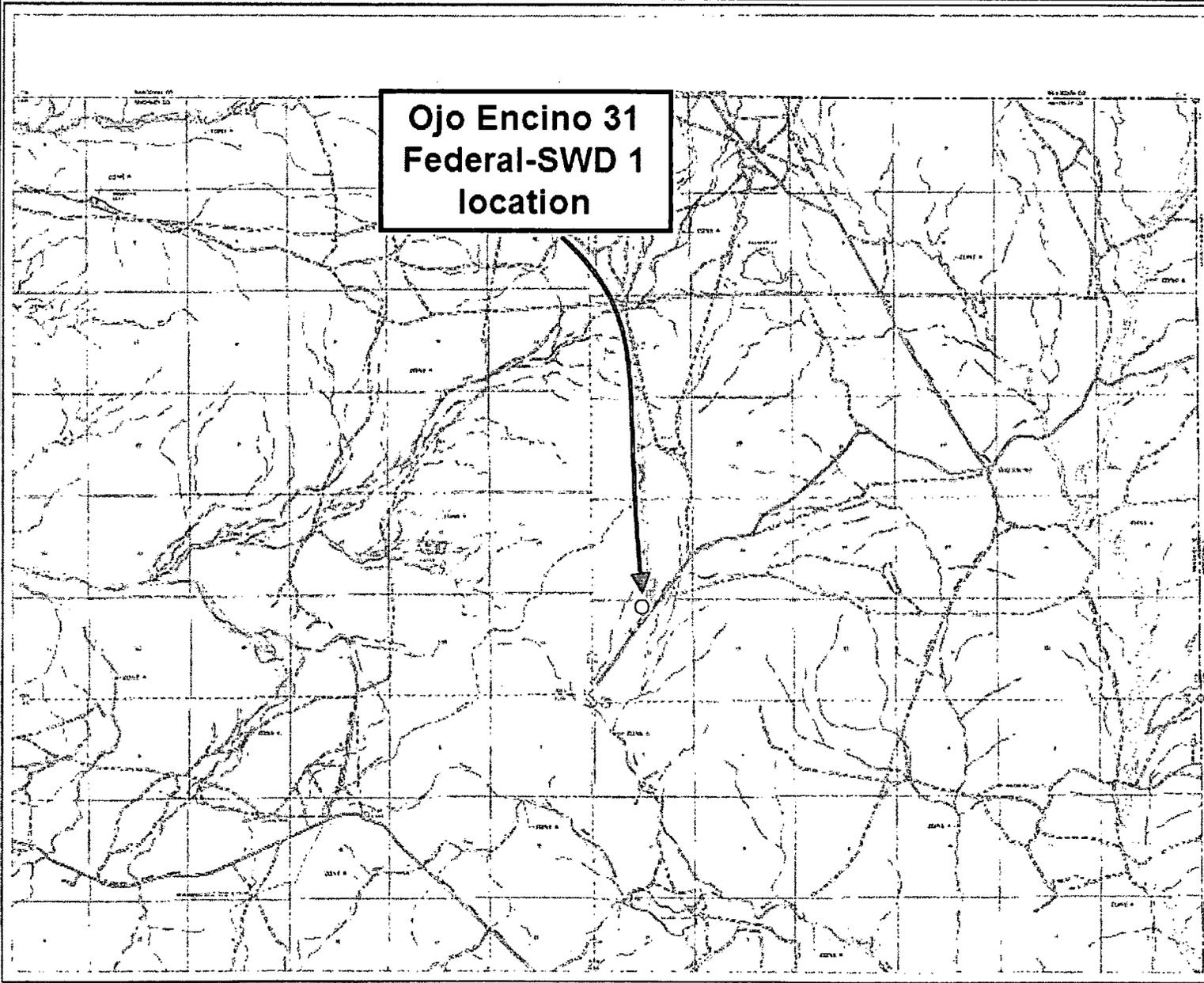
MSC Viewer



Scale 7 of 60



Make a FIR Matte!



**Ojo Encino 31
Federal-SWD 1
location**

STATE

COUNTY

TOWNSHIP

RANGE

SECTION

GRID

UTM

PROJECTION

UNIT

SCALE

DATE

BY

REVISION

HERKULES COUNTY, NEW MEXICO

UNINCORPORATED AREA

SECTION 18

TOWNSHIP 18N

RANGE 18E

GRID

UTM

PROJECTION

UNIT

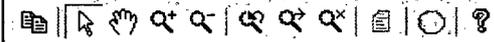
SCALE

DATE

BY

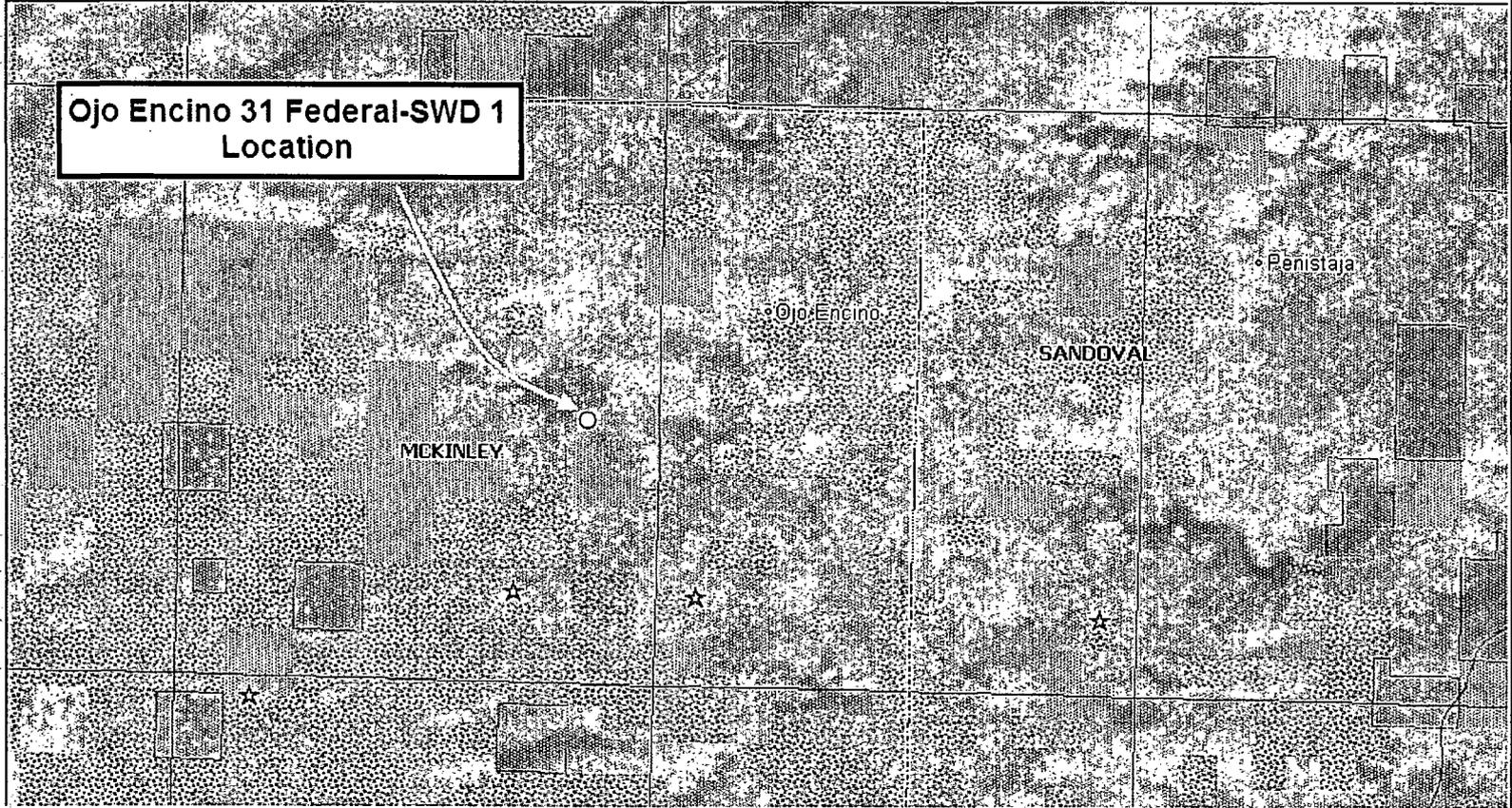
REVISION

Mines, Mills and Quarries Web Map



autodesk

- Mines, Mills & Quarries Commodity Groups
 - Aggregate & Stone Mines
 - Coal Mines
 - Industrial Minerals Mines
 - Industrial Minerals Mills
 - Metal Mines and Mill Concentrate
 - Potash Mines & Refineries
 - Smelters & Refinery Ops.
 - Uranium Mines
 - Uranium Mills
- Mines, Mills & Quarries Status
 - Active Mining
 - Active Mining, Active Reclamation
 - Permanent Closure, Active Reclamation
 - Permanent Closure, Reclaimed Awaiting
 - Temporary Suspension



USGS 7.5 min Topo Quad Index : OJO ENCINO MESA

1 : 145,465

21.9 x 11.9 (mi)