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

Type of action: ☒ Below grade tank registration PVF1836039569
☐ 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: Hilcorp Energy Company OGRID # 372171
Address: 382 Road 3100 Aztec NM 87410
Facility or well name: A9 Lateral Compressor
API Number: OCD Permit Number:
U/L or Qtr/Qtr NE Section 1 Township 29N Range 7W County: Rio Arriba
Center of Proposed Design: Latitude 36.758970 °N Longitude -107.517129 °W 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 ____ 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: Max 120 bbl Type of fluid: Produced Water
Tank Construction material: Metal
☐ Secondary containment with leak detection ☒ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness 45 mil ☐ HDPE ☐ PVC ☒ Other LLDPE

NMOCD
DEC 04 2018
DISTRICT III

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 4' hog wire fence with a single strand of barbed wire on top

27

6.

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

☒ Screen ☐ Netting ☐ Other_____

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

7.

Signs: Subsection C of 19.15.17.11 NMAC

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

☒ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

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

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

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

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

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

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

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☒ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

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

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including 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	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ 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): Etta Trujillo Title: Operations/Regulatory Technician

Signature: Etta Trujillo Date: 11/30/2018

e-mail address: ettrujillo@hilcorp.com Telephone: 505-324-5161

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

OCD Representative Signature: [signature] **Approval Date:** 12/26/2018

Title: Environmental Specialist **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: _____

A9 Lateral Compressor (BELOW GRADE TANK)

Hilcorp Energy Company requests a variance for the items listed below. The requested variance, per 19.15.17.15.A, provides equal or better protection of fresh water, public health & the environment.

1. Fencing
   - Fencing as described in Section 5 under Alternate, Hilcorp will construct all new fences around the below grade tank utilizing 48" steel mesh field-fence (hog-wire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Below grade tanks will be fenced, regardless of location.

2. Geo-membrane Liner
   - The geo-membrane liner consists of a 45-mil flexible LLDPE material manufactured by Brawler Industries, LLC as SuperScrim H45. SuperScrim H45 is manufactured with LLDPE and is 45 mil inch thickness and is reinforced with polyester scrim. The geomembrane liner has a hydraulic conductivity of less than 5×10^{-14} cm/s and is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. The manufacturer specific sheet is attached.

3. Hilcorp will notify Public Entity Surface Owners by email in lieu of certified mail. Private Entity Surface Owners will still be notified via certified mail.

#84 30-039-07706
#580 30-039-24860

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NE Sec. 1 Twp 29 Rng 7

Name of Well/Wells or Pipeline Serviced SAN JUAN 29-7 UNIT #84, #580

cps 143w

Elevation 6827' Completion Date 8/31/72 Total Depth 300' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 70'

RECEIVED
MAY 31 1991
OIL CON. DIV
DIST. 3

Depths gas encountered: N/A

Type & amount of coke breeze used: 4750 lbs.

Depths anodes placed: 285', 270', 210', 200', 190', 170', 160', 125', 95', 85'

Depths vent pipes placed: N/A

Vent pipe perforations: 200'

Remarks: gb #2

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

El Paso Natural Gas Company
Form 7-238 (Rev. 1-69)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

GROUND BED NO 2
G.C.S.

Log

Drilling Log (Attach Hereto). ☐

Completion Date 8-31-72

Well Name	Location	CPS No.
SJ 29-7 #84	NE 1-29-7	143

Type & Size Bit Used	Work Order No.
6 3/4	184-52364-50-20

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
300		EST 4750		

	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
Anode Depth	285	✓ 270	210	200	190	170	160	125	95	85
Anode Output (Amps)	2.0	3.0	3.4	4.5	3.4	5.2	6.0	3.4	4.4	4.5
Anode Depth	# 11	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20
Anode Output (Amps)	# 11	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20

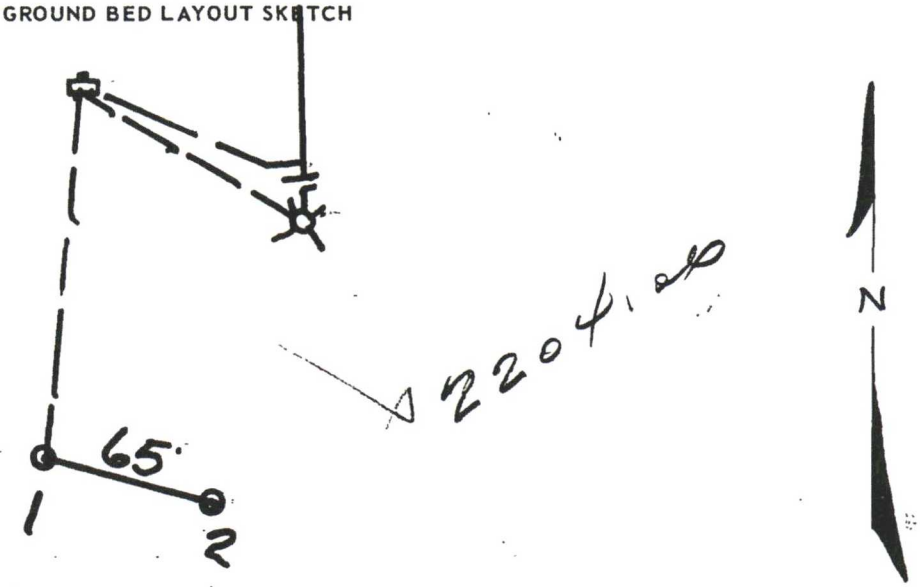
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.2	Amps 14.5	Ohms 0.77		

Remarks: Driller said water at 70'
Vent Perforated 200'
Pump 330 shovels - (Hole Full)

All Construction Completed

(Signature)

GROUND BED LAYOUT SKETCH



nal & 1 Copy All Reports

C.P.S. #143-W

DRILLING DEPARTMENT

LEASE S.T. 29-7 WELL NO. 94 CONTRACTOR Brown RIG NO. REPORT NO.

MORNING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	70	Dry Sand		
70	80	Wet Sand Water		
80	100	Shale		
100	130	Sand		

BIT NO. NO. DC ____ SIZE ____ LENG. ____

SERIAL NO. NO. DC ____ SIZE ____ LENG. ____

SIZE STANDS

TYPE SINGLES

MAKE DOWN ON KELLY

TOTAL DEPTH

MUD RECORD			MUD, ADDITIVES USED AND RECEIVED
Time	Wt.	Vis.	

FROM	TO	TIME BREAKDOWN

REMARKS –

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
130	170	Shale		
170	190	Sand		
190	240	Shaly		
240	300	Sand		

BIT NO. NO. DC ____ SIZE ____ LENG. ____

SERIAL NO. NO. DC ____ SIZE ____ LENG. ____

SIZE STANDS

TYPE SINGLES

MAKE DOWN ON KELLY

TOTAL DEPTH

MUD RECORD			MUD, ADDITIVES USED AND RECEIVED
Time	Wt.	Vis.	

FROM	TO	TIME BREAKDOWN

REMARKS –

EVE

Driller

FROM	TO

BIT NO.

SERIAL NO.

SIZE

TYPE

MAKE

MUD RECORD		
Time	Wt.	Vis.

FROM	TO

REMARKS –

SIGNED: Toolpusher William Brown Company Supervisor

Form 7-1 (Rev. 5-67)

EL PASO NATURAL GAS COMPANY
ENGINEERING DEPARTMENT

Sheet ______ of ______
Date: ____________
By: ____________

MW		gals/mol
16	C_1	6.4
30	C_2	9.56
44	C_3	10.42
58	IC_4	12.38
"	NC_4	11.93
72	IC_5	13.85
"	NC_5	13.71
86	IC_6	15.50
"	C_6	15.57
100	IC_7	17.2
"	C_7	17.46
114	C_8	19.38
28	$C_2^=$	9.64
42	$C_3^=$	9.67

MW	MISC	gals/mol
44	CO_2	6.38
34	H_2S	5.17
28	N_2	4.16
2	H_2	3.38

143w 8-31-72 X = 605

80	1.2	60	6
	1.8		1.0
90	1.8	70	2.2
	1.5		1.6
100	1.2	80	1.0
	1.1		2.0
10	1.1	90	2.2
	1.0		
20	1.0	300	
	1.4		
30	1.1		
	1.1		
40	1.2		
	2.0		
50	2.2		
	2.2		
60	2.1		
	1.6		
70	1.5		
	1.2		
80	1.0		
	1.0		
90	1.4		
	1.6		
200	2.1		
	2.1		
10	1.7		
	1.4		
20	.9		
	.5		
30	.5		
	.5		
40	.8		
	.7		
50	.7		
	.6		

Driller Said wtr at 70

Vent Perf. 200'
Pump 330 shovels - (Full)

		Log	WTR	Coke
1	285	2.0	1.2	2.0
2	270	2.2	1.7	3.0
3	210	1.7	1.7	3.4
4	200	2.1	1.5	4.5
5	190	1.4	1.4	3.4
6	170	1.6	1.5	5.2
7	160	2.1	2.0	6.0
8	125	1.4	1.4	3.4
9	95	1.5	1.5	4.4
10	85	1.8	1.8	4.5

.77

145 11.20V 14.5A = 0.77 Ω

1015
1050
1015

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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00039	SJ		RA		2	3	29	29N	07W	268022	4064208*	585	435	150
SJ 00053	SJ		RA			3	13	29N	07W	274326	4067036*	536	460	76
SJ 00541	SJ		RA	4	4	1	06	29N	07W	266691	4070968*	360	360	0
SJ 00580	SJ		RA		3	2	05	29N	07W	268604	4071023*		160	
SJ 01112	SJ		RA	4	4	2	28	29N	07W	270543	4064431*	2453	900	1553
SJ 01199	SJ		RA	4	2	3	09	29N	07W	269856	4068874*	265	125	140
SJ 01228	SJ		RA		1	2	23	29N	07W	273312	4066455*	285	205	80
SJ 02636	SJ		RA	2	1	3	05	29N	07W	267888	4070745*	300	200	100
SJ 02891	SJ		RA	2	3	2	24	29N	07W	275007	4066104*	210	160	50
SJ 03390	SJ		RA	4	2	1	13	29N	07W	274658	4067927*	320	120	200
SJ 03391	SJ		RA	2	3	2	24	29N	07W	275007	4066104*	210		
SJ 03453	SJ		RA	4	1	4	05	29N	07W	268692	4070519*	355	20	335
SJ 03573	SJ		RA	1	4	2	24	29N	07W	275209	4066091*	900		
SJ 03809 POD1	SJ		RA	3	2	2	24	29N	07W	275294	4066294	500	260	240
SJ 03981 POD1	SJ		RA	2	3	4	10	29N	07W	271851	4068541	500	250	250
SJ 04021 POD1	SJ		RA	2	2	1	09	29N	07W	269882	4069806	245	75	170

Average Depth to Water: **266 feet**

Minimum Depth: **20 feet**

Maximum Depth: **900 feet**

Record Count: 16

Basin/County Search:

County: Rio Arriba

PLSS Search:

Township: 29N **Range:** 07W

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

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	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00035	SJ	RA	2	2	4	33	30N	07W	270745	4072250*	547	467	80
SJ 00837	SJ	RA		4	4	17	30N	07W	269152	4076614*	400		
SJ 02366	SJ	RA		1	3	15	30N	07W	271062	4077047	345	225	120
SJ 02698	SJ	RA		1	3	15	30N	07W	271173	4076962*	402	255	147
SJ 02818	SJ	RA	2	1	3	24	30N	07W	274444	4075362*	86	42	44
SJ 02983	SJ	RA	3	4	1	25	30N	07W	274616	4073946*	262	40	222
SJ 03006	SJ	RA	3	3	1	24	30N	07W	274255	4075564*	100		
SJ 03053	SJ	RA	4	4	3	24	30N	07W	274836	4074750*	200		
SJ 03075	SJ	RA	1	2	1	25	30N	07W	274626	4074548*	165	78	87
SJ 03082	SJ	RA	1	1	3	24	30N	07W	274244	4075362*	98	61	37
SJ 03385	SJ	RA	4	4	4	17	30N	07W	269251	4076513*	520	460	60
SJ 03485	SJ	RA	1	1	3	24	30N	07W	274244	4075362*	126	60	66
SJ 03640	SJ	RA	1	1	3	15	30N	07W	271072	4077061*	433	241	192
SJ 03773 POD1	SJ	RA	2	1	3	24	30N	07W	274444	4075362*	120	70	50
SJ 03774 POD1	SJ	RA	3	3	1	25	30N	07W	274214	4073956*	300	220	80
SJ 03946 POD1	SJ	RA	4	2	4	15	30N	07W	270941	4076902	455	285	170
SJ 04202 POD1	SJ	RA	2	1	3	24	30N	07W	274488	4075418	140	72	68

Average Depth to Water: **184 feet**

Minimum Depth: **40 feet**

Maximum Depth: **467 feet**

Record Count: 17

Basin/County Search:

County: Rio Arriba

PLSS Search:

Township: 30N **Range:** 07W

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

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	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00040	SJ	RA	3	2	3	28	30N	06W	279427	4073418*	420		
SJ 00041	SJ	RA	3	2	3	28	30N	06W	279427	4073418*	349		
SJ 00741	SJ	RA	3	2	4	17	30N	06W	278707	4076656*	2038	300	1738

Average Depth to Water: **300 feet**

Minimum Depth: **300 feet**

Maximum Depth: **300 feet**

Record Count: 3

Basin/County Search:

County: Rio Arriba

PLSS Search:

Township: 30N **Range:** 06W

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

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	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00038	SJ	RA	3	4	4	06	29N	06W	276923	4069867*	813		
SJ 00059	SJ	RA	2	2	2	35	29N	06W	283371	4063065*	365	120	245
SJ 00059 S	SJ	RA	2	2	2	35	29N	06W	283371	4063065*	335	120	215
SJ 00059 S-2	SJ	RA	4	4	4	26	29N	06W	283381	4063267*	565	275	290
SJ 00059 S-3	SJ	RA	3	2	2	35	29N	06W	283171	4062865*	561	146	415
SJ 02794		RA	2	2	2	12	29N	06W			280	140	140
SJ 03364	SJ	RA	1	4	3	13	29N	06W	284070	4066662*	900	620	280
SJ 03392	SJ	RA	4	4	3	20	29N	06W	277798	4065022*	210		
SJ 03393	SJ	RA	2	4	4	30	29N	06W	276951	4063634*	210		
SJ 03406	SJ	RA	4	3	3	05	29N	06W	277525	4069858*	900	380	520
SJ 03481	SJ	RA	4	4	3	20	29N	06W	277798	4065022*	250		
SJ 04014 POD1	SJ	RA	3	4	3	12	29N	06W	283530	4060940	378		

Average Depth to Water: **257 feet**

Minimum Depth: **120 feet**

Maximum Depth: **620 feet**

Record Count: 12

Basin/County Search:

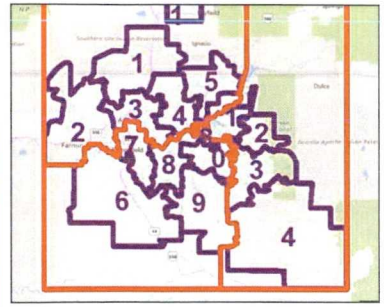
County: Rio Arriba

PLSS Search:

Township: 29N **Range:** 06W

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

A9 Lateral Compressor



Legend

All Completions, Surface Locat

- Gas Well
- Oil Well
- Oil and Gas
- SWD
- Injection Well
- Abandoned Loc
- Location
- Other Location

SJB Roads

- Asset Teams Outline
- Supervisor Areas, outline
- Cathodic 2008
- CO Water Wells
- Hydrogeologic
- POD Waters
- Wetlands
- Waterways
- Water Vulnerable Areas

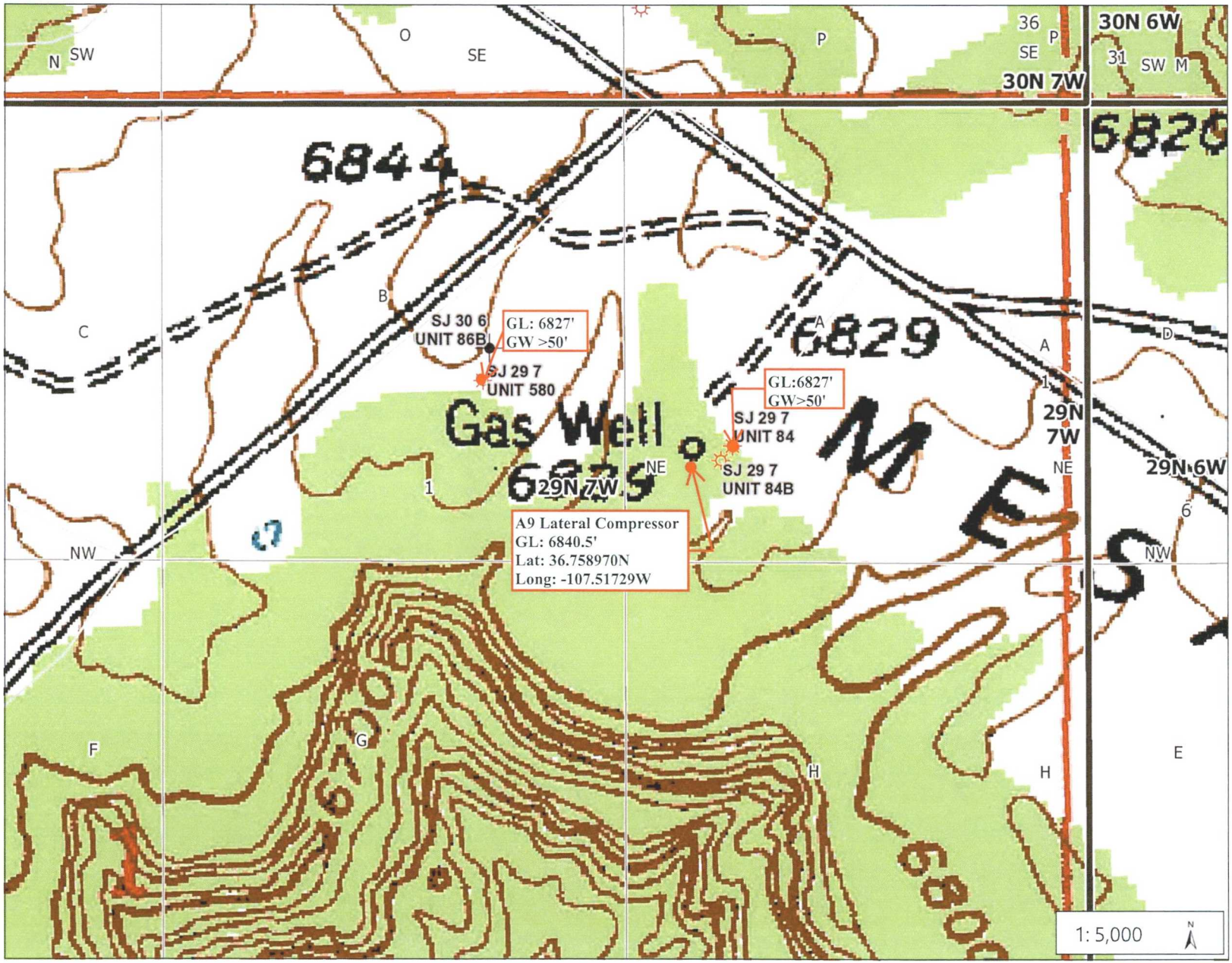
Notes

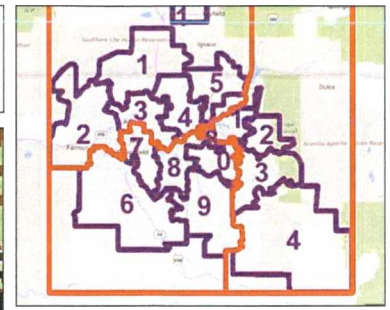
0.2 0 0.08 0.2 Miles

NAD_1927_StatePlane_New_Mexico_West_FIPS_3003

This map is to be used for internal Hilcorp or Harvest purposes only.
Not survey quality.

A9 Lateral Compressor





Legend

All Completions, Surface Locat

- Gas Well
- Oil Well
- Oil and Gas
- SWD
- Injection Well
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- Location
- Other Location

SJB Roads

- Asset Teams Outline
- Supervisor Areas, outline
- Cathodic 2008
- CO Water Wells
- Hydrogeologic
- POD Waters
- Wetlands
- Waterways
- Water Vulnerable Areas

Notes

0.2 0 0.08 0.2 Miles

NAD_1927_StatePlane_New_Mexico_West_FIPS_3003

This map is to be used for internal Hilcorp or Harvest purposes only.
Not survey quality.

Below Grade Tank (BGT) Siting Criteria and Compliance Demonstrations

Well Name: **A9 Lateral Compressor**

1. Depth to groundwater (should not be less than 25 feet):
   The nearest recorded well with available water-depth information is the **A9 Lateral** with groundwater @ 70' as indicated in the **Cathodic Data Sheet** attached. The subject well is 14' more in elevation making depth to groundwater at 84'.

2. Distance to watercourse (should not be within 100 feet of a continuously flowing watercourse, other significant watercourse, lakebed, sinkhole, wetland or playa lake [measured from the ordinary high-water mark]):

   Aerial map attached indicates that there are **no** lakebeds, sinkholes, playa lakes, or watercourses within 100 feet of the proposed Below Grade Tank.

3. Distance to springs or wells (should not be within 200 feet of a spring or a fresh water well used for public or livestock consumption):

   Aerial map attached indicates that the Below Grade Tank will **not** be within 200 feet of any recorded well or spring.

Hydrogeological report for

Regional Hydrogeological context:

The San Jose Formation of Eocene age occurs in New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico State line and overlies the Animas Formation in the area generally north of the State line.

The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin).

Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al, 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use.

The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily adsorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.

Stone et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico: Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.

Below Grade Tank Design and Construction

In accordance with NMAC 19.15.17 the following information describes the design and construction of below-grade tanks on Hilcorp Energy Company, hereinafter known as HEC, locations. This is HEC's standard procedure for all below grade tanks (BGT). A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

1. HEC will design and construct a properly sized and approved BGT which will contain liquids and should prevent contamination of fresh water to protect the public health and environment.

2. HEC signage will comply with 19.15.17.11.C NMAC.

3. HEC is requesting approval of an alternative fencing to be used on BGT tank locations. HEC requests to utilize 48" steel mesh field-fence (hog-wire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. BGTs will be fenced, regardless of location.
    a. If the BGT is located within 1000' of an occupied permanent residence, school, hospital, institution or church, HEC will construct A 6' chain link fence with two strands of barbed wire on top. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite.

4. HEC will construct a screened, expanded metal covering, on the top of the BGT.

5. HEC will ensure that a BGT is constructed of materials resistant to the BGT's particular contents and resistant to damage from sunlight as shown on design drawing and specification sheet.

6. The HEC BGT system will have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom as shown on design drawing.

7. HEC shall operate and install the BGT to prevent the collection of surface water run-on. HEC has built in shut off devices that do not allow a BGT to overflow. HEC constructs berms and corrugated retaining walls at least 6" above ground to keep from surface water run-on entering the BGT as shown on the design plan.

8. If HEC needs to modify/retrofit the existing BGT it will meet the below specifications.

9. HEC will construct and use a BGT that does not have double walls. The BGT's side walls will be open for visual inspection for leaks, the BGT's bottom is elevated a minimum of six inches above the underlying ground surface and the BGT is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.

10. HEC will equip below grade tanks with a properly functioning, automatic high-level shut off control device, as well as manual controls, to prevent overflows.

11. HEC will utilize a geomembrane liner manufactured by Brawler Industries, LLC as SuperScrim H45. SuperScrim H45 is manufactured with LLDPE and is 45 mil inch thickness and is reinforced with polyester scrim. The geomembrane liner has a hydraulic conductivity of less than 5×10^{-14} cm/s and is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. The manufacturer specific sheet is attached.

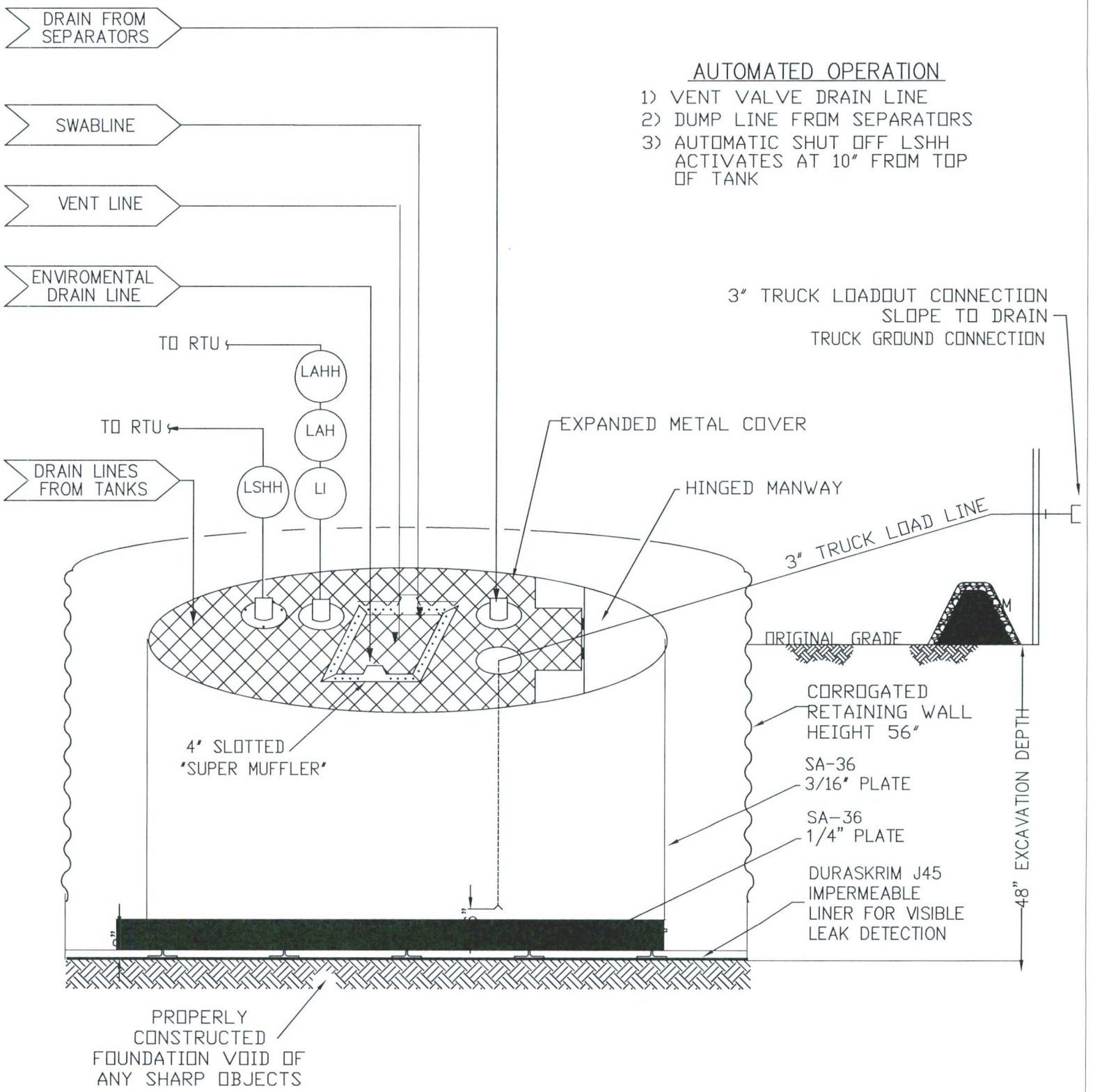
12. The general specification for design and construction are attached

MANUAL OPERATION

1) PRODUCTION TANKS DRAINLINE
2) SWABLINE DRAIN LINE
3) ENVIROMENTAL DRAIN LINE FROM COMPRESSOR SKID

AUTOMATED OPERATION

1) VENT VALVE DRAIN LINE
2) DUMP LINE FROM SEPARATORS
3) AUTOMATIC SHUT OFF LSHH ACTIVATES AT 10" FROM TOP OF TANK



Hilcorp

PRODUCED WATER PIT TANK

OPEN TOP GRAVITY FLOW TANK
INTERNALLY COATED WITH
12-14 MILS AMERON AMERCOAT 385

BRAWLER SUPERSCRIM™ H
Reinforced Geomembranes

SuperScrim™ H Product Specifications

This product meets GRI GM 25 Specifications

Properties	Test Method	Frequency	Minimum Average Values		
			H30	H36	H45
Thickness, Nominal (mils) Min. Ave. (mils)	ASTM D5199	Per roll	30 27	36 32	45 40
Weight Nominal (lb/1000, ft²) Min. Ave. (lb/1000, ft²)	ASTM D5261	Per roll	140 125	168 151	210 189
Grab Tensile Strength (lb), min. ave. Elongation (%), min. ave.	ASTM D7004 (each direction) (each direction)	30,000 lb	300 25	310 25	320 25
Tongue Tear (lb), min. ave.	ASTM D5884 (each direction)	30,000 lb	130	130	130
Index Puncture (lb), min. ave.	ASTM D4833	30,000 lb	85	103	105
Ply Adhesion (lb), min. ave. (1)	ASTM D6636	30,000 lb	20	25	25
Oxidative Induction Time (OIT) (2) (a) Standard OIT Or (b) High Pressure OIT	ASTM D3895 ASTM D5885	Formulation	>100 >1000	>100 >1000	>100 >1000
Standard Roll Dimensions					
Roll Width (3), ft			11.83	11.83	11.83
Roll Length (3), ft			1500	1230	1000
Roll Area, ft²			17,745	14,551	11,830

(1) Alternatively, an acceptable ply adhesion is to have a film tearing bond occur within the sheet material.
(2) The Manufacturer has the option to select either one of the OIT methods listed to evaluate the antioxidant effectiveness in the geomembrane.
(3) Roll widths and lengths have a tolerance of ±1%
**Custom material thicknesses also available*

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This is a preliminary data sheet based upon laboratory testing of initial manufacturing lots and may be changed without notice as additional product testing data becomes available.

BRAWLER
INDUSTRIAL FABRICS & LINERS

MILES CITY, MT
184 Hwy 59 N
Miles City, MT . 59301
800.488.3592
406.234.1680

MIDLAND, TX
11701 Co. Rd. 125 W
Midland, TX . 79711
800.583.6005
432.563.4005

PLEASANTON, TX
4300 S Hwy 281
Pleasanton, TX . 78064
830.569.4005

HOUSTON, TX
8615 Golden Spike Ln
Houston, TX . 77086
800.364.7688
281.272.1660

SE[redacted]A ESPAÑOL

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BRAWLER SUPERSCRIM™ WC
Reinforced Geomembranes

SuperScrim™ WC Product Specifications

Properties	Test Method	Minimum Average Values					
		9 mil	12 mil	16 mil	20 mil	24 mil	30 mil
Weight	D5261	5.4 oz/yd²	5.7 oz/yd²	7.2 oz/yd²	9.6 oz/yd²	11.5 oz/yd²	13.4 oz/yd²
Thickness		9 mil	12 mil	16 mil	20 mil	24 mil	30 mil
Grab Tensile (lbs.)	D751	MD 200 CD 135	MD 210 CD 176	MD 230 CD 210	MD 330 CD 286	MD 352 CD 300	MD 352 CD 300
Mullen Burst	D6241	300 psi	350 psi	400 psi	600 psi	680 psi	780 psi
Accelerated UV Weathering	D4355	>80% after 2000 hrs exposure	>90% after 2000 hrs exposure	>90% after 2000 hrs exposure	>90% after 2000 hrs exposure	>90% after 2000 hrs exposure	>90% after 2000 hrs exposure
Standard Roll Dimensions							
Roll Length [2], Ft		3,000	3,000	4,000	3,000	2,250	2,250
Roll Width [2], Ft		12	12	12	12	12	12
Roll Area, Ft ²		36,000	36,000	48,000	36,000	27,000	27,000

[1]9 of 10 views shall be Category 1 or 2. No more than 1 view from Category 3.
[2]Roll widths and lengths have a tolerance of ± 1%

Custom material thicknesses also available

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MILES CITY, MT
184 Hwy 59 N
Miles City, MT . 59301
800.488.3592
406.234.1680

MIDLAND, TX
11701 Co. Rd. 125 W
Midland, TX . 79711
800.583.6005
432.563.4005

PLEASANTON, TX
4300 S Hwy 281
Pleasanton, TX . 78064
830.569.4005

HOUSTON, TX
8615 Golden Spike Ln
Houston, TX . 77086
800.364.7688
281.272.1660

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Hilcorp Energy Company
San Juan Basin
Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of a below-grade tank (BGT) on a Hilcorp Energy Company (HEC) location. This is HEC's standard procedure for all BGT's. A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

1. HEC will operator and maintain a BGT to contain liquids and solids and maintain the integrity of the liner, liner system and secondary containment system to prevent contamination of fresh water and protect public health and the environmental. HEC will perform an inspection on a monthly basis, install cathodic protection and automatic overflow shutoff devices as seen on the design plan.
2. HEC will not discharge into or store any hazardous waste in the BGT.
3. HEC shall operator and install the BGT to prevent the collection of surface water run-on. HEC has built in shut-off devices that do not all ow a BGT to overflow. HEC constructs berms and corrugated retained walls at least 6" above grade to keep surface water run-on from entering the BGT as shown on the design plan.
4. As per 19.15.17.12.D(3), HEC will inspect the BGT for leakage and damage at least monthly. The operator will document the integrity of each tank at least annually and maintain a written record for 5 years. Inspections may include 1) containment berms adequate and no oil present, 2) tanks had no visible leaks or sign of corrosion, 3) tank valves, flanges, and hatches had no visible leaks and 4) no evidence of significant spillage of produced liquids. HEC shall remove any visible or measurable layer of oil from the fluid surface of the BGT in an effort to prevent significant accumulation of oil overtime.
5. HEC shall maintain adequate freeboard to prevent overtopping of the BGT.
6. If a BGT develops a leak, then HEC shall removal all liquid above the damage or leak within 48 hours of discovery, notify the appropriate division office pursuant to 19.15.29 NMAC and repair the damage or replace BGT as applicable.
7. If HEC discovers a BGT designed in accordance with 19.15.17.11.I(5) has lost integrity the BGT will promptly be drained and removed from service and HEC will follow the approved closure plan. If HEC discovers a retrofitted BGT designed in accordance with 19.15.17.11.I(4)(a-c), does not demonstrate integrity or that the BGT develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC shall repair the damage or close the existing BGT pursuant to the closure requirements of 19.15.17.13 NMAC.
8. If HEC equips or retrofits the existing BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, HEC shall visually inspect the area beneath the BGT during the retrofit and document any areas that are wet, discolored or showing other evidence of a release on form C-141. HEC shall measure and report to the division the concentration of contaminants in the wet or discolored soil with respect to the standards set forth in Table I of 19.15.17.13 NMAC. If there is no wet or discolored soil or if the concentration of contaminants in the wet or discolored soil is less than the standard set forth in Table I of 19.15.17.13 NMAC, then HEC will proceed with the closure requirements of 19.15.17.13 NMAC prior to initiating the retrofit or replacement.

Hilcorp Energy Company
San Juan Asset
Production BGT Closure Plan

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general closure requirements of a below-grade tank (BGT) on any Hilcorp Energy Company (HEC) location in the San Juan Asset. This is HEC's standard closure procedure for all BGT's regulated under Rule 19.15.17 NMAC and operated by HEC. For those closures which do not conform to this standard closure plan, a separate BGT specific closure plan will be developed and utilized.

Closure Conditions and Timing for BGT:

- Within 60 days of cessation of operation HEC will:
  - Remove all liquids and sludge and dispose in a division approved manner.
- Within 72 hours or 1 week prior to closure HEC will:
  - Give notice to surface owners by certified mail. For public entities by email as specified on the variance page.
  - Give notice to Division District Office verbal or in writing/email.
- Within 6 months of cessation of operation HEC will:
  - Remove BGT and dispose, recycle, reuse, or reclaim in a division approved manner.
  - Remove unused onsite equipment associated with the BGT.
- Within 60 days of closure HEC will:
  - Send the Division District Office a Closure Report per 19.15.17.13.F (1).

General Plan Requirements:

1. Prior to initiating any BGT closure, except in the case of an emergency, HEC will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or 1 week before closure and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner will be notified as soon as practical.

2. Notice of closure will be given to the Division District office between 72 hours and 1 week of the scheduled closure via email or phone. The notification of closure will include the following:
   a. Operators Name
   b. Well Name and API Number
   c. Location

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

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

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

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

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

Table I

Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed

Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤50 feet	Chloride	EPA 300.0	600 mg/kg
	TPH	EPA SW-846 Method 418.1	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

*Or other test methods approved by the division

**Numerical limits or natural background level, whichever is greater

(19.15.17.13 NMAC-Ro, 19.15.17.13 NMAC 3/28/2013)

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

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

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

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

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

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

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