

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 August 1, 2011

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

**Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application**

- Type of action: ☒ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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: High Plains Petroleum Corporation (HPPC) OGRID #: 10459
Address: 3860 Carlock Drive, Boulder, Colorado 80305-6511
Facility or well name: SI Federal 27 #1
API Number: 30-043-21121 OCD Permit Number: _____
U/L or Qtr/Qtr J Section 27 Township 20N Range 3W County: Sandoval
Center of Proposed Design: Latitude 35.93369°N Longitude 107.13875°W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☐ Welded ☒ Factory ☐ Other _____ Volume: 701 bbl Dimensions: L 57' x W 12' x D 8'
RCVD MAY 7 '12
OIL CONS. DIV.
DIST. 3

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: _____
Tank Construction material: _____
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

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 foot hog wire -

7.

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)

8.

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

9.

Administrative Approvals 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:

- ☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<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. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; 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 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 500 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 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

HPFC

11.

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: _____

12.

Closed-loop Systems 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.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - 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: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

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

14.

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 ☐ Closed-loop System

☐ 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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 F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)**Instructions:** Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No
Required for impacted areas which will not be used for future service and operations:

- ☐ 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

- | | |
|---|---|
| Ground water is less than 50 feet below the bottom of the buried waste. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> NA |
| Ground water is between 50 and 100 feet below the bottom of the buried waste | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> NA |
| 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). | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Topographic map; Visual inspection (certification) of the proposed site | |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | |
| 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. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Written confirmation or verification from the municipality; Written approval obtained from the municipality | |
| Within 500 feet of a wetland. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | |
| Within the area overlying a subsurface mine. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | |
| Within an unstable area. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map | |
| Within a 100-year floodplain. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - FEMA map | |

18.

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 F of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

HPPC

19.

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): John B. Somers II Title: President of High Plains Petroleum Corporation -
 Signature: John B. Somers II Date: May 4, 2012 -
 e-mail address: HPBoulder@yahoo.com Telephone: 303-494-4529 -

20.

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 5/07/2012
 Title: Compliance Officer OCD Permit Number: _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 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: _____

22.

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.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____
 Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

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)
☐ 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

25.

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: _____



High Plains Petroleum Corporation

3860 Carlock Dr. Boulder, CO 80305 303-494-4529

May 4, 2012

RCVD MAY 7 '12

OIL CONS. DIV.

DIST. 3

District III
Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, New Mexico 87410
Attention: Mr. Jonathon Kelly

PRIORITY MAIL

Re: Application for a temporary pit
SI Federal 27 #1
San Isidro Mesaverde Field
Sandoval County, New Mexico

Dear Mr. Kelly,

Enclosed please find Form C-144 and all of the required documentation, which is High Plains Petroleum Corporation's application for a small, temporary pit to be used when SI Federal 27 #1 is drilled. The well will be a shallow, 2775 foot, development well to produce oil from sands in the Mesaverde Group.

To be able to drill the well before the monsoon rains begin in July, the APD was submitted to the BLM on March 21, 2012. So, review and approval of the enclosed application as soon as possible would be appreciated. Then, we should be able to drill before slick muddy roads either prevent, or make access difficult.

Sincerely,

John Somers
High Plains Petroleum

Enclosures

District I

1625 N. French Dr. Hobbs, NM 88240
Phone: (575)393-6161 Fax (575)393-0720

District II

811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax (575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone: (505) 334-6178 Fax (505) 334-6170

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 53590		³ Pool Name San Isidro Mesaverde	
⁴ Property Code		⁵ Property Name SI FEDERAL 27			⁶ Well Number 1
⁷ OGRID No 10459		⁸ Operator Name HIGH PLAINS PETROLEUM CORPORATION			⁹ Elevation 6819

¹⁰ Surface Location

U/L or Lot No	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
J	27	20 N	3 W		2310	South	2310	East	Sandoval

¹¹ Bottom Hole Location If Different From Surface

U/L or Lot No	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No
-------------------------------------	-------------------------------	----------------------------------	------------------------

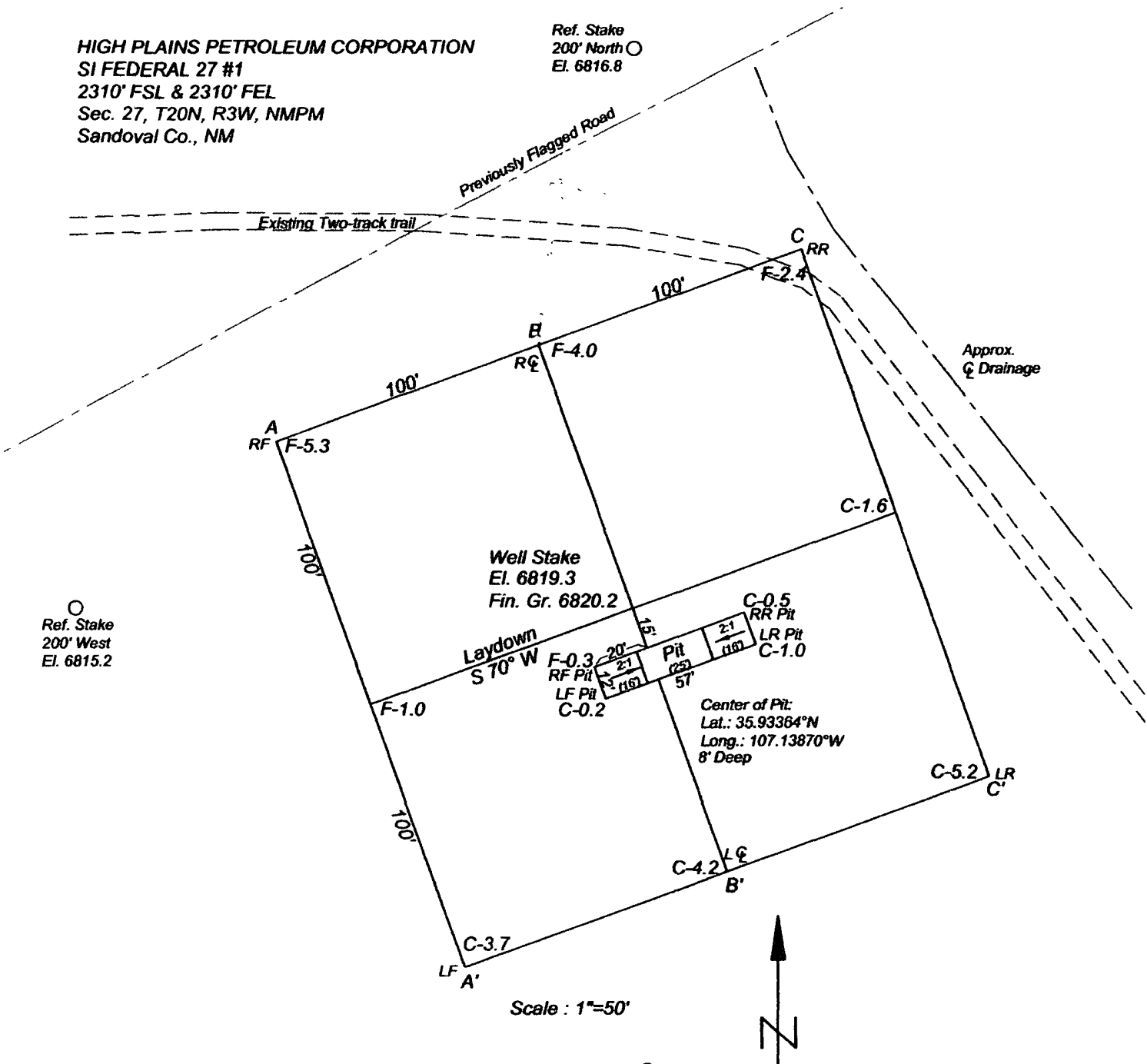
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16	West		80.00 Ch.	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. John B. Somers II 3/13/2012 Signature Date John B. Somers II Printed Name HPBoulder@yahoo.com E-mail Address
	80.00 Ch.			
		Sec. 27		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey 07 Feb 2012 Signature and Seal of Professional Surveyor William E. Mahoney II Certificate Number 8466
	Lat. 35.93369° N Long. 107.13875° W	2310'		
	West		80.00 Ch.	

Bearings from GLO Plat

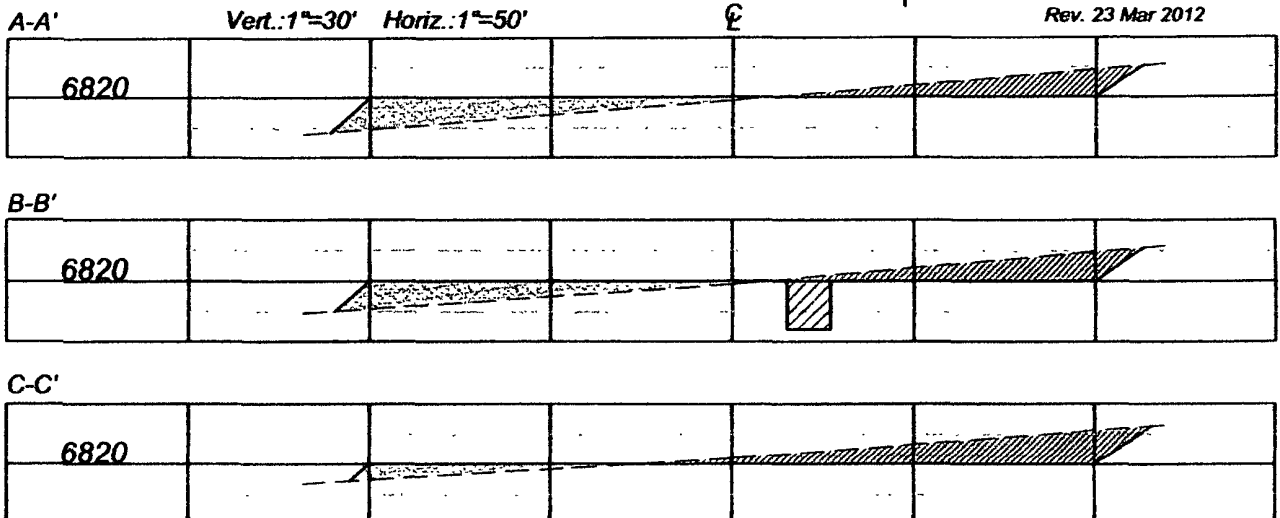
HIGH PLAINS PETROLEUM CORPORATION
 SI FEDERAL 27 #1
 2310' FSL & 2310' FEL
 Sec. 27, T20N, R3W, NMPM
 Sandoval Co., NM

Ref. Stake
 200' North
 El. 6816.8

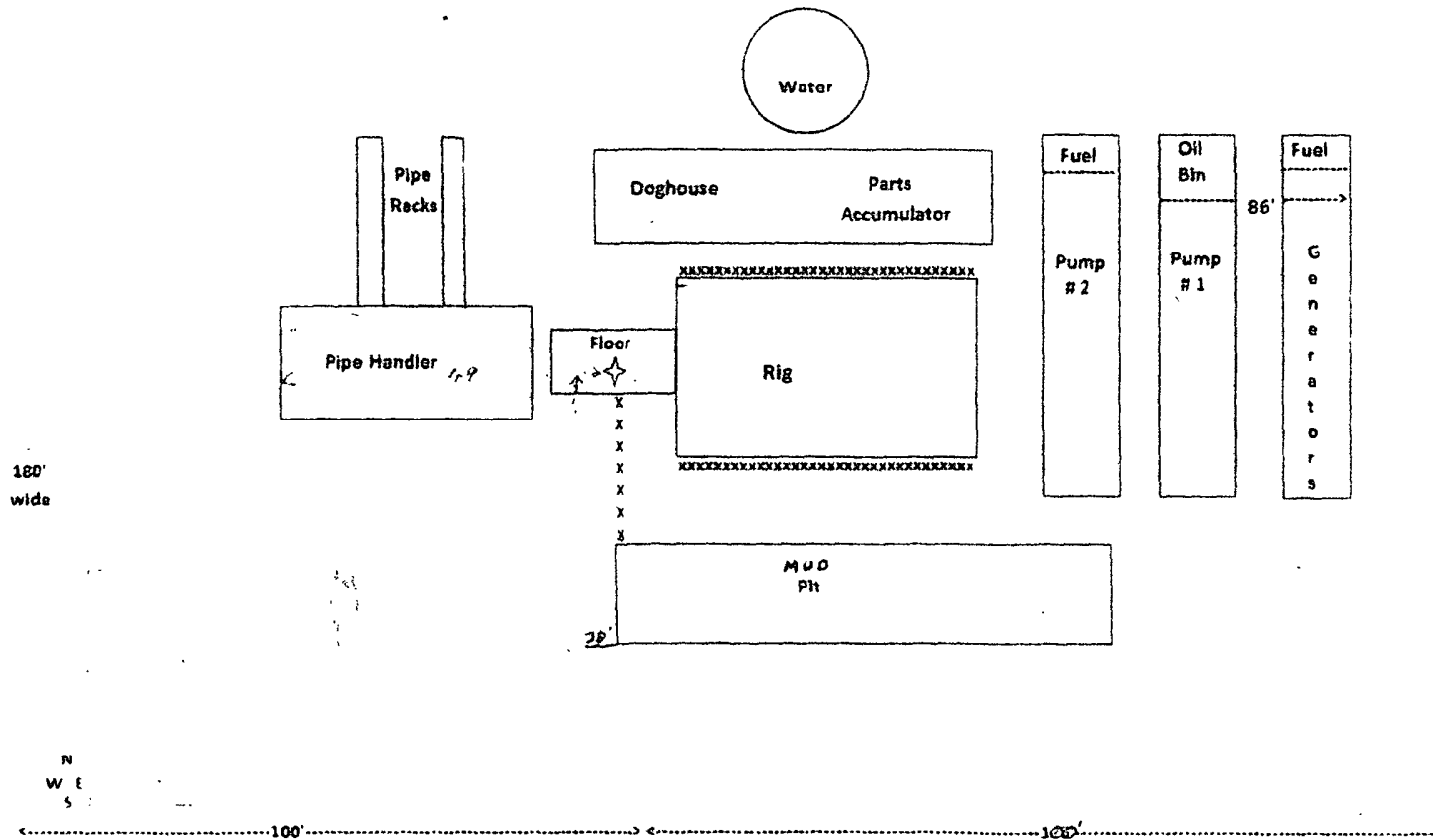


Ref. Stake
 200' West
 El. 6815.2

Scale : 1"=50'



Attachment C
to
Surface Use Plan
for
SI Federal 27 #1
NW/4SE/4 Sec. 27, T20N, R3W, NMPM,
Sandoval County, New Mexico
Lease No. NMNM105187



Hydrogeological Report for SI Federal 27 #1

Regional Geology

SI Federal 27 #1 is located on federal land on the Chaco Slope of the San Juan Basin. Local dip and drainage are to the northwest into San Isidro Valley. In San Isidro Valley, drainage is southwest into the Rio Puerco River Basin that drains into the Rio Grande Basin.

The location for the well is on Quaternary alluvium. That alluvium consists of clay, silt and sand (Hinds, 1966). Since the pit will only be 8 feet deep and lined, there should be no seepage down into the underlying Ojo Alamo Sandstone. Furthermore, if seepage did occur, the clay would swell, seal the pit and prevent leakage into the Ojo Alamo.

The closest water well is located on the southeast side of Fork Rock Mesa in Section 35. The water from that well is used by the grazing lessee to water their livestock. That water comes from a shallow source that is most likely either the Kirtland Shale, or the Fruitland Formation. Steel casing that will be cemented to the surface will protect that source of water.

In Section 27, the Tertiary Ojo Alamo outcrops. The Ojo Alamo Sandstone consists of massive overlapping beds of brown medium to coarse grained crossbedded fluviatile sandstone. Thickness in the area varies from 80 to 135 feet. Part of USGS Map GQ-591, Geologic Map of the Johnson Trading Post Quadrangle, accompanies this report.

The closest well from which water comes from the Ojo Alamo SS is the BLM water well in the southeast quarter of Section 15. That well provides water for the livestock of the grazing lessee. The surface casing to be cemented in the well will protect the Ojo Alamo Sandstone.

References

Hinds, J.S. 1966, Geologic Map of the Johnson Trading Post Quadrangle.

Kernodle, Thorn, Levings, Craigg and Dam, 1990, Hydrogeology of the Kirtland Shale and Fruitland Formation in the San Juan Structural Basin.

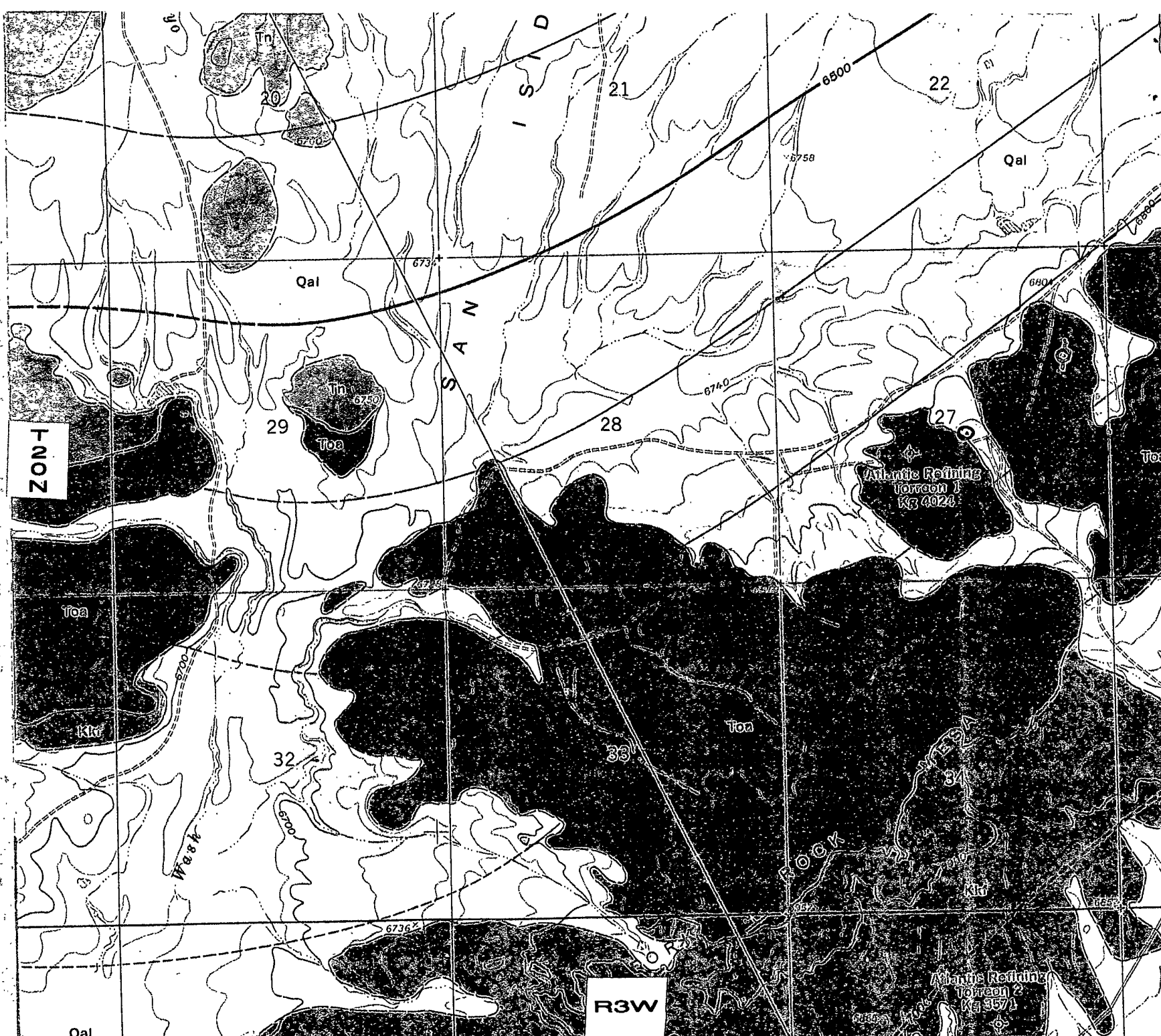
Thorn, Levings, Craigg, Dam and Kernodle, 1990, Hydrogeology of the Ojo Alamo Sandstone in the San Juan Structural Basin.

USGS Map

GQ-591

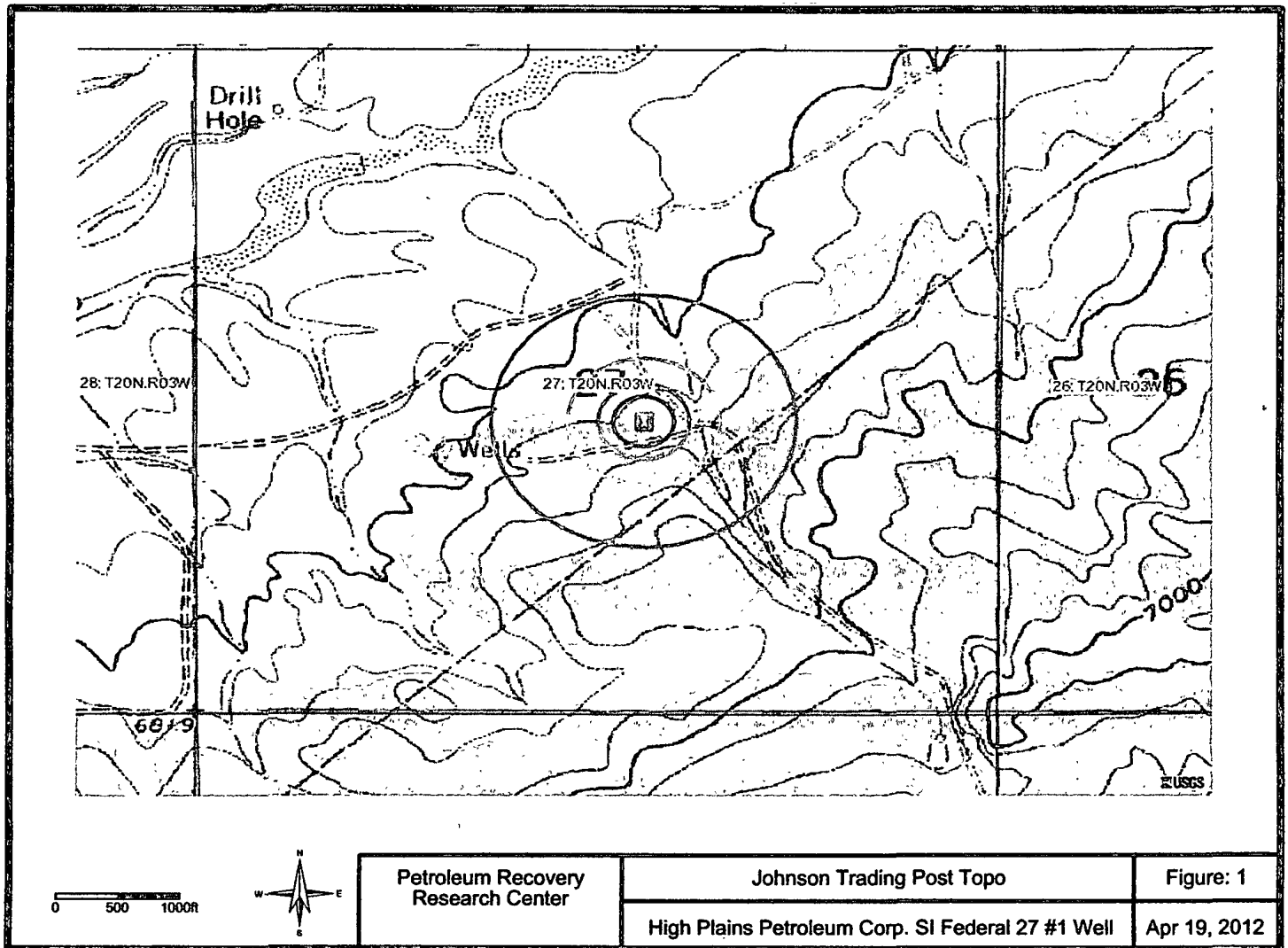
RP Fed. 27#1

SI Fed. 27#1 Loc.



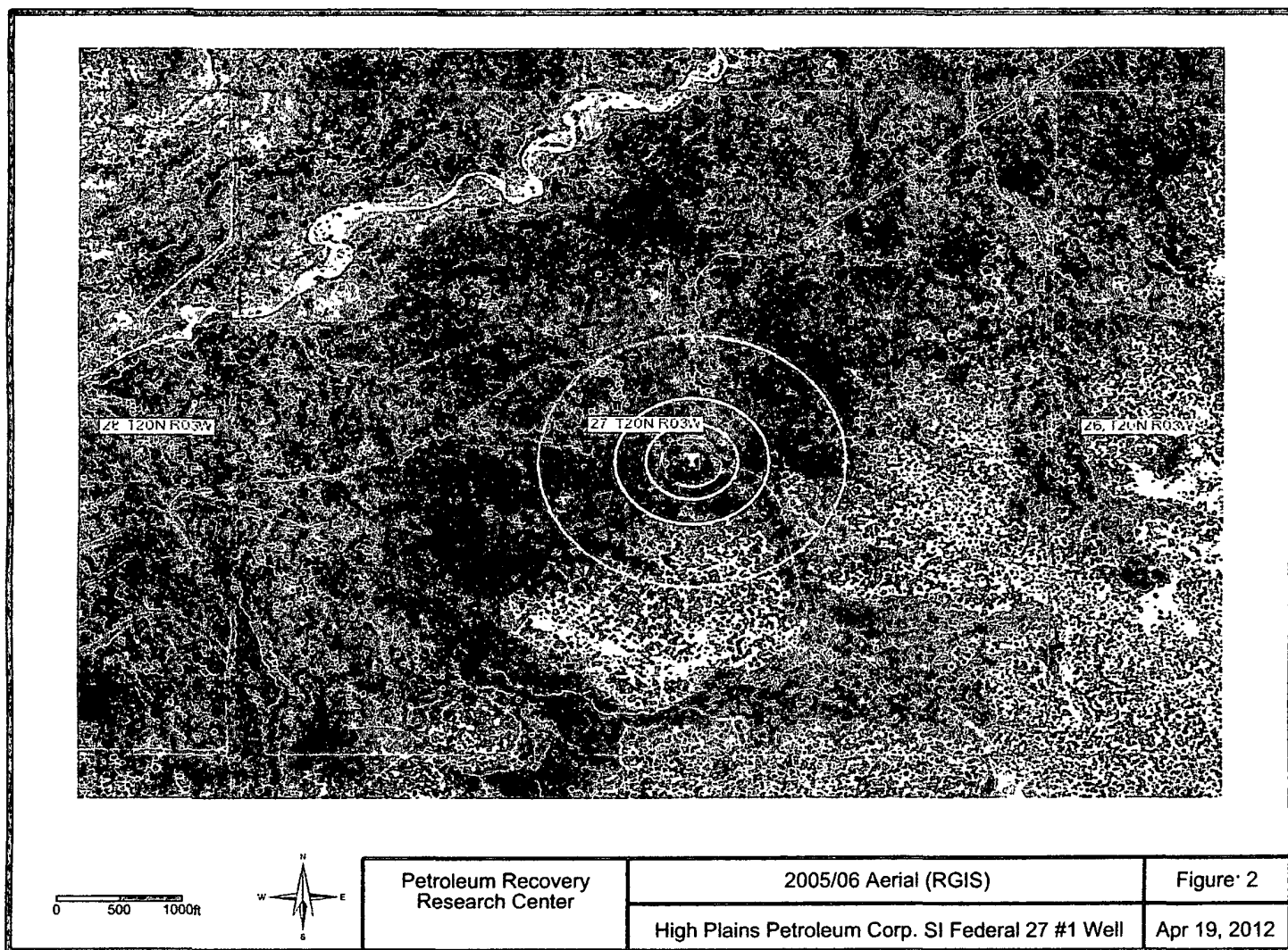
High Plains Petroleum Corporation
SI Federal 27 #1
Temporary Reserve Pit Application
Siting Criteria

1. Based on the attached Waters Database information from the State Engineer's Office, there are eighteen (18) water wells in Township 20 North, Range 3 West, NMPM. The closest water well is in Section 35, 1.6 mi. southeast of the well location. Depth to groundwater in that well is 160'.
2. The attached topographic map and aerial photos show that there are no continuously flowing watercourses within 300' of the well, or any significant watercourses, lake beds, sinkholes, or playa lakes within 200' of the well.
3. There are no permanent residences, schools, hospitals, institutions or churches within 300' of the well.
4. Based on the attached Waters Database printout, there is no domestic water well or spring within 500' of the well, and no other fresh water well or spring within 1000' of the well.
5. The well is not located within, or even close to any municipal boundaries.
6. The attached U.S. Fish and Wildlife Service's aerial photo shows that the well isn't within 500' of any wetlands.
7. The attached NMEMNRD Mining and Mineral Division map shows that there are no subsurface mines in Section 27, T20N, R3W.
8. SI Federal 27 #1 is not located in an unstable area, over a mine or on a steep hillside.
9. Based on the attached FEMA Map, the well is not located in a 100 year flood plain.



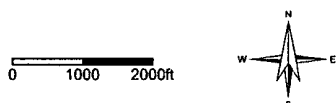
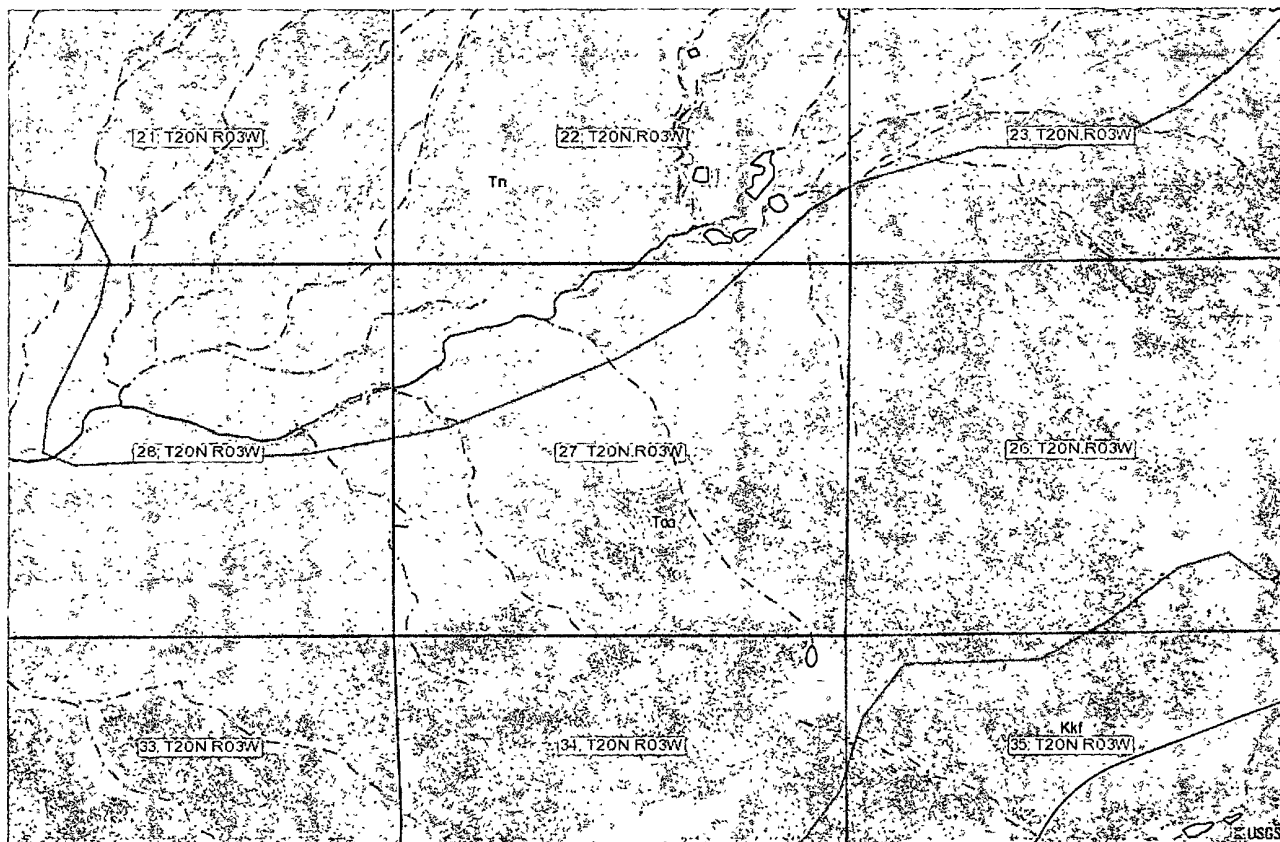
Distances from SI Federal 27 #1

- Red Ring – 200 ft. radius
- Orange Ring – 300 ft. radius
- Yellow Ring – 500 ft. radius
- Green Ring – 1000 ft. radius



Distances from SI Federal 27 #1

- Red Ring – 200 ft. radius
- Orange Ring – 300 ft. radius
- Yellow Ring – 500 ft. radius
- Green Ring – 1000 ft. radius



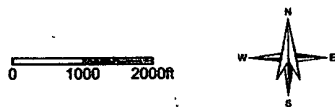
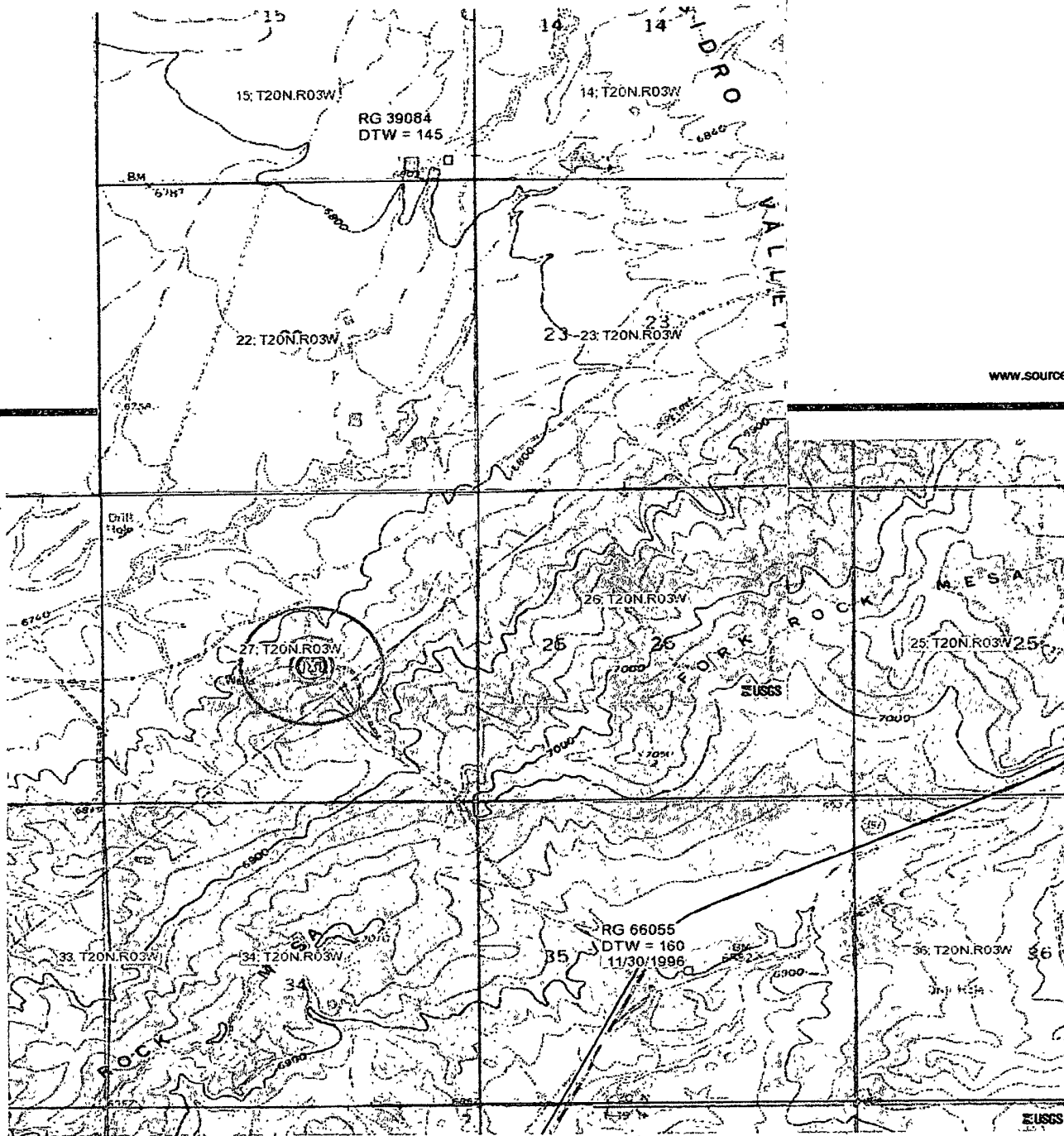
Petroleum Recovery
Research Center

Geology & Surface Water

Figure: 3

High Plains Petroleum Corp. SI Federal 27 #1 Well

Apr 19, 2012



Petroleum Recovery
Research Center

Water depth of nearby wells

Figure: 4

High Plains Petroleum Corp. SI Federal 27 #1 Well

Apr. 19, 2012

Map Layers		Reset Marker	Identify																									
Print single page																												
Go To Location																												
Query																												
Feature: <input type="text" value="USGS"/> Distance(ft): <input type="text" value="1000"/> Submit																												
USGS wells near the point: <table border="1"> <thead> <tr> <th>Site_No</th> <th>Dist...</th> <th>Depth</th> <th>Water</th> <th>Date</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				Site_No	Dist...	Depth	Water	Date																				
Site_No	Dist...	Depth	Water	Date																								
Additional Information Longitude, Latitude (WGS84): -107.16233, 35.94382 Scale = 1 : 24K																												

Map Layers		Reset Marker	Identify																									
Print single page																												
Go To Location																												
Query																												
Feature: <input type="text" value="OSE"/> Distance(ft): <input type="text" value="1000"/> Submit																												
OSE wells near the point: <table border="1"> <thead> <tr> <th>Name</th> <th>Depth</th> <th>Depth</th> <th>Water</th> <th>Date</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				Name	Depth	Depth	Water	Date																				
Name	Depth	Depth	Water	Date																								
Additional Information Longitude, Latitude (WGS84): -107.16233, 35.94382 Scale = 1 : 24K																												

High Plains Petroleum Corporation
 - SI Federal 27 #1
 2310' FSL & 2310' FEL
 Section 27, T20N, R3W, NMPM
 Sandoval County, New Mexico



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 Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RG 38721			SA	3	2	2	17	20N	03W	304330	3982590*	665	200	465
RG 39084			SA	4	4	4	15	20N	03W	307722	3981313*	390	145	245
RG 41629			SA	3	2		17	20N	03W	303506	3981803*	1030	400	630
RG 64587			SA	4	4	4	07	20N	03W	302927	3983024*	758		
RG 64587 DCL			SA	4	4	4	07	20N	03W	302927	3983024*	758	456	302
RG 64588			SA	4	2	4	08	20N	03W	304548	3983394*	590		
RG 64588 DCL			SA	4	2	4	08	20N	03W	304548	3983394*	590	390	200
RG 64589			SA	4	4	4	06	20N	03W	302962	3984632*	780		
RG 64589 DCL			SA	4	4	4	06	20N	03W	302962	3984632*	780	543	237
RG 66055			SA	1	1	4	35	20N	03W	308632	3977066*	325	160	165
RG 74979			SA	3	2	3	20	20N	03W	303471	3980194*	160	60	100
RG 77017			SA	2	3	2	17	20N	03W	304118	3982396*	1030		
RG 87569 POD1			SA	2	3	2	17	20N	03W	304118	3982396*	1030		

Average Depth to Water: **294 feet**

Minimum Depth: **60 feet**

Maximum Depth: **543 feet**

Record Count: 13

Basin/County Search:

Basin: Rio Grande

County: Sandoval

PLSS Search:

Township: 20N

Range: 03W

High Plains Petroleum Corporation
- SI Federal 27 #1
2310' FSL & 2310' FEL
Section 27, T20N, R3W, NMPM
Sandoval County, New Mexico

*UTM location was derived from PLSS - see Help

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

Wells Without Well Log Information

(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)

POD Number	POD		County	Source	q q q			Sec	Tws	Rng	X	Y
	Code	Subbasin			64	16	4					
<u>RG 38721</u>			SA	Artesian	3	2	2	17	20N	03W	304330	3982590*
<u>RG 39084</u>			SA	Artesian	4	4	4	15	20N	03W	307722	3981313*
<u>RG 62115</u>			SA		4	1	3	08	20N	03W	303338	3983419*
<u>RG 62115 EXP</u>			SA		4	1	3	08	20N	03W	303338	3983419*
<u>RG 64587</u>			SA	Shallow	4	4	4	07	20N	03W	302927	3983024*
<u>RG 64587 DCL</u>			SA	Shallow	4	4	4	07	20N	03W	302927	3983024*
<u>RG 64587 S</u>			SA	Shallow	4	2	4	08	20N	03W	304548	3983394*
<u>RG 64587 S-2</u>			SA	Shallow	4	4	4	06	20N	03W	302962	3984632*
<u>RG 64587 S-3</u>			SA		4	1	3	08	20N	03W	303338	3983419*
<u>RG 64588</u>			SA		4	2	4	08	20N	03W	304548	3983394*
<u>RG 64588 DCL</u>			SA	Shallow	4	2	4	08	20N	03W	304548	3983394*
<u>RG 64589</u>			SA		4	4	4	06	20N	03W	302962	3984632*
<u>RG 64589 DCL</u>			SA	Shallow	4	4	4	06	20N	03W	302962	3984632*
<u>RG 77017</u>			SA		2	3	2	17	20N	03W	304118	3982396*
<u>RG 87569 POD1</u>			SA		2	3	2	17	20N	03W	304118	3982396*

Record Count: 15

Basin/County Search:

Basin: Rio Grande

County: Sandoval

PLSS Search:

Township: 20N

Range: 03W

High Plains Petroleum Corporation
- SI Federal 27 #1
2310' FSL & 2310' FEL
Section 27, T20N, R3W, NMPM
Sandoval County, New Mexico

*UTM location was derived from PLSS - see Help

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

Wells with Well Log Information

(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 Code	Subbasin	County	Source	6416 4	Sec	Tws	Rng	X	Y	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
RG 41629			SA	Shallow	3	2	17	20N 03W	303506	3981803*	05/01/1984	05/17/1984	05/24/1984	1030	400		709
RG 66055			SA	Shallow	1	1	4	35 20N 03W	308632	3977066*	11/30/1996	12/04/1996	12/09/1996	325	160		539
RG 74979			SA	Shallow	3	2	3	20 20N 03W	303471	3980194*	11/20/2000	11/22/2000	11/28/2000	160	60		1394

Record Count: 3

Basin/County Search:

Basin: Rio Grande

County: Sandoval

PLSS Search:

Township: 20N

Range: 03W

High Plains Petroleum Corporation
- SI Federal 27 #1
2310' FSL & 2310' FEL
Section 27, T20N, R3W, NMPM
Sandoval County, New Mexico

*UTM location was derived from PLSS - see Help

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.

3/30/12 1:51 PM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION



New Mexico Office of the State Engineer

Point of Diversion with Meter Attached

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(in feet)

POD Number	Code	Subbasin	County	Source	6416 4	Sec	Tws	Rng	X	Y	Start Date	Finish Date	Depth Well	Depth Water
RG 41629			SA	Shallow	3 2	17	20N	03W	303506	3981803*	05/01/1984	05/17/1984	1030	400
RG 64587			SA	Shallow	4 4 4	07	20N	03W	302927	3983024*		07/31/1972	758	
RG 64587 S			SA	Shallow	4 2 4	08	20N	03W	304548	3983394*				
RG 64587 S-2			SA	Shallow	4 4 4	06	20N	03W	302962	3984632*				

Record Count: 4

Basin/County Search:

Basin: Rio Grande

County: Sandoval

PLSS Search:

Township: 20N

Range: 03W

High Plains Petroleum Corporation
SI Federal 27 #1
2310' FSL & 2310' FEL
Section 27, T20N, R3W, NMPM
Sandoval County, New Mexico

*UTM location was derived from PLSS - see Help

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

Currently Active Points of Diversion

(with Well Drill Dates & Depths)

		(acre ft per annum)				(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)		(NAD83 UTM in meters)				(in feet)	
WR File Nbr	Sub basin	Use	Diversion	County	POD Number	Grant	Source	6416 4	Sec	Tws	Rng	X	Y	Start Date	Finish Date	Depth Well	Depth Water
RG 38721		STK	12	SA	RG 38721		Artesian	3	2	2	17	20N	03W	304330	3982590*	04/15/1964	665 200
RG 39084		STK	23	SA	RG 39084		Artesian	4	4	4	15	20N	03W	307722	3981313*	09/01/1963	390 145
RG 41629		OIL	6	SA	RG 41629		Shallow	3	2		17	20N	03W	303506	3981803* 05/01/1984	05/17/1984	1030 400
RG 62115 EXP		EXP		SA	RG 62115 EXP			4	1	3	08	20N	03W	303338	3983419*		
RG 64587		UTL	177	SA	RG 62115			4	1	3	08	20N	03W	303338	3983419*		
High Plains Petroleum Corporation SI Federal 27 #1 2310' FSL & 2310' FEL Section 27, T20N, R3W, NMPM Sandoval County, New Mexico				SA	RG 64587		Shallow	4	4	4	07	20N	03W	302927	3983024*	07/31/1972	758
				SA	RG 64587 S		Shallow	4	2	4	08	20N	03W	304548	3983394*		
				SA	RG 64587 S-2		Shallow	4	4	4	06	20N	03W	302962	3984632*		
				SA	RG 64587 S-3			4	1	3	08	20N	03W	303338	3983419*		
				SA	RG 64588			4	2	4	08	20N	03W	304548	3983394*	07/31/1972	590
				SA	RG 64589			4	4	4	06	20N	03W	302962	3984632*	08/31/1972	780
RG 64587 DCL		DOM		SA	RG 64587 DCL		Shallow	4	4	4	07	20N	03W	302927	3983024* 07/01/1972	07/01/1972	758 456
RG 64588		MDW	20	SA	RG 64588			4	2	4	08	20N	03W	304548	3983394*	07/31/1972	590
RG 64588 DCL		DOM		SA	RG 64588 DCL		Shallow	4	2	4	08	20N	03W	304548	3983394* 07/01/1972	07/01/1972	590 390
RG 64589		MDW	32	SA	RG 64589			4	4	4	06	20N	03W	302962	3984632*	08/31/1972	780
RG 64589 DCL		DOM		SA	RG 64589 DCL		Shallow	4	4	4	06	20N	03W	302962	3984632* 08/01/1972	08/01/1972	780 543
RG 66055		DOM	3	SA	RG 66055		Shallow	1	1	4	35	20N	03W	308632	3977066* 11/30/1996	12/04/1996	325 160
RG 74979		STK	3	SA	RG 74979		Shallow	3	2	3	20	20N	03W	303471	3980194* 11/20/2000	11/22/2000	160 60

*UTM location was derived from PLSS - see Help

WR File Nbr	Sub basin	Use	Diversion	County	POD Number	Grant	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)		Start Date	Finish Date	(in feet)	
								q	q	q	q	X	Y			Depth Well	Depth Water
RG 77017		STK	3	SA	RG 77017		6416 4	2	3	2	17	20N	03W	304118	3982396*		1030
RG 87569		STK	3	SA	RG 87569 POD1		6416 4	2	3	2	17	20N	03W	304118	3982396*		1030

Record Count: 20

POD Search:

POD Basin: Rio Grande

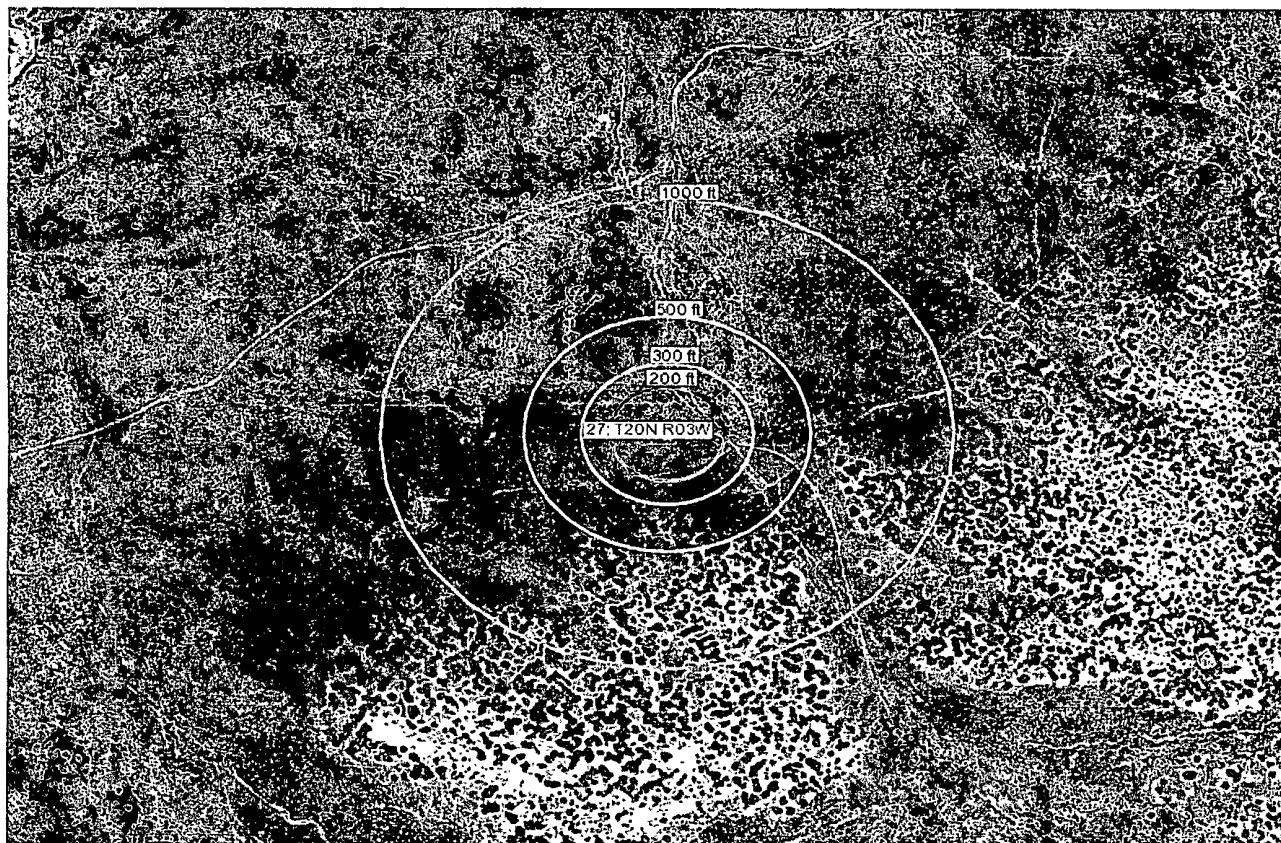
PLSS Search:

Township: 20N Range: 03W

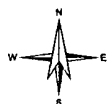
Sorted by: File Number

*UTM location was derived from PLSS - see Help

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.



0 200 400ft



Petroleum Recovery
Research Center

Watercourse distance and human buildings

Figure: 5

High Plains Petroleum Corp. SI Federal 27 #1 Well

Apr 19, 2012

Petroleum Recovery Research Center	Closest Municipality	Figure: 6
	High Plains Petroleum Corp./SI Federal 27 #1 Well	Apr 20, 2012

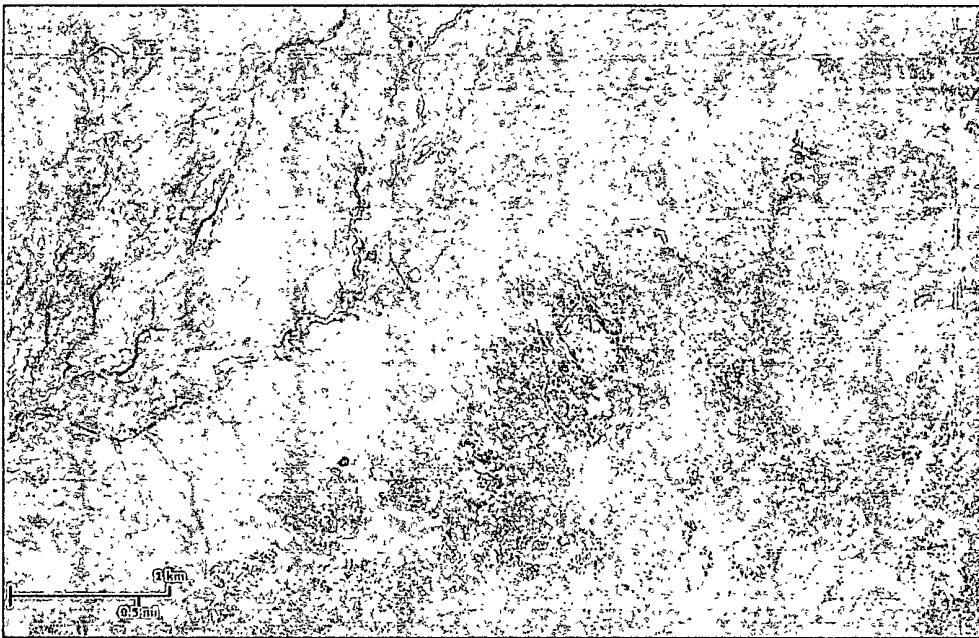


U.S. Fish and Wildlife Service

National Wetlands Inventory

Fork Rock Mesa
NM

Apr 11, 2012



Wetlands

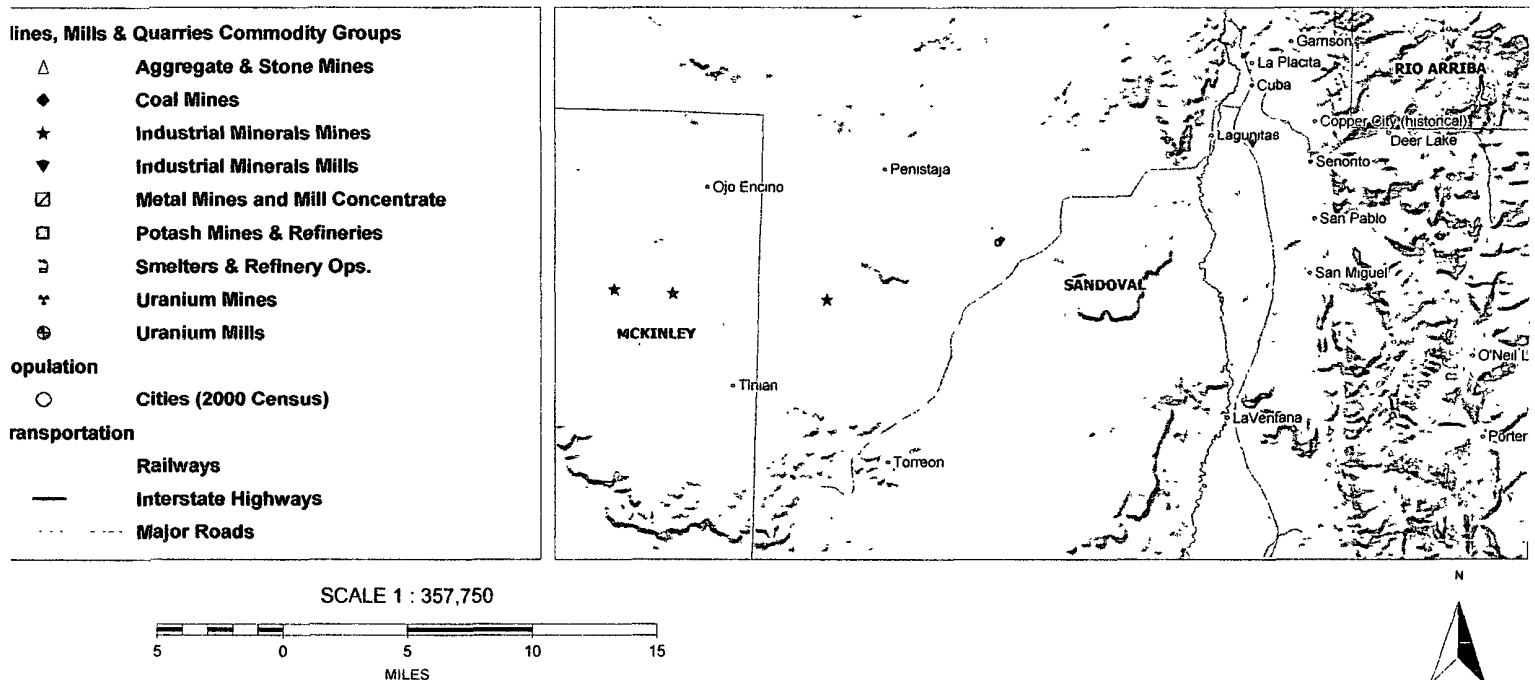
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The U.S. Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

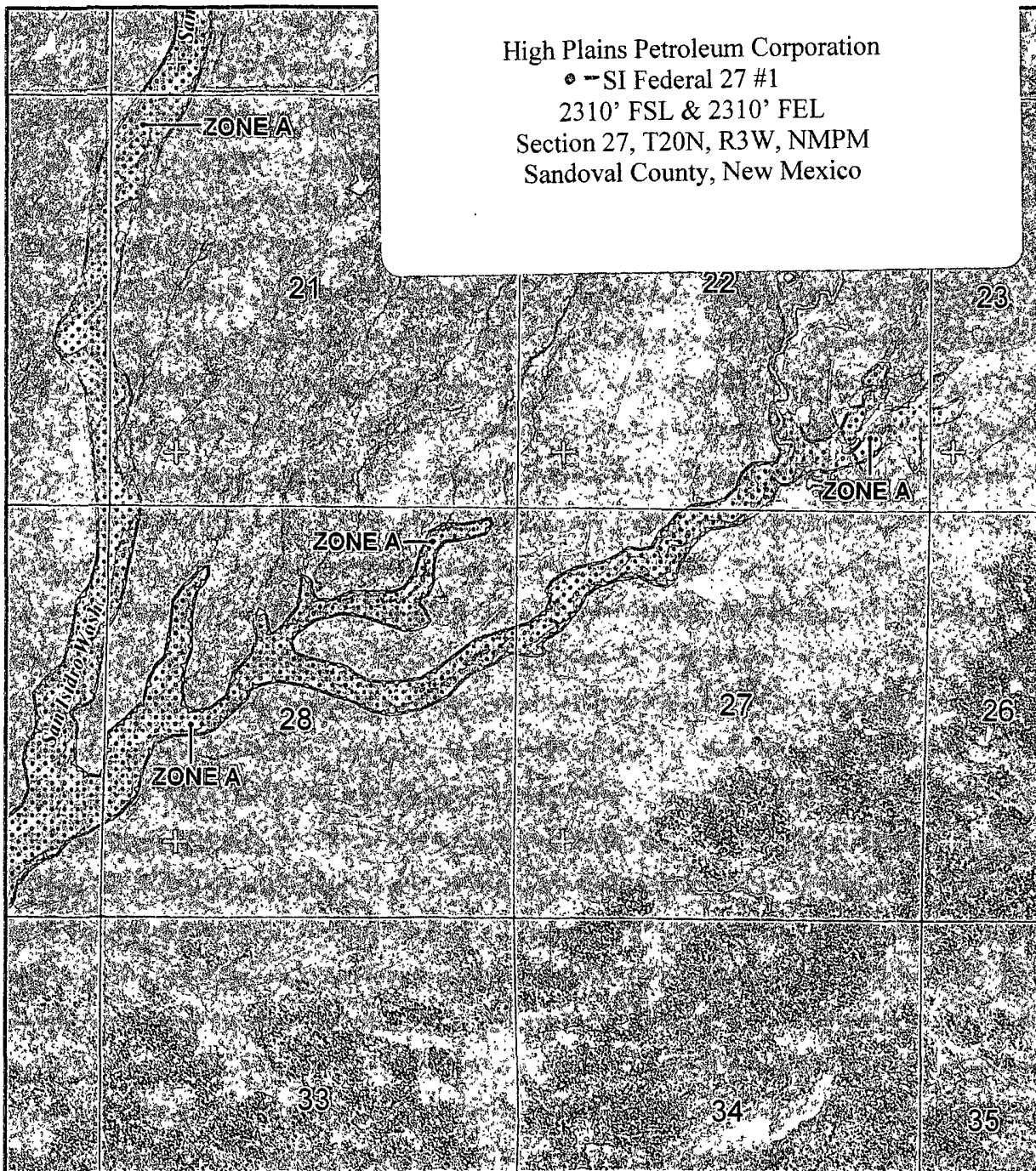
High Plains Petroleum Corporation
O - SI Federal 27 #1
2310' FSL & 2310' FEL
Section 27, T20N, R3W, NMPM
Sandoval County, New Mexico

MMQonline Public Version

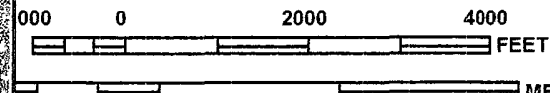


High Plains Petroleum Corporation
 •SI Federal 27 #1
 2310' FSL & 2310' FEL
 Section 27, T20N, R3W, NMPM
 Sandoval County, New Mexico

High Plains Petroleum Corporation
 • --SI Federal 27 #1
 2310' FSL & 2310' FEL
 Section 27, T20N, R3W, NMPM
 Sandoval County, New Mexico



MAP SCALE 1" = 2000'



NFIP

PANEL 0550D

FIRM
 FLOOD INSURANCE RATE MAP
 SANDOVAL COUNTY,
 NEW MEXICO
 AND INCORPORATED AREAS

PANEL 550 OF 2225

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
SANDOVAL COUNTY			
UNINCORPORATED AREAS	350055	0550	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
 35043C0550D

MAP REVISED
 MARCH 18, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

High Plains Petroleum Corporation
SI Federal 27 #1
Pit Design and Construction Plan

In accordance with Rule 19.15.17, the following information describes the design and construction of a temporary pit on High Plains Petroleum Corporation's location for SI Federal 27 #1.

1. High Plains Petroleum Corporation will design and construct a temporary pit to contain liquids and solids, prevent contamination of fresh water and protect public health and environment.
2. Before the pit is constructed, top soil will be stockpiled for later use in restoration.
3. High Plains Petroleum Corporation will post a well sign, not less than 12" by 14", on the well site prior to construction of the temporary pit. The sign will list the operator, the well name, the location of the well by unit letter, section, township, range, the API number, and emergency telephone numbers.
4. High Plains Petroleum Corporation shall construct all new fences utilizing 48" steel mesh field-fence (hogwire). T-posts shall be installed every 12 feet and corners shall be anchored utilizing a second T-post. The temporary pit will be fenced at all times excluding drilling or completion operations, when the front side of the fence will be temporarily removed for operational purposes.
5. High Plains Petroleum Corporation shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
6. High Plains Petroleum Corporation shall construct the pit so that the slopes are no steeper than two horizontal feet to 1 vertical foot.
7. The temporary pit will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
8. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
9. The liner will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
10. High Plains Petroleum Corporation shall ensure that the liner is protected from any fluid force or mechanical damage at any point of discharge into or suction from the lined temporary pit.
11. The pit shall be protected from run-off by constructing and maintaining a diversion ditch around the location.
12. The volume of the temporary pit shall not exceed 10 acre-feet, including freeboard.

High Plains Petroleum Corporation
SI Federal 27 #1
Maintenance and Operating Plan

In accordance with Rule 19.15.17.12, the following information describes the operation and maintenance of the temporary pit on High Plains Petroleum Corporation's location for SI Federal 27 #1.

1. High Plains Petroleum Corporation will operate and maintain a temporary pit to contain liquids and solids, prevent contamination of fresh water and protect the health and environment.
2. High Plains Petroleum Corporation shall dispose of all drilling fluids in a manner, approved by division rules, that prevent the contamination of fresh water and protect public health and the environment.
3. High Plains Petroleum Corporation will not discharge or store any hazardous waste in any temporary pit.
4. If the pit liner's integrity is compromised or if any penetration of the liner occurs above the liquid's surface, then High Plains Petroleum Corporation shall notify the Aztec District office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
5. If a leak develops below the liquid's level, High Plains Petroleum Corporation shall remove all liquids above the damaged liner within 48 hours, notify the Aztec District office within 48 hours of the discovery and either repair the damage, or replace the liner.
6. The liner shall be protected from any fluid force or mechanical damage.
7. The pit shall be protected from run-off by constructing and maintaining a diversion ditch around the location.
8. High Plains Petroleum Corporation shall immediately remove any visible layer of oil from the surface of the pit after cessation of drilling operations. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will be stored onsite until closure of pit.
9. Only fluids generated during the drilling process will be discharged into the temporary pit.
10. High Plains Petroleum Corporation will maintain the temporary pit free of miscellaneous solid waste or debris.
11. During drilling operations, High Plains Petroleum Corporation will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged in the IADC reports. High Plains Petroleum Corporation will file this log with the Aztec District office upon closure of the pit.
12. After drilling operations, High Plains Petroleum Corporation will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at High Plains Petroleum Corporation's office electronically and will be filed with the Aztec District office upon closure of the pit.
13. High Plains Petroleum Corporation shall maintain at least two feet of freeboard for a temporary pit.
14. High Plains Petroleum Corporation shall remove all free liquids from the temporary pit within 30 days from the date the operator releases the drilling rig, which may require an extension since the well is to be drilled just before the beginning of the monsoon season in July.

High Plains Petroleum Corporation
SI Federal 27 #1
Closure Plan

In accordance with Rule 19.15.17.13 NMAC, the following information describes the closure requirements for a temporary pit to be on High Plains Petroleum Corporation's location for SI Federal 27 #1.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of the pit closure. The closure report will be filed on C-144 and incorporate the following:

- Details on back-filling, capping and covering, where applicable
 - Plot Plan (Pit diagram)
 - Inspection reports
 - Sampling Results
 - Certification
 - Plat of pit location on Form C-105
1. All free standing liquids will be removed from the pit at the start of the pit closure process and disposed of in a division-approved facility.
 2. The method of closure for the temporary pit will be on-site burial.
 3. The BLM, which is the surface owner, shall be notified of High Plains Petroleum Corporation's closure plan using a means that provides proof of notice.
 4. Within 6 months of drilling rig removal, High Plains Petroleum Corporation will close, recontour and reseed the temporary pit.
 5. Notice of Closure will be given to the Aztec District office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
 - i. Operator's name
 - ii. Location by unit Letter, Section, Township, Range, Well name and number, and API Number.
 6. Liner of the temporary pit will be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility.
 7. Pit contents shall be mixed with non-waste containing earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
 8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e.. Dig and haul to the Industrial Ecosystem Inc. Land Farm (Permit # NM-01-0010B) or other NMOCD approved facility.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	1000

9. Upon completion of solidification and testing, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
10. Re-contouring of location will match, fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
11. Notification will be sent to OCD when the reclaimed area is seeded.
12. High Plains Petroleum Corporation shall seed the disturbed areas the first growing season after the pit has been closed. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mix will be used. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successful vegetative growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.
13. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of the well on the pad. The marker will be a four foot tall riser with the operator's information at the time the well on the pad is abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and Number, Unit Letter, Section, Township, Range and an indicator that the marker is an onsite burial location.