District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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
June 24, 2008

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.

5

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

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.

Operator: PARAWON OPERATING LLC OGRID #: 225465
Address: c/oMike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401
Facility or well name: NE Hogback Unit #73
API Number: 30-045-34754 OCD Permit Number:
U/L or Qtr/Qtr B Section 10 Township 30N Range 16W County: San Juan
Center of Proposed Design: Latitude 36.83260 N Longitude -108.50991 W NAD: ☐1927 ☒ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ Steel Pit
☒ Lined ☐ Unlined
Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC
☐ Other ☒ String-Reinforced
Seams: ☒ Welded ☒ Factory ☐ Other
Volume: 975 bbl Dimensions: L 70' x W 13' x D 6'

☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
☐ Drying Pad ☐ Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined
Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC
☐ Other
Seams: ☐ Welded ☐ Factory ☐ Other
Volume: bbl yd³
Dimensions: Length x Width

☐ **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

Fencing: Subsection D of 19.15.17.11 NMAC
☐ Chain link, six feet in height, two strands of barbed wire at top
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
Netting: Subsection E of 19.15.17.11 NMAC
☐ Screen ☐ Netting ☐ Other
☐ Monthly inspections
Signs: Subsection C of 19.15.17.11 NMAC
☐ 12'x24', 2' lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19.15.3.103 NMAC

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

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.

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	☐ Yes ☒ 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	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ 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	☐ 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 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ 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

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 - 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: _____

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 (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (required 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 - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

NMAC

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

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

Proposed Closure: 19.15.17.13 NMAC

Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ 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)

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. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Ground water is between 50 and 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
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 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 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 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; 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 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ 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

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

Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) ***Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings.***

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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 and Design of Burial Trench (if applicable) 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

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): Mike Pippin Title: Petroleum Engineer

Signature: Mike Pippin Date: 7/11/08

e-mail address: mike@pippinllc.com Telephone: 505-327-4573

OCD Approval: ☑ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: Brandon Powell **Approval Date:** 7-16-08

Title: Enviro Ispec **OCD Permit Number:** _____

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

☐ **Closure Completion Date:** _____

Closure Method:

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method

☐ If different from approved plan, please explain.

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
- ☐ Proof of Deed Notice (if applicable)
- ☐ Plot Plan
- ☐ Confirmation Sampling Analytical Results
- ☐ Waste Material Sampling Analytical Results
- ☐ 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

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: _____

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

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 October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	32870	HORSESHOE GALLUP

[4] Property Code	[5] Property Name	[6] Well Number
300241	NE HOGBACK UNIT	73

[7] OGRID No.	[8] Operator Name	[9] Elevation
225465	PARAWON OPERATING LLC	5563'

[10] Surface Location

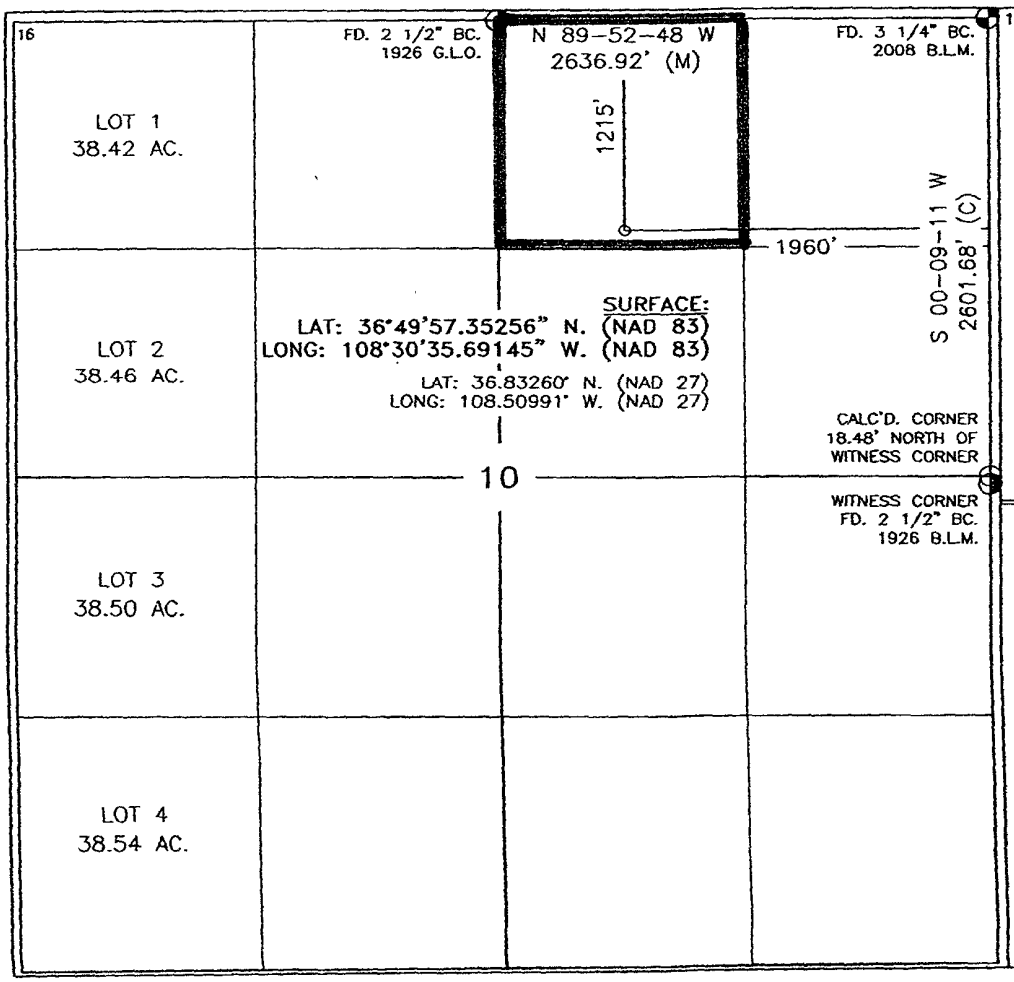
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	10	30-N	16-W		1215	NORTH	1960	EAST	SAN JUAN

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
40 ACRES NW¼ NE¼			

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



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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Mike Pippin 7-3-08
Signature Date

MIKE PIPPIN
Printed Name

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 knowledge and belief.

JUNE 9, 2008
Date of Survey

Signature and Seal of Professional Surveyor:

ROY A. RUSH
NEW MEXICO
8894
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number

WELL PAD DIAGRAM

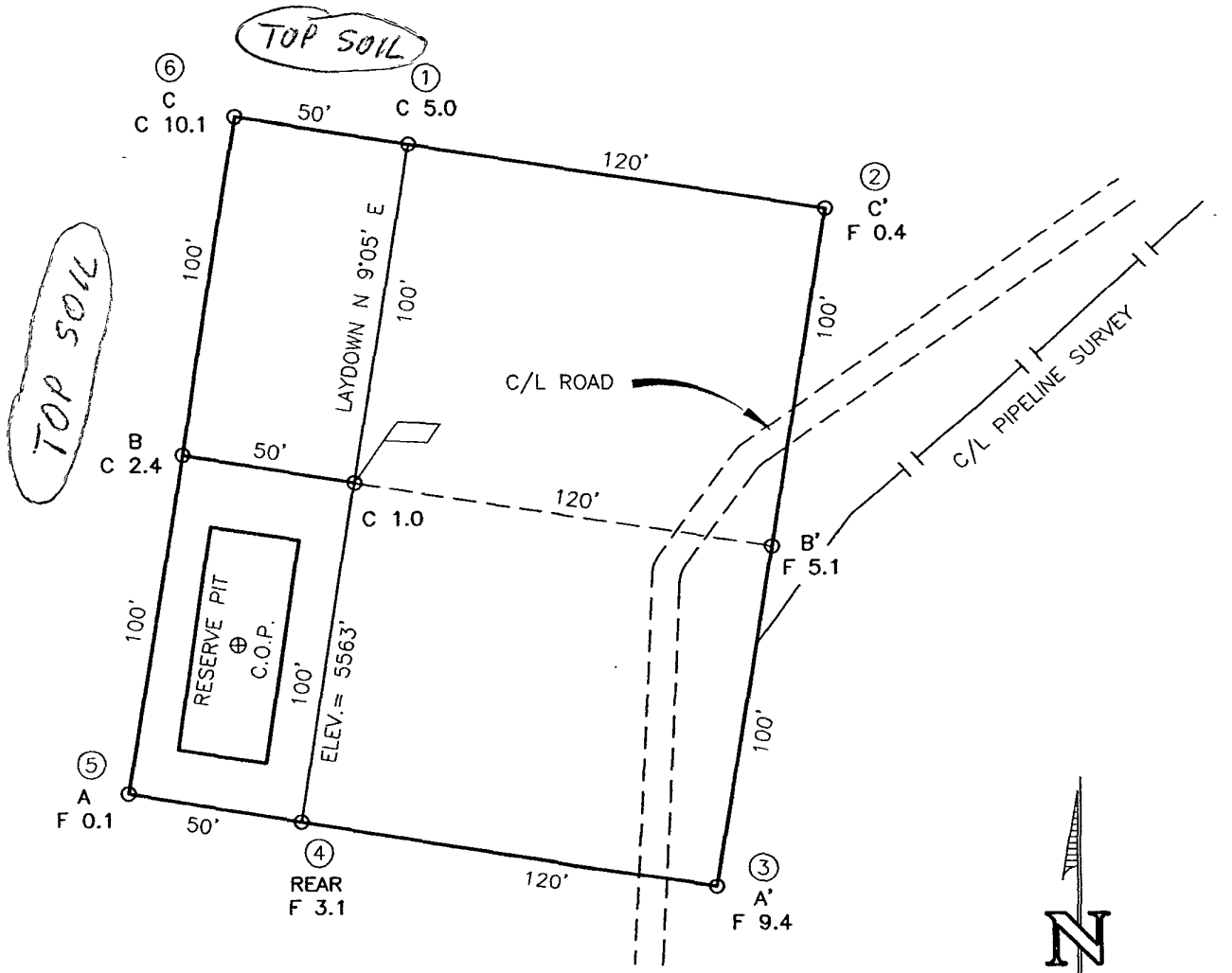
COMPANY: PARAWON OPERATING LLC

LEASE: NE HOGBACK UNIT No. 73

FOOTAGE: 1215 FNL 1960 FEL

SEC.: 10, TWN: 30-N, RNG: 16-W, NMPM

ELEVATION: 5563'



CENTER OF PIT

NAD 83
LAT. = 36.83524° N
LONG. = 108.50999° W

NAD 27
LAT. = 36°49'57.08530" N
LONG. = 108°30'35.95007" W

N

SCALE IN FEET
0 25 50

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

REF. DWG. PAR001_CF WELL PAD CROSS SECTION

REVISION:	DATE:	REVISED BY:
ADD C.O.P.	07/09/08	B.K.
LOCATION RESTAKE	6/13/08	G.V.

Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O. Box 510 -Farmington, NM 87499
Phone (505) 326-1772 • Fax (505) 326-6019
NEW MEXICO L.S. 8894

DRAWN BY: G.V.	CADFILE: PAR001_PL8
ROW#: PAR001	DATE: 3/31/08

WELL PAD CROSS-SECTIONAL DIAGRAM

COMPANY: PARAWON OPERATING LLC

LEASE: NE HOGBACK UNIT No 73

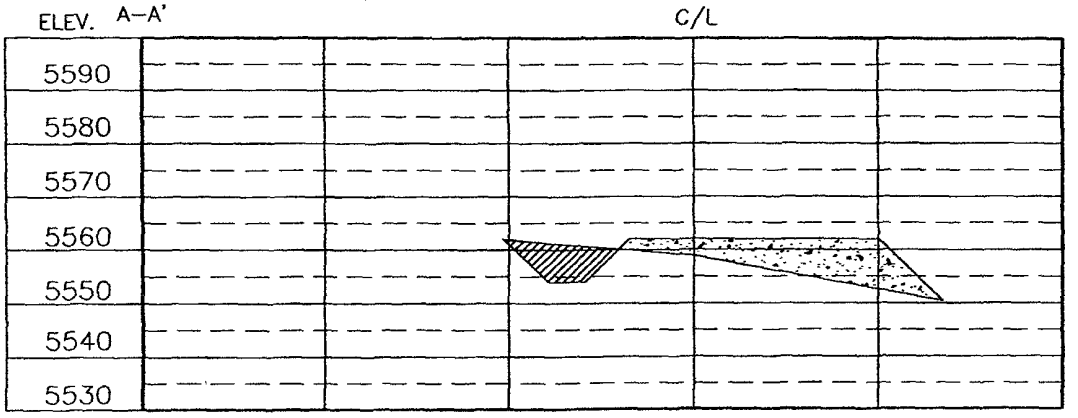
FOOTAGE: 1215 FNL 1960 FEL

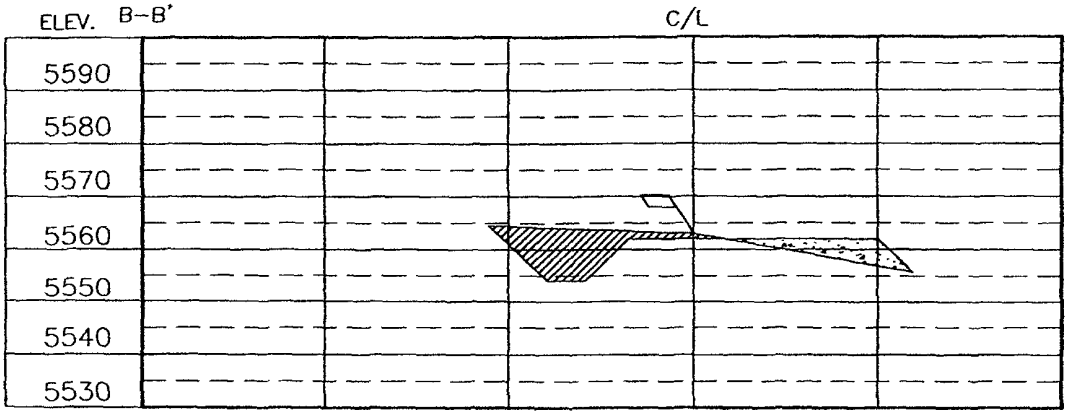
SEC.: 10, TWN: 30-N, RNG: 16-W, NMPM

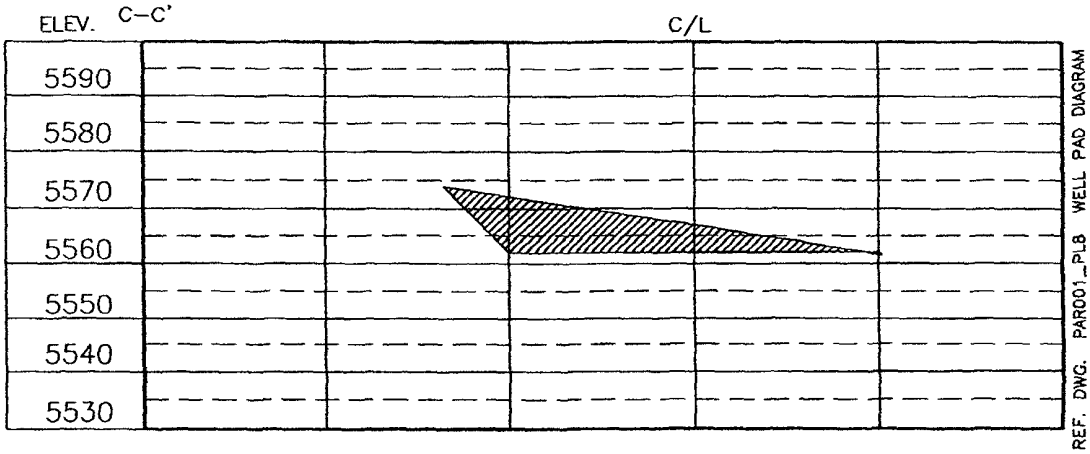
ELEVATION: 5563'

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.







REF. DWG. PAR001_PLB WELL PAD DIAGRAM

REVISION:	DATE:	REVISED BY:
LOCATION RESTAKE	6/13/08	G.V.

Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O. Box 510 Farmington, NM 87499
Phone (505) 326-1772 • Fax (505) 326-6019
NEW MEXICO L.S. 8894

DRAWN BY: G.V. | CADFILE: PAR001_CF
ROW#: PAR001 | DATE: 3/31/08

PARAWON OPERATING LLC

NE HOGBACK UNIT #73

1215' FNL, 1960' FEL

H Sec. 10 T30N R16W

San Juan County, NM

HYDROGEOLOGICAL REPORT

The subject well is located about one mile west of the Hogback monocline west of Farmington. The Point Lookout member of the Mesaverde group forms the land surface over much of the NE Hogback Unit and the subject well. It overlies the Mancos Shale, which for the most part has very little or no permeability until the Gallup sandstones of the producing formation are encountered. Therefore, a water table in the classical sense does not exist in the area of this well. According to the State Engineer's office, there are no water wells within 1000 feet of the proposed well.

The Point Lookout Sandstone, lowest unit in the classical Mesaverde Group, dips toward the basin center to a maximum depth of 6,400 ft.

GEOLOGIC CHARACTERISTICS: This coastal marine sandstone was named by Collier (1919) for exposures on the prominent topographic feature of that name in Mesa Verde National Park, southwest Colorado. The Point Lookout is well exposed in The Hogback monocline west of Farmington. The sandstone is a very fine to medium-grained, immature to submature, lithic arkose to arkose. Thickness of the Point Lookout ranges from 40 to 415 ft. The Point Lookout lies conformably on the Mancos Shale. The contact is marked by a change from shale to an interval of interbedded mudstone and sandstone in the lower part of the Point Lookout.

HYDROLOGIC PROPERTIES: The potentiometric surface of ground water in the Point Lookout is shown in fig. 41 (sheet6, pocket). Aquifer test data are sparse. A test by Dames and Moore (1977) northeast of Crownpoint (19.11.31.131) gave a transmissivity of approximately 240 ft2/d for the main body of the Point Lookout Sandstone and a transmessivity of approximately 70ft2/d for the Hosta Sandstone Tongue. In contrast, Craigg (1980, p. 52) reported that several tests of the Point Lookout Sandstone south of Torreon gave transmissivities of less than 1 ft2/d. An average hydraulic conductivity of 0.01 ft/d (from permeability data of Reneau and Harris, 1957, p.41) would give a transmissivity of approximately 2 ft2/d for a 200-ft-thick section. Craigg (1980, p.52) reported hydraulic conductivities ranging from 0.002 to 0.02 ft/d in the horizontal direction and from 0.002 to .01 ft/d in the vertical direction for tests on three cores taken from test holes south of Torreon.

WATER QUALITY AND USE: The specific conductance of water from the Point Lookout Sandstone, like that from the Menefee, generally exceeds 1,500 umhos, although water with a conductance of less than 1,000 umhos is produced from a few wells and springs on the flanks of the Chuska and Cebolleta Mountains. The Point lookout sandstone is not widely used as a source of water; a few stock and domestic wells tap this unit on the southern and western side of the basin.

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, 70p.

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 16W Sections: 10,11

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

POD / Surface Data Report Avg Depth to Water Report Water Column Report

Clear Form iWATERS Menu Help

AVERAGE DEPTH OF WATER REPORT 07/08/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 16W Sections 10,11

NAD27 X. Y Zone. Search Radius

County Basin Number Suffix

Owner Name (First) (Last) Non-Domestic Domestic All

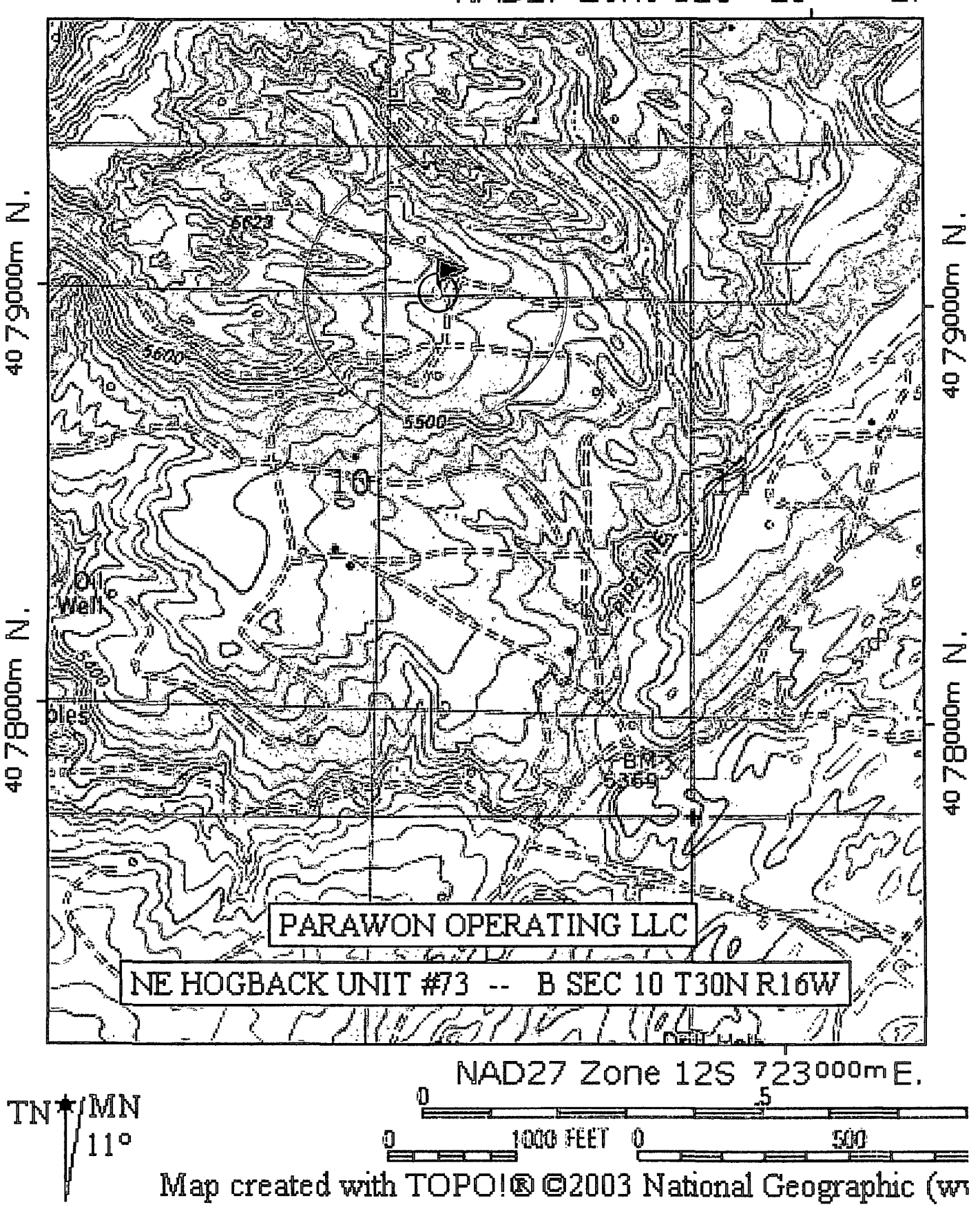
POD / Surface Data Report Avg Depth to Water Report Water Column Report

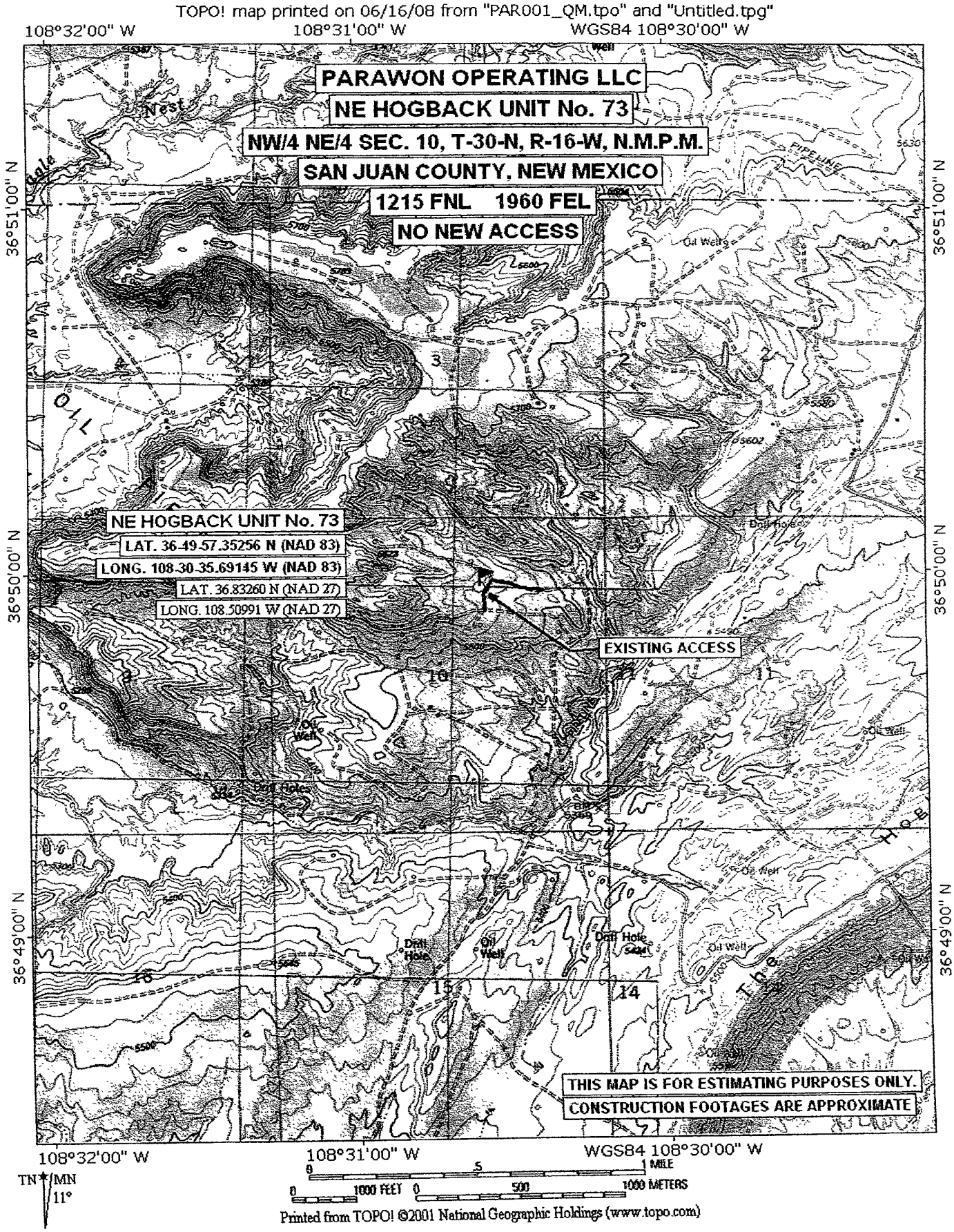
Clear Form IWATERS Menu Help

POD / SURFACE DATA REPORT 07/08/2008

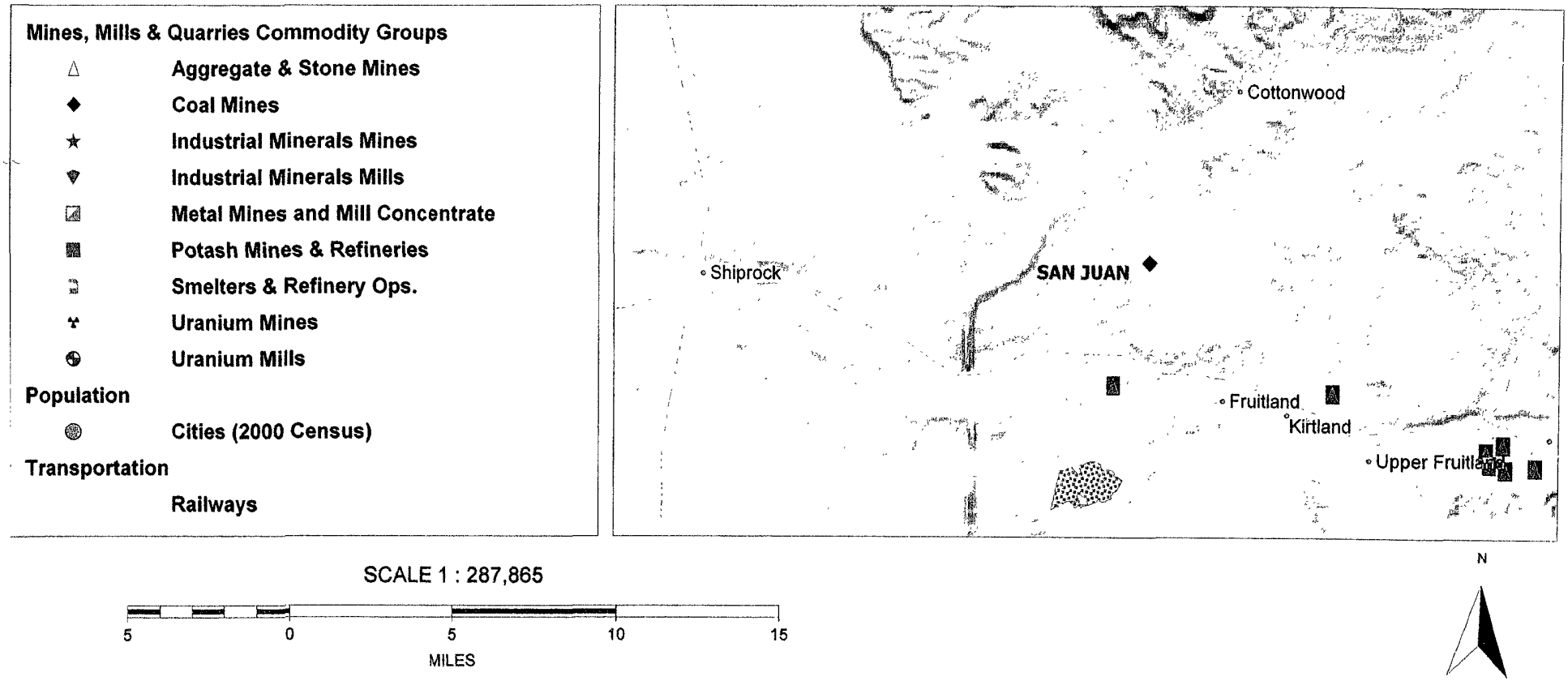
DB File Nbr	(acre ft per annum) Use	Diversion	Owner	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest Source	Tws	Rng	Sec	q	q	q	X Y are in Feet Zone	X	Y	UTM are in Meters) UTM_Zone	Easting	Northing	Start Date	Finish Date	Depth Well

No Records found, try again

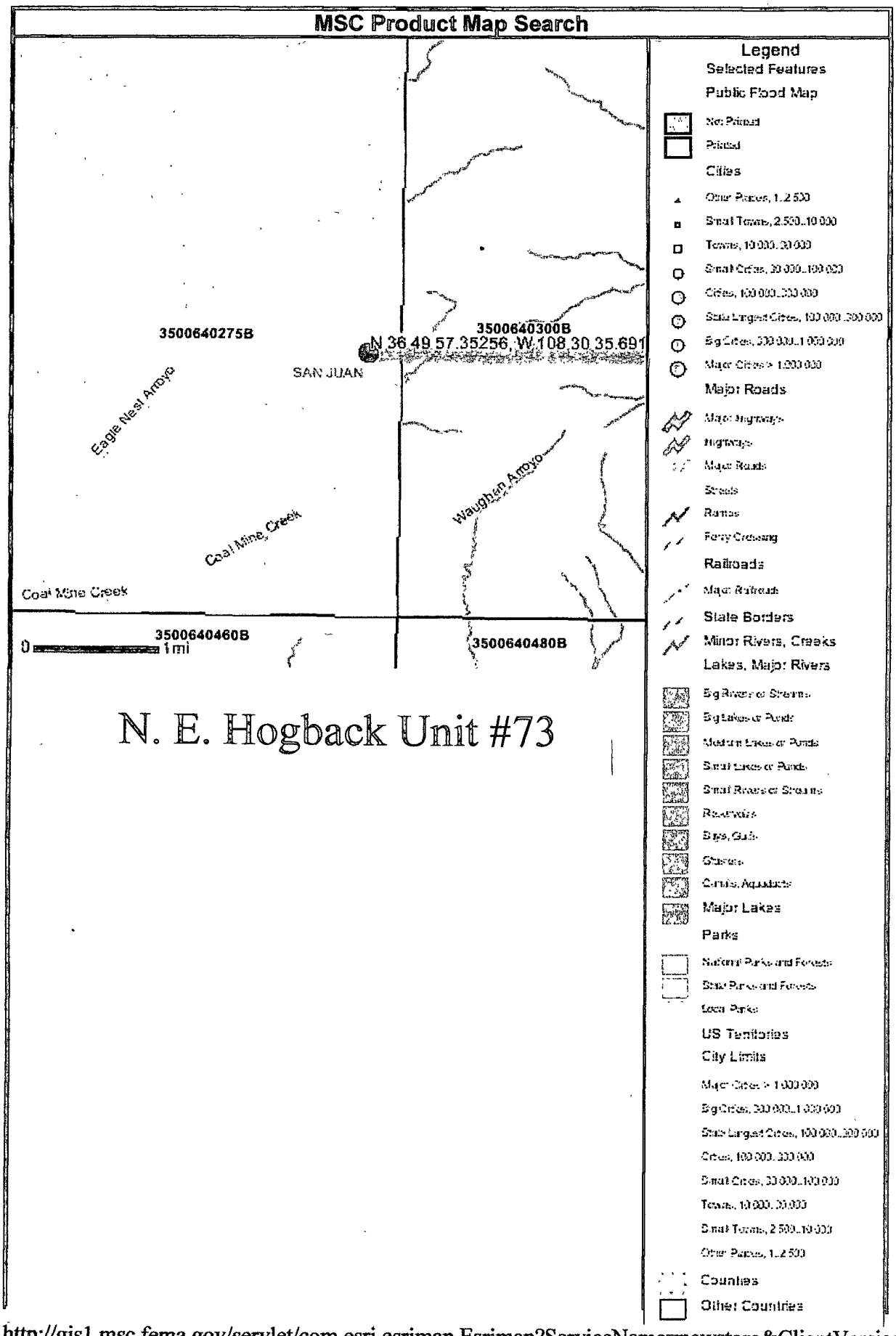

map printed on 07/09/08 from "New Mexico.tpo" and "Untitl
NAD27 Zone 12S 723000m E.
40 79000m N.
40 78000m N.
5600
5500
10
Well
BM
5369
PARAWON OPERATING LLC
NE HOGBACK UNIT #73 -- B SEC 10 T30N R16W
NAD27 Zone 12S 723000m E.
TN
MN
11°
0
.5
0
1000 FEET
0
500
Map created with TOPO!® ©2003 National Geographic (w


TOPO! map printed on 06/16/08 from "PAR001_QM.tpo" and "Untitled.tpg"
108°32'00" W
108°31'00" W
WGS84 108°30'00" W
36°51'00" N
36°50'00" N
36°49'00" N
PARAWON OPERATING LLC
NE HOGBACK UNIT No. 73
NW/4 NE/4 SEC. 10, T-30-N, R-16-W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO
1215 FNL 1960 FEL
NO NEW ACCESS
NE HOGBACK UNIT No. 73
LAT. 36.49.57.35256 N (NAD 83)
LONG. 108.30.35.69145 W (NAD 83)
LAT. 36.83260 N (NAD 27)
LONG. 108.50991 W (NAD 27)
EXISTING ACCESS
THIS MAP IS FOR ESTIMATING PURPOSES ONLY.
CONSTRUCTION FOOTAGES ARE APPROXIMATE
Oil Well
Drill Hole
PIPELINE
TN
MN
11°
1 MILE
1000 FEET
1000 METERS
Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

NE HOGBACK UNIT #73

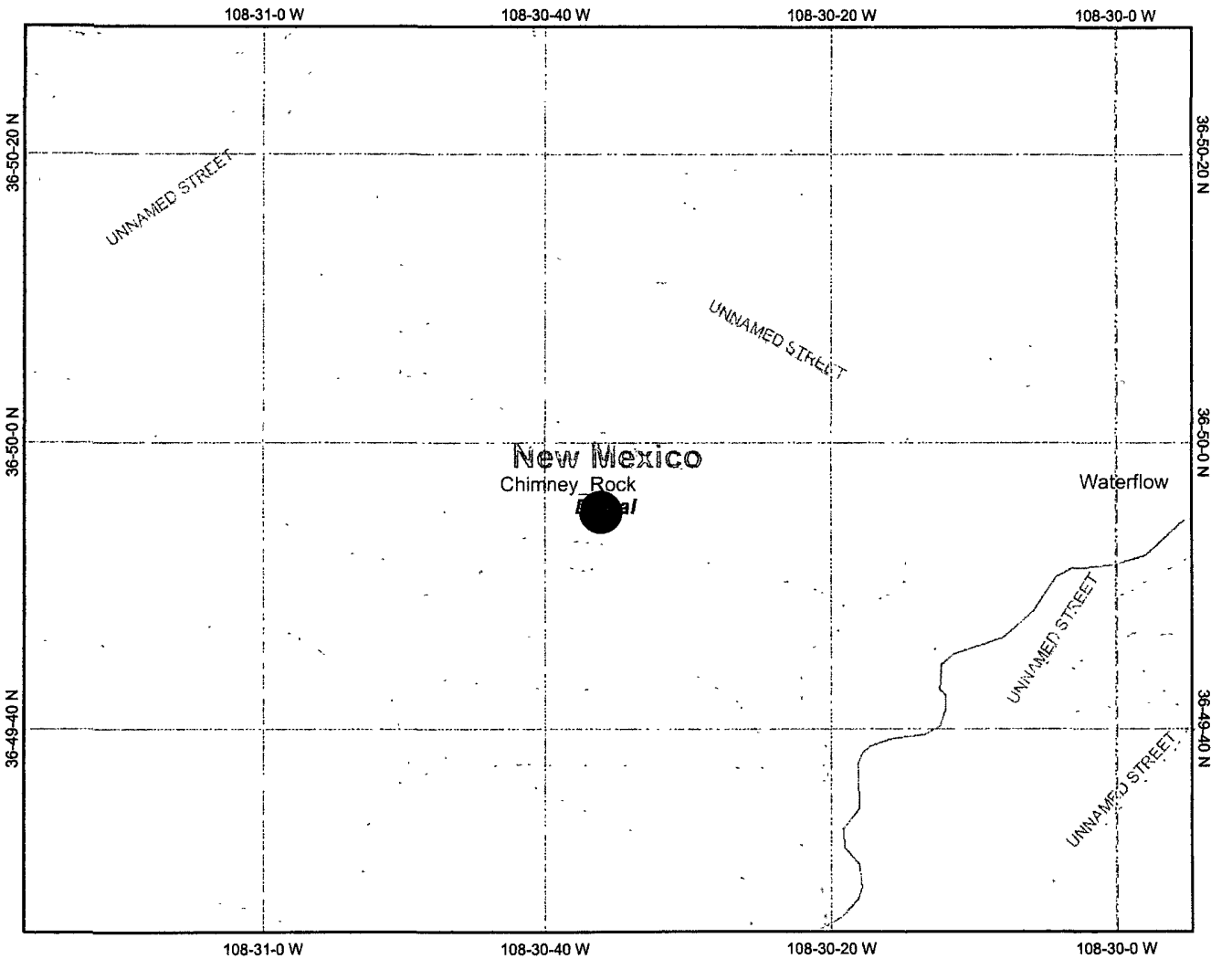


http://www.emnrd.state.nm.us/MMD/MMQonline/MMQonline-PUBLIC-PROD.MWF



N. E. Hogback Unit #73

NE HOGBACK UNIT #73



Map center: 36° 49' 57" N, 108° 30' 36" W

Legend

Ohio_wet_scan
- 0
- 1
- Out of range

Interstate

Major Roads

Other Road
- Interstate
- State highway
- US highway

Roads

Cities

USGS Quad Index 24K

Lower 48 Wetland Polygons
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Lower 48 Available Wetland Data
- Non-Digital
- Digital
- No Data
- Scan

NHD Streams

Counties 100K

States 100K

South America

North America

Scale: 1:13,618

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Notes: B 10 T30N R16W

PARAWON OPERATING LLC
NE HOGBACK UNIT #73
1215' FNL, 1960' FEL
B Sec. 10 T30N R16W
San Juan County, NM

FEMA MAP – 100 YEAR FLOODPLAIN)

The FEMA map for the NE Hogback Unit #73 is attached, but lacks any real data possibly due to its location being on Navajo Tribe surface. The results from the FEMA map search were "No product in search area". This well is not located near a wash or watercourse and is not in 100-year floodplain as visible on the topographic map.

Siting Criteria Compliance Demonstrations

The NE Hogback Unit #73 is not located in an unstable area. The location is not over a mine and is not on the side of a hill. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse.

PARAWON OPERATING LLC
NE HOGBACK UNIT #73
1215' FNL, 1960' FEL
B Sec. 10 T30N R16W
San Juan County, NM

PIT DESIGN AND CONSTRUCTION PLAN

In accordance with Rule 19.15.17, the following information describes the design and construction of temporary pits on Parawon Operating LLC locations. This is Parawon's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

General Plan

1. Parawon will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. Prior to construction the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
3. Parawon will post a well sign, not less than 12" by 24", on the well site prior to construction of the temporary pit. This sign will list the operator on record as the operator, the location of the well site by unit letter, section, township, range, and emergency telephone numbers.
4. Parawon shall construct all new fences utilizing 48" steel mesh field-fence (hogwire) 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. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
5. Parawon 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. Parawon shall construct the pit so that the slopes are no steeper than two horizontal feet to 1 vertical foot.
7. Pit walls will be walked down by a crawler type tractor following construction.
8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
9. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
10. All liners will be anchored in the bottom of the compacted earth-filled trench at least 18 inches deep.
11. Parawon will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. Parawon will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. Parawon will minimize the number of field seams in corners and irregularly shaped areas.
12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
13. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.
15. Temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit.
16. The lower half of the blow pit (nearest lined pit) will be lined with the same 20-mil liner. The upper half of the blow pit will remain unlined as allowed in Rule 19.15.17.11F.11.
17. Parawon will not allow freestanding liquids to remain on the unlined portion of the temporary blow pit.

PARAWON OPERATING LLC
NE HOGBACK UNIT #73
1215' FNL, 1960' FEL
B Sec. 10 T30N R16W
San Juan County, NM

MAINTENANCE AND OPERATING PLAN

In accordance with Rule 19.15.17, NMAC, the following information describes the operation and maintenance of temporary pits on Parawon Operating LLC locations. This is Parawon's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit, which does not conform to this plan.

General Plan

1. Parawon will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. Parawon will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed at Basin Disposal Inc., permit #NM-01-005 or in Parawon's pressure maintenance system.
3. Parawon will not discharge or store any hazardous waste in any temporary pit.
4. If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then Parawon shall notify the Aztec Division 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, Parawon shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. Parawon shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. Parawon shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.166 NMAC shall be reported to the division's Environmental Bureau Chief.
6. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
7. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
8. Parawon shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will be stored on-site until closure of the pit.
9. Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
10. Parawon will maintain the temporary pit free of miscellaneous solid waste or debris.
11. During drilling or workover operations, Parawon will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged in the IADC reports. Parawon will file this log with the Aztec Division office upon closure of the pit.
12. After drilling or workover operations, Parawon will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at Parawon's office electronically and will be filed with the Aztec Division office upon closure of the pit.
13. Parawon shall maintain at least two feet of freeboard for a temporary pit.
14. Parawon shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling or workover rig.
15. Parawon shall remove all free liquids from a cavitation pit within 48 hours after completing cavitation. Parawon may request additional time to remove liquids from the Aztec Division office if it is not feasible to remove liquids within 48 hours.

PARAWON OPERATING LLC
NE HOGBACK UNIT #73
1215' FNL, 1960' FEL
B Sec. 10 T30N R16W
San Juan County, NM

CLOSURE PLAN

In accordance with Rule 19.15.17, NMAC, the following information describes the closure requirements of temporary pits on Parawon Operating LLC locations. This is Parawon's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit, which does not conform to this plan.

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

* Details on Capping and Covering, where applicable,
* Plot Plan (Pit Diagram)
* Inspection Reports
* Sampling Results
* C-105
* Copy of Deed Notice will be filed with County Clerk

General Plan

1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves.
2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.
3. The surface owner shall be notified of Parawon's proposed closure plan using a means that provides proof of notice i.e., certified mail, return receipt requested.
4. Within 6 months of the Rig Off status occurring, Parawon will ensure that temporary pits are closed, re-contoured, and reseeded.
5. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
   * Operator's name
   * Location by Unit Letter, Section, Township, and Range. Well name and API number.

6. Liner of temporary pit shall 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 facililty.
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.

Components	Test 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

PARAWON OPERATING LLC
NE HOGBACK UNIT #73
1215' FNL, 1960' FEL
B Sec. 10 T30N R16W
San Juan County, NM

CLOSURE PLAN

General Plan (Continued)

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. 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. Parawon shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. 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 tow successive 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 all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the maker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

Powell, Brandon, EMNRD

From: Mike Pippin [mike@pippinllc.com]
Sent: Wednesday, July 16, 2008 8:16 AM
To: estherkee@frontiernet.net
Cc: Powell, Brandon, EMNRD
Subject: Surface Owner Notification to close the NE Hogback Units #73 and #74 temporary pits

Navajo Nation Land Department, Project Review July 16, 2008

Esther Kee

RE: Surface Notification to close the NE Hogback Unit #73 and #74 temporary pits on-site at the subject location.

Dear Ms. Esther Kee,

In compliance with the State of New Mexico, Energy Minerals and Natural Resources Department new pit rule (Subsection F of 19.15.17.13 NMAC), Parawon Operating LLC is hereby providing notice to the Navajo Nation Land Department of the operator's proposal to close the "Temporary Pit" (drilling reserve pit) for the NE Hogback Units #73 and #74 oil wells using "on-site burial methods".

The subject wells are located (B and H, Section 10, T30N, R16W) on Navajo Tribal Trust surface land in San Juan County, New Mexico.

This notification is required by the NMOCD in order to obtain a permit to build the pits. If you have any questions or require additional information, please contact me.

Sincerely,

Mike Pippin

Parawon Operating LLC