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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
JUN 20 2006
OCD-ARTESIA

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
Parallel Petroleum Corp. 1004 N. Big Spring Street, Suite 400, Midland, TX. 79701	230387
	[3] API Number: 30-005-63832

[5] Property Code	[5] Property Name	[6] Well No.
35805	Barbaro 1426-22 O	1

[9] Proposed Pool 1	[10] Proposed Pool 2
Wildcat; Wolfcamp	

[7] 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	27	14S	26E		399	N	1910'	E	Chaves

[8] Proposed 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
B	22	14S	26E		660'	N	1910'	E	Chaves

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	O & G	R	P	3415'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	9814'MD,5250TVD	Wolfcamp	NA	NA

Depth to Groundwater 65' | Distance from nearest fresh water well 2000' | Distance from nearest surface water 3000'

Pit: Liner: Synthetic X _12__mils thick Clay ☐ Pit Volume:25,000 bbls

Closed-Loop System ☐

Drilling Method:
Fresh Water X Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

See Reverse Side

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36#	1400'	325	Surface
8-3/4"	5-1/2"	17#	TVD 5250'	NA	Tie back
			MD 9814'		To surface
Verify by CBL or Temp Survey					casing

[22] Describe the proposed program. If this application is to DEEPEN or PLUGBACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Well to be Drilled as a Horizontal Wolfcamp test and will be drilled from the pad of the Bold Venture #1. The attached drilling plan will be utilized for this test and contains details on the cement and mud programs as well as the directional information. The following is a summary of this plan.

1. **Prepare surface location. Move in and rig up drilling rig, spud well and drill and set conductor. Install and test BOP's.**
2. **Drill 12 ¼" surface hole to a minimum depth of 1400'. Set 9 5/8"casing and cement.**
3. **Drill 8 ¾" production hole 5500' TD and evaluate running mud logs as well as DLL/CNL/LDT/CAL/GR to TD.**
4. **Set Kickoff point at 4192' and drill and advance hole to a Wolfcamp penetration point at approximately 662' FSL and 1910' FEL of the section 22 and continue drilling to BHL. (9814' MD & 5250' TVD)**
5. **Set 5 ½" to TD and tie cement back to surface casing. Perforate porosity and stimulate as necessary (specific procedure to be determined).**
6. **Place well on test.**
7. **No H2S is anticipated during the drilling of this well.**

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Printed name: Deane Durham

Title: Drilling Engineer

E-mail Address: ddurham@plll.com

Date: 6-16-2006 | Phone: 432-684-3727

OIL CONSERVATION DIVISION

Approved by: BRYAN G. ARRANT

Title: DISTRICT II GEOLOGIST

Approval Date: JUN 28 2006 | Expiration Date: JUN 28 2007

Conditions of Approval Attached ☐ SEE REVERSE

As a condition of approval, a closure plan must be submitted and approved prior to the commencement of closure procedures.

NOTIFY OCD OF SPUD & TIME TO WITNESS CEMENTING OF SURFACE CASING

As a condition of approval, if during pit construction water is encountered or if water seeps in pits after construction the OCD MUST BE CONTACTED IMMEDIATEY!

USGS information shows this area to be water sensitive.

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Frances 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

API Number	Pool Code	Pool Name
	96086	Wildcat; Wolfcamp

Property Code	Property Name	Well Number
	BARBARO 1426-22 O	1

OGRID No.	Operator Name	Elevation
	PARALLEL PETROLEUM CORPORATION	3415'

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	27	14 S	26 E		399	NORTH	1910	EAST	CHAVES

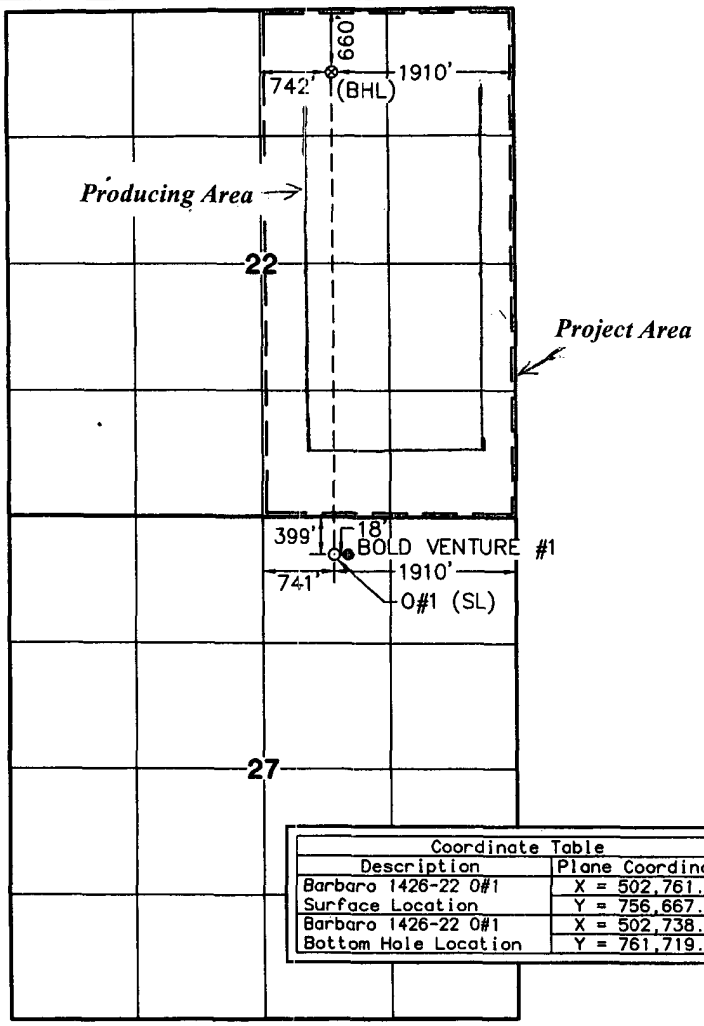
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	22	14 S	26 E		660	NORTH	1910	EAST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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

NOTE:
1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.



Coordinate Table	
Description	Plane Coordinate
Barbaro 1426-22 O#1 Surface Location	X = 502,761.2 Y = 756,667.9
Barbaro 1426-22 O#1 Bottom Hole Location	X = 502,738.2 Y = 761,719.3

OPERATOR CERTIFICATION

I hereby certify the 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 interestin 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.

Signature Date 6-16-06

Deane Durham
Printed Name

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 supervison and that the same is true and correct to the best of my belief.

June 1, 2006
Date of Survey

Signature & Seal of Professional Surveyor

MACON McDONALD LVA
NEW MEXICO
12185
REGISTERED PROFESSIONAL SURVEYOR

W.O. Num. 2006-0643

Certificate No. MACON, McDONALD 12185

PARALLEL PETROLEUM CORPORATION
BARBARO 1426-22 O#1
SL: 1910' FEL AND 399' FNL, SEC 27, T14S, R26E
BHL: 1910' FEL AND 660' FNL, SEC 22, T14S, R26E
CHAVES COUNTY, NEW MEXICO

Objective

Drill a horizontal well in the Wolfcamp.

Expected Geologic Tops

GL: 3415', KB 3427'.
Glorieta 2565'
Tubb 3575'
Abo Shale 4325'
Wolfcamp 5250'
Wolfcamp Shale 5425'

Well Geometry

- 9 5/8" casing at 1400'
- 5 1/2" casing through the horizontal Wolfcamp; Cement per completion.

Casing Program

Hole	MD (ft)	Casing	Weight	Grade	Coupling	COMMENT
12-1/4"	0 – 1400	9-5/8"	36	J55	LT&C	
8-3/4"	0 – TD'	5-1/2"	17	N80	LT&C	Run through the horizontal lateral.

Casing Cementing Program

9-5/8" slurry: Lead: 125 sacks (50:50) Poz (Fly Ash): Class C + 5% bwow Sodium Chloride + 10% bwoc Bentonite + 151.7% fresh water. Tail: 200 sacks Class C + 1% bwoc Calcium Chloride + 56.3% fresh water

Note: If cement does not circulate to surface, notify OCD. A temperature survey will most likely be required. Top out to surface with 1" pipe in the annulus.

Note: 5-1/2" Cement per completion procedure. Top of Cement should be a minimum depth to tie back to 9-5/8" casing.

Mud Program

Depth	Hole	MW	Visc.	WL	Synopsis
0 - 1400	12-1/4"	8.4 – 8.6	28 - 29	No control	FRESH WATER mud only to 1200 ft. Severe loss potential. Circulate inner reserve. LCM: paper, fiber, cotton seed hulls.
1400 – 4100	8-3/4"	8.6 – 9.2	28 -29	No control	Cut brine. Start w/existing & add brine t/80K-120K chlorides
KOP – TD Horizontal	8-3/4" & 7-7/8"	8.9 – 9.5	38 - 45	6 - 10	XCD/Starch polymer as req'd for hole cleaning. Lubricants.

PARALLEL PETROLEUM CORPORATION

SURVEY CALCULATION PROGRAM

OPERATOR:	Parallel Petroleum Corporation	Supervisors:	
WELL:	Barbaro 1426-22 O#1		
LOCATION:	Sec. 22 T-14-S R-26-E		
API NUMBER:			
COMMENTS:			
		MAG DEC.(-/+)	
		GRID CORR.(-/+)	
		TOTAL CORR.(-/+)	0.0
DATE: 06/14/06	TIME: 2:14 PM	TRUE TO GRID	

MINIMUM CURVATURE CALCULATIONS(SPE-3362) PROPOSED DIRECTION 0.0

SVY NUM	MD	INC	GRID AZM	TVD	VERT SECT	N-S	E-W	DLS/ 100	TARGET TRACKING TO CENTER ABOVE(+) BELOW(-)	RIGHT(+) LEFT(-)
TIE	0	0.0	0.0	0.0	0.0	0.0	0.0			
1	4192	0.0	0.0	4192.0	0.0	0.0	0.0	0.0	1058.0	0.0
2	4202	0.6	0.0	4202.0	0.1	0.1	0.0	6.0	1048.0	0.0
3	4212	1.2	0.0	4212.0	0.2	0.2	0.0	6.0	1038.0	0.0
4	5856	90.0	0.0	5250.5	1060.7	1060.7	0.0	5.4	-0.5	0.0
5	9814	90.0	0.0	5250.5	5018.7	5018.7	0.0	0.0	-0.5	0.0

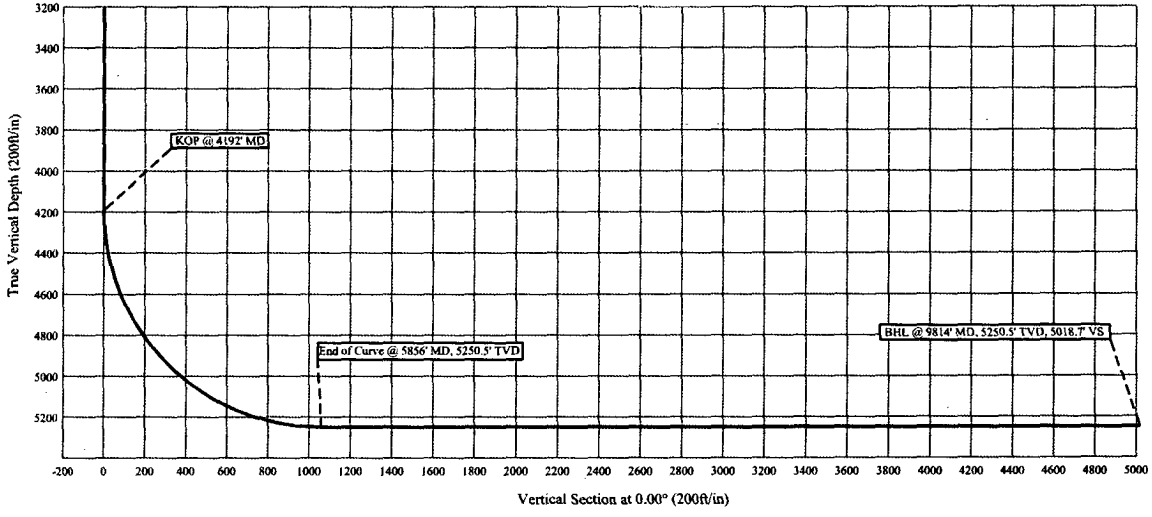
KOP @ 4192' MD
BUR = 5.4 DEG per 100 FT
End Curve @ 5856' MD, 5250.5' TVD
BHL @ 9814' MD, 5250.5' TVD, 5018.7' VS

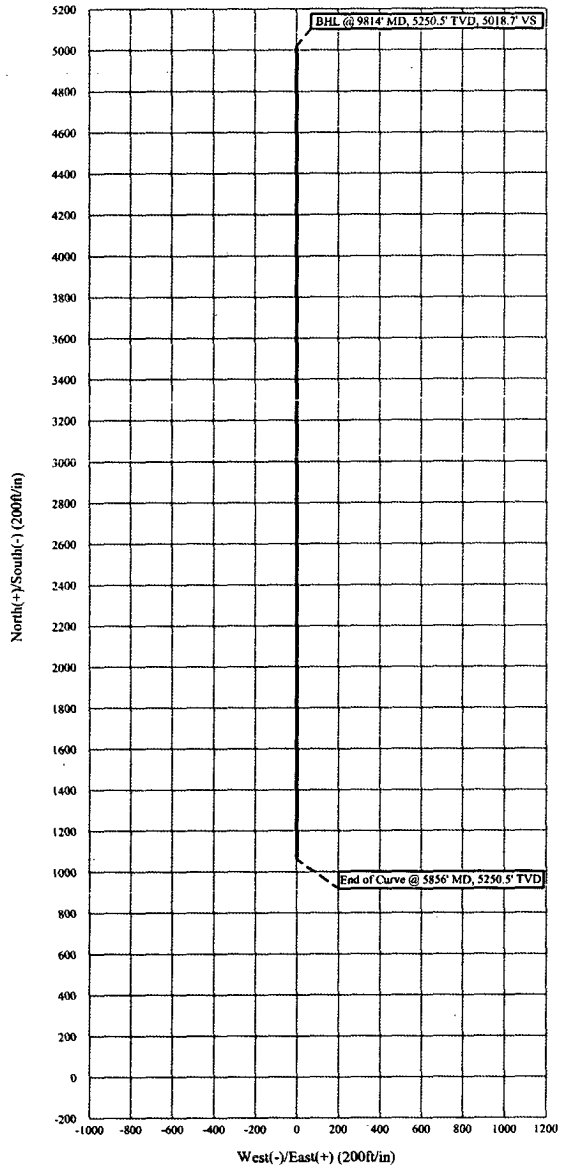
Parallel Petroleum Corp.

Barbaro 1426-22 O#1
Section 22, T 14-S, R 26-E
Chaves County, New Mexico

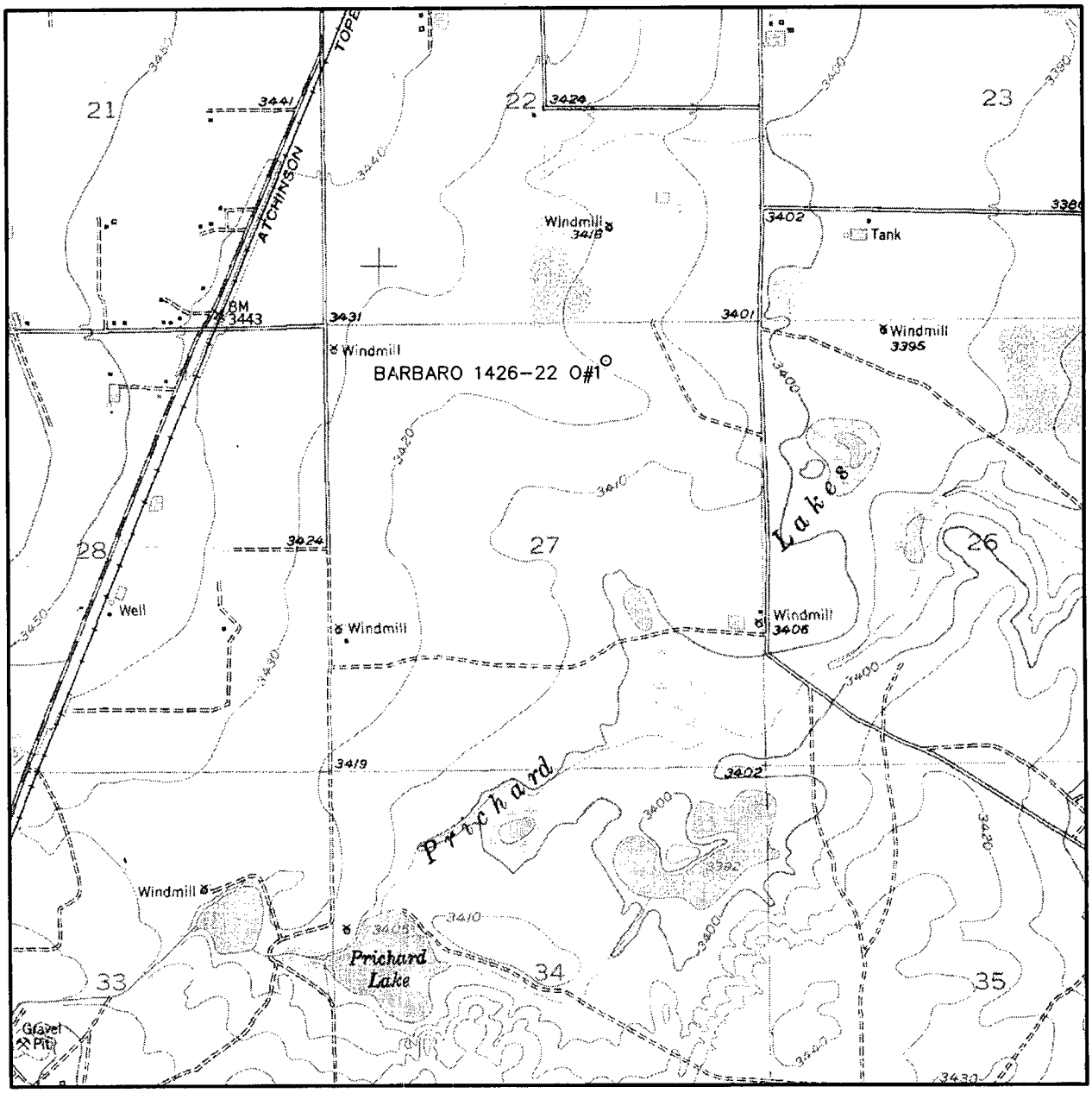
COMPANY DETAILS

Parallel Petroleum Corp.
1004 N. Big Spring, Ste 400
Midland, Texas 79701





LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
HAGERMAN – 10'

SEC. 27 TWP. 14–S RGE. 26–E

SURVEY N.M.P.M.

COUNTY CHAVES

DESCRIPTION 399' FNL & 1910' FEL

ELEVATION 3415'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE BARBARO 1426–22 O

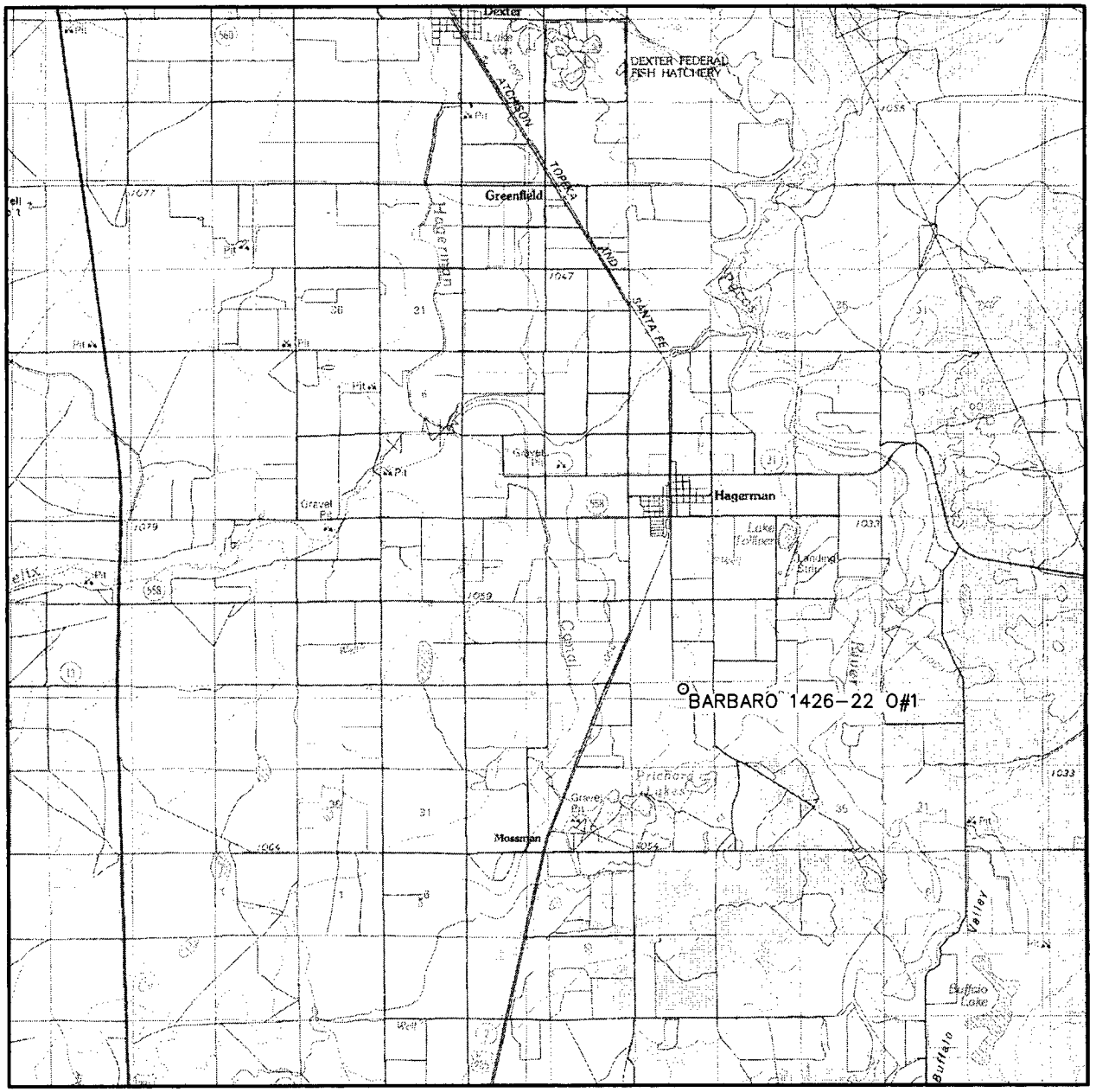
U.S.G.S. TOPOGRAPHIC MAP
HAGERMAN, N.M.

NORTH

WEST COMPANY of Midland, Inc.

110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687–0865 – (432) 687–0868 FAX

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 27 TWP. 14-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY CHAVES

DESCRIPTION 399' FNL & 1910' FEL

ELEVATION 3415'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE BARBARO 1426-22 O

WEST COMPANY of Midland, Inc.

110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

PARALLEL
Petroleum Corporation
1004 North Big Spring, Suite 400 • Midland, TX 79701 • Ph: 432-684-3727 • Fax: 432-685-6580

June 16, 2006

New Mexico Oil conservation Division
1301 W. Grand Ave.
Artesia, New Mexico 88210

Re: Hydrogen Sulfide Potential
Hagerman Area Wolfcamp Program
Section 27, T14S, R26E
Chaves County, New Mexico

Gentlemen:

Parallel Petroleum Corporation operates the Seabiscuit #1 well located in Section 33, T-14-S, R-26-E. The well which was tested in the Wolfcamp formation did not have any indications of hydrogen sulfide from this formation. We believe the potential for it on locations in this area are negligible. There are no occupied dwellings within 1.5 miles of this well.

Should you need any additional information regarding this issue, please contact me at the address or phone number listed above or ddurham@plll.com .

Sincerely,

Deane Durham
Drilling Engineer