

OCD-ARTESIA

ATS-07-52

Form 3160-3
April 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

5. Lease Serial No.
NM 108920

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Idiot Box 1821-33 Federal #1

9. API Well No.

30-015-35259

10. Field and Pool, or Exploratory
Wolfcamp

11. Sec. T. R. M. or Blk. and Survey or Area

33-18S-21E

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator
Parallel Petroleum Corporation

3a. Address 1004 North Big Spring, Suite 400
Midland, Texas

3b. Phone No. (include area code)
432/684-3727

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 2066' FSL and 111' FEL

At proposed prod. zone 2040' FSL and 660' FWL

ROSWELL CONTROLLED WATER BASIN

14. Distance in miles and direction from nearest town or post office*
9 miles south of Hope, New Mexico

12. County or Parish
Eddy

13. State
NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 111'

16. No. of acres in lease
1960

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 2500' North

19. Proposed Depth
4,800'

20. BLM/BIA Bond No. on file
NMB000265

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
GL 4295'

22. Approximate date work will start*
01/20/2007

23. Estimated duration
30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Deane Durham

Name (Printed/Typed)
Deane Durham

Date

10/20/06

Title

Drilling Engineer, Parallel Petroleum Corporation

Approved by (Signature)

Cathy Queen

Name (Printed/Typed)

Cathy Queen

NOV 24 2006

Title

EC FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

NSL

- Required to produce

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

If earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Parallel Petroleum Corporation
1004 N. Big Spring St.
Suite 400
Midland, Texas 79701

The undersigned accepts all applicable terms, conditions, stipulations and restrictions covering operations conducted on the leased land or portion thereof, as described below:

Lease No: NM 108921

Legal Description of Land: Idiot Box 1821-33 Federal #1
SHL: 2066' FSL AND 111' FEL, SEC 33, T18S, R21E
BHL: 2040' FSL AND 660' FWL, SEC 33, T18S, R21E
Eddy County, New Mexico *13 12*

Formation(s) (if applicable): Morrow with alternate in the Wolfcamp

Bond Coverage: \$25,000 statewide bond of Parallel Petroleum Corporation

BLM Bond File No: NMB000265

10-20-06
Date

Deane Durham
Name: Deane Durham
Title: Engineer

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Frances
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 97489	Pool Name Wildcat; Wolfcamp
Property Code	Property Name IDIOT BOX 1821-33 FEDERAL	Well Number 1
OGRID No.	Operator Name PARALLEL PETROLEUM CORPORATION	Elevation 4294'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	33	18 S	21 E		2066	SOUTH	111	EAST	EDDY

Bottom Hole Location If Different From Surface

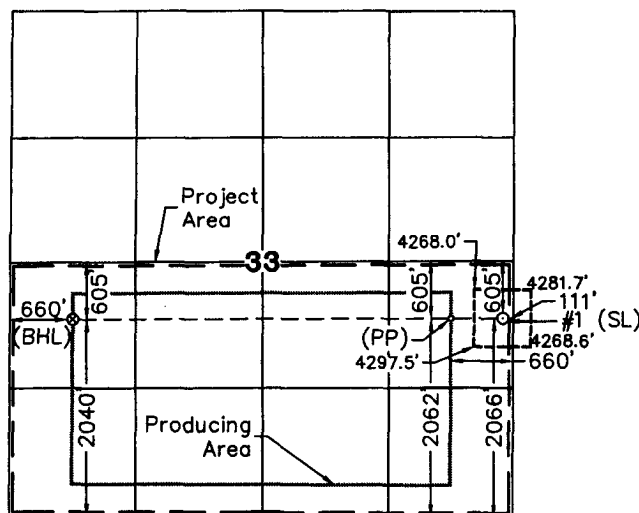
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	33	18 S	21 E		2040	SOUTH	660	WEST	EDDY

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
Idiot Box 1821-33 Federal #1	X = 359,341.6
Surface Location	Y = 619,525.0
Idiot Box 1821-33 Federal #1	X = 358,793.1
Penetration Point	Y = 619,522.8
Idiot Box 1821-33 Federal #1	X = 354,838.8
Bottom Hole Location	Y = 619,507.2

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 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.

Deane Durham 10-20-06
Signature Date
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 supervision and that the same is true and correct to the best of my belief.

September 27, 2006

Date of Survey LVA
Signature & Seal of Professional Surveyor

[Signature]
W.O. Num. 2006-0986

Certificate No. MACON McDONALD 12185

ATTACHMENT TO FORM 3160-5
IDIOT BOX 1821-33 FEDERAL #1
Surface Hole Location
2066 FSL AND 111 FEL, SEC 33, 18S, 21E
Bottom Hole Location
2040 FSL AND 660 FWL, SEC 33, 18S, 21E
EDDY COUNTY, NEW MEXICO

DRILLING PROGRAM

This well is designed as a horizontal test in the Wolfcamp formation.

1. GEOLOGIC NAME OF SURFACE FORMATION

San Andres

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

GL 4294'
Glorieta 1270'(+3024')
Yeso 1330' (+2964')
Tubb sand 2615'(+1679')
Lower Yeso 2730' (+1564')
Abo Shale 3200' (+1094')
Abo Carbonate 3350' (+944')
Wolfcamp 4030' (+264')
Wolfcamp Shale 4180'(+114')
TD 4200' Pilot Hole

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, OR GAS

Fresh water 790'
Oil and Gas Wolfcamp 4030' (+264')
No H₂S gas should be encountered

4. CASING AND CEMENTING PROGRAM

<u>Casing Size</u>	<u>From</u> <u>To</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
16" conductor	0'-120'			
8 5/8"	0' - 1500'	24#	J-55	STC
5 1/2"	0' - 8,403'	17#	N-80	LTC

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

IDIOT BOX 1821-33 FEDERAL #1

Page 2

8-5/8" 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 BLM. A temperature survey will be required. Top out to surface with 1" pipe in the annulus.

Note: 5-1/2" Cement casing with enough volume to circulate to surface plus 25%. (Acid soluble CMT). Lead - 560 sacks 50:50 Poz (Fly Ash):Class C CMT + 10% Bentonite + 0.2% FL-52A + 0.2% Sodium Metasilicate + 141% fresh water. Tail - 560 sacks Class H CMT + 0.6% BA-10 + 0.4% CD-32 + 1% FL-62 + 0.1% ASA-301 + 0.4% Sodium Metasilicate + 20 lbs/sack calcium carbonate + 53% fresh water. Cement must tie back to surface casing per completion procedure.

Drilling Procedure

- a. Set 16" conductor pipe as deep as possible up to 120' with a rathole unit.
- b. Drill 11" surface hole to an approximate depth of 1500', using fresh water and viscous sweeps for hole cleaning. Set 8 5/8", 24# J-55 casing with 460 sx, Class C cement (lead will be 50/50 Poz, circulate to surface, 1" if necessary).
- c. Set slips on 8 5/8" CSG. Cut 8 5/8" CSG and NU & test BOP.
- d. Drill 7 7/8" production hole to 4200', using cut brine to an approximate depth of 3100' and a polymer mud system to TD.
- e. Run open-hole logs
- f. Set CMT kick-off plug.
- g. Dress CMT to kick off point at approximately 3481'.
- h. Build angle at 10.4 degrees per 100' to 90 degrees and hold.
- i. Drill 7 7/8" horizontal drain hole to a terminus of 660' FWL.
- j. Run 5 1/2" 17# N-80 CSG to TD. Cement with enough volume to circulate to surface plus 25%. (Acid soluble CMT). Lead - 560 sacks 50:50 Poz (Fly Ash):Class C CMT + 10% Bentonite + 0.2% FL-52A + 0.2% Sodium Metasilicate + 141% fresh water. Tail - 560 sacks Class H CMT + 0.6% BA-10 + 0.4% CD-32 + 1% FL-62 + 0.1% ASA-301 + 0.4% Sodium Metasilicate + 20 lbs/sack calcium carbonate + 53% fresh water. Cement must tie back to surface casing per completion procedure.
- k. Rig Down Rotary Tools

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

The BOP stack will consist of a 3,000 psi working pressure, dual ram type preventer and annular.

A BOP sketch is attached.

6. TYPES AND CHARACTERS OF THE PROPOSED MUD SYSTEM

- a. Spud and drill to 1,500' with 8.3 ppg Fresh Water system and viscous sweeps for hole cleaning.
- c. The production section from 1,500' to 3,100' will utilize a cut brine mud system.
- d. The remaining production section from 3,100' to TD will be a polymer mud system with mud weight sufficient to control formation pressures.

8.8-9.2 ppg
FW

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT

None required.

8. LOGGING, TESTING, AND CORING PROGRAM

Mud logs as well as DLL/CNL/LDT/CAL/GR logging is planned. Drill stem tests, cores and sidewall cores are possible. No MWD GR will be used.

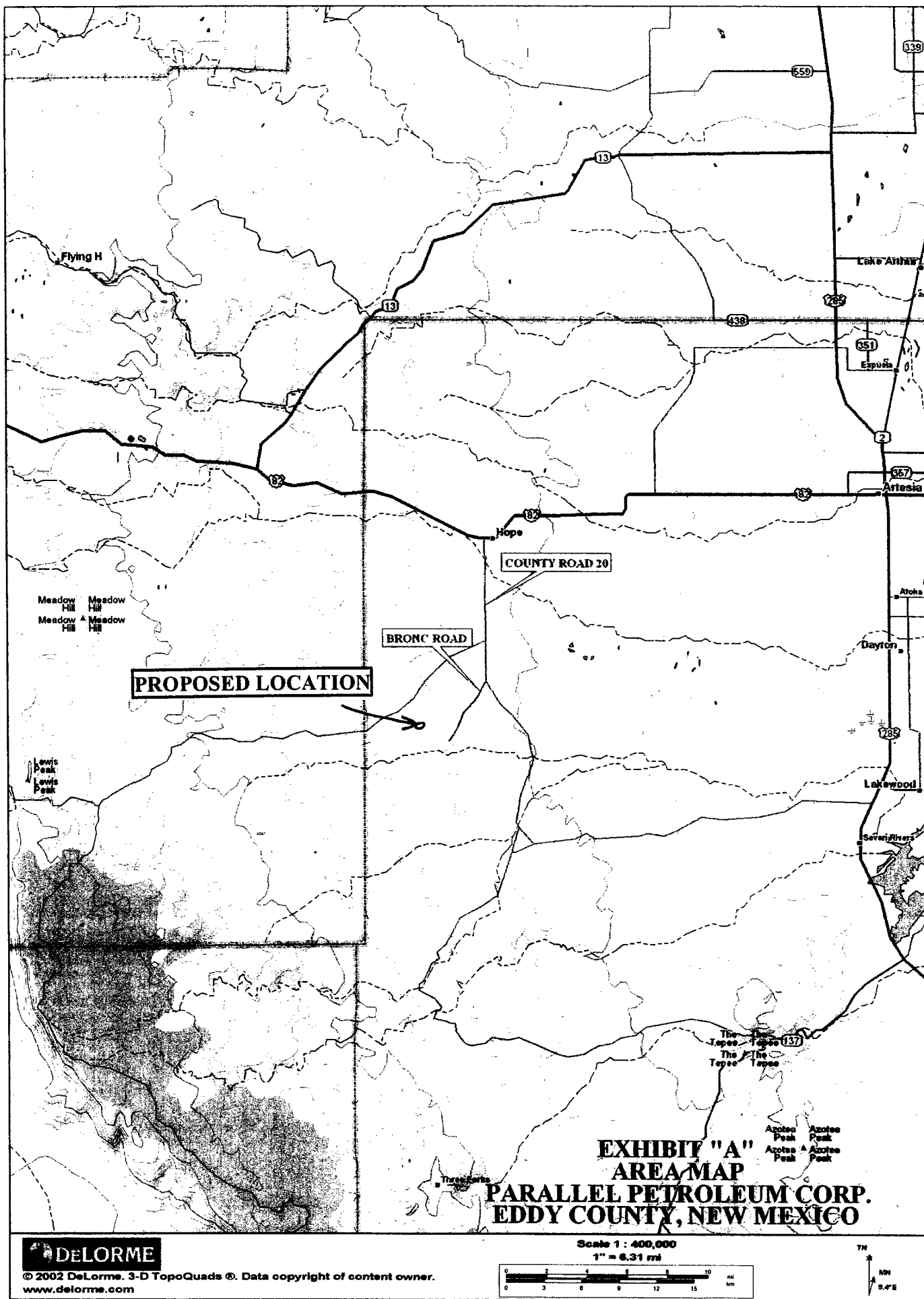
9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS

None anticipated.

BHP expected to be 2,100 psi.

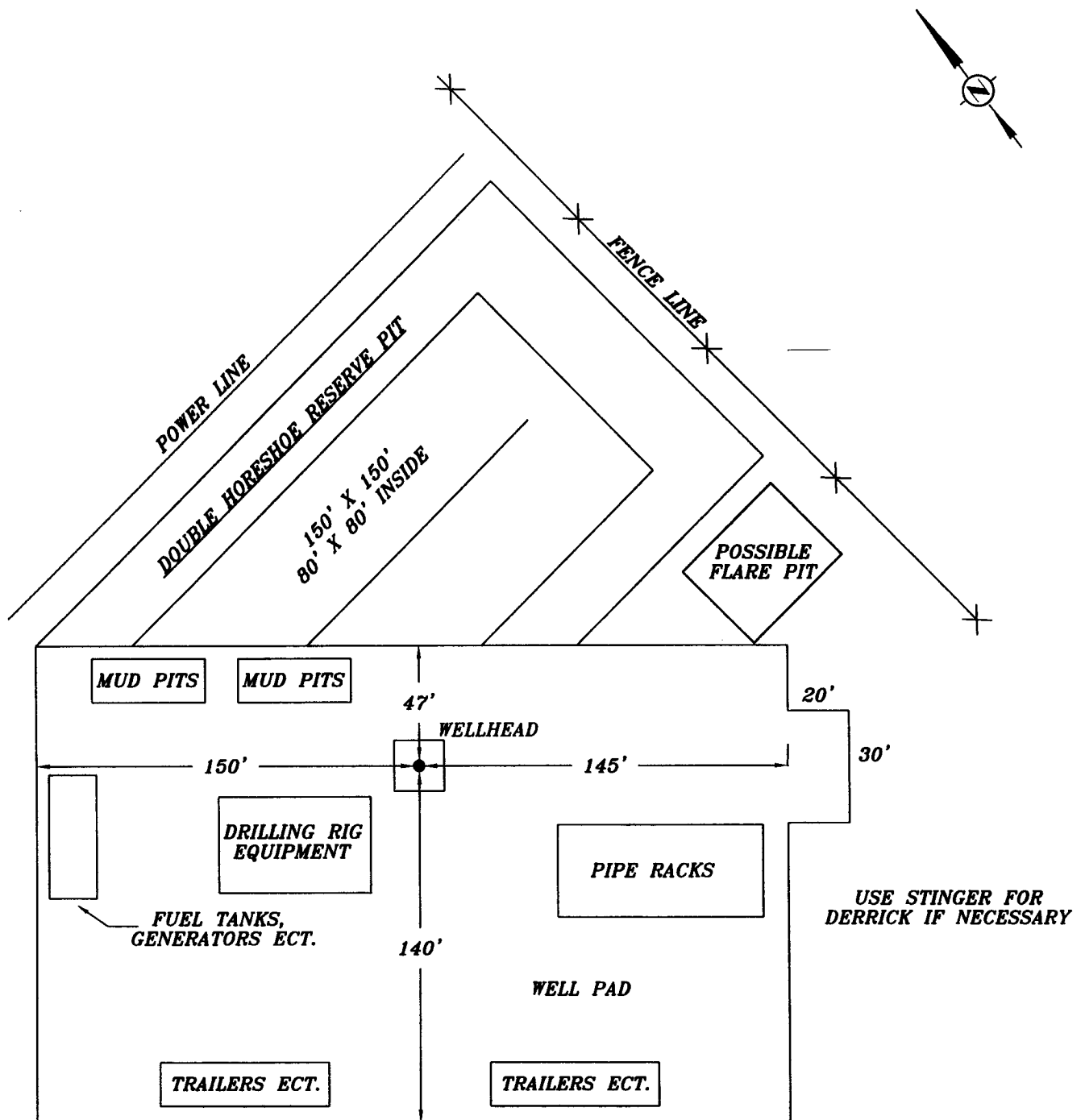
10. ANTICIPATED STARTING DATE:

It is planned that operations will commence around first quarter of 2007 with drilling and completion operation lasting about 30 days.



DeLORME

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www.delorme.com



NOT TO SCALE

DATE:
11/3/05
OWN. BY:
JJ
FILE:
C:\P\HALL\2428\
DRILLING OIL LAYOUT-2

EXHIBIT B

**PARALLEL PETROLEUM
DRILLING RIG LAYOUT**

**HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS**

MINIMUM BOP SCHEMATIC

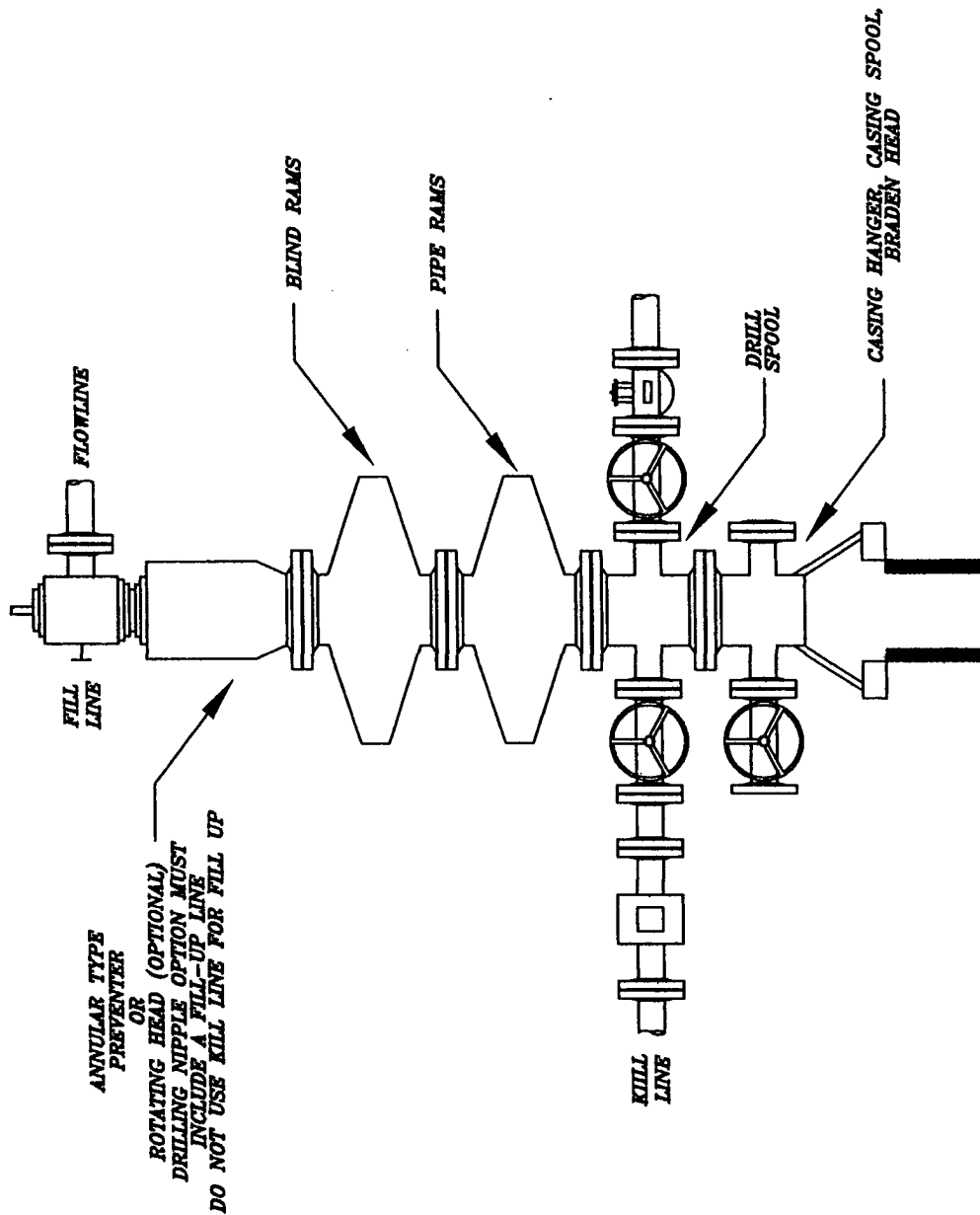


EXHIBIT I

PARALLEL PETROLEUM
BOP SCHEMATIC

DATE
7/26/05

OWN. BY
JL

FILE
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HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

NOT TO SCALE

CHOKES MANIFOLD 5M SERVICE

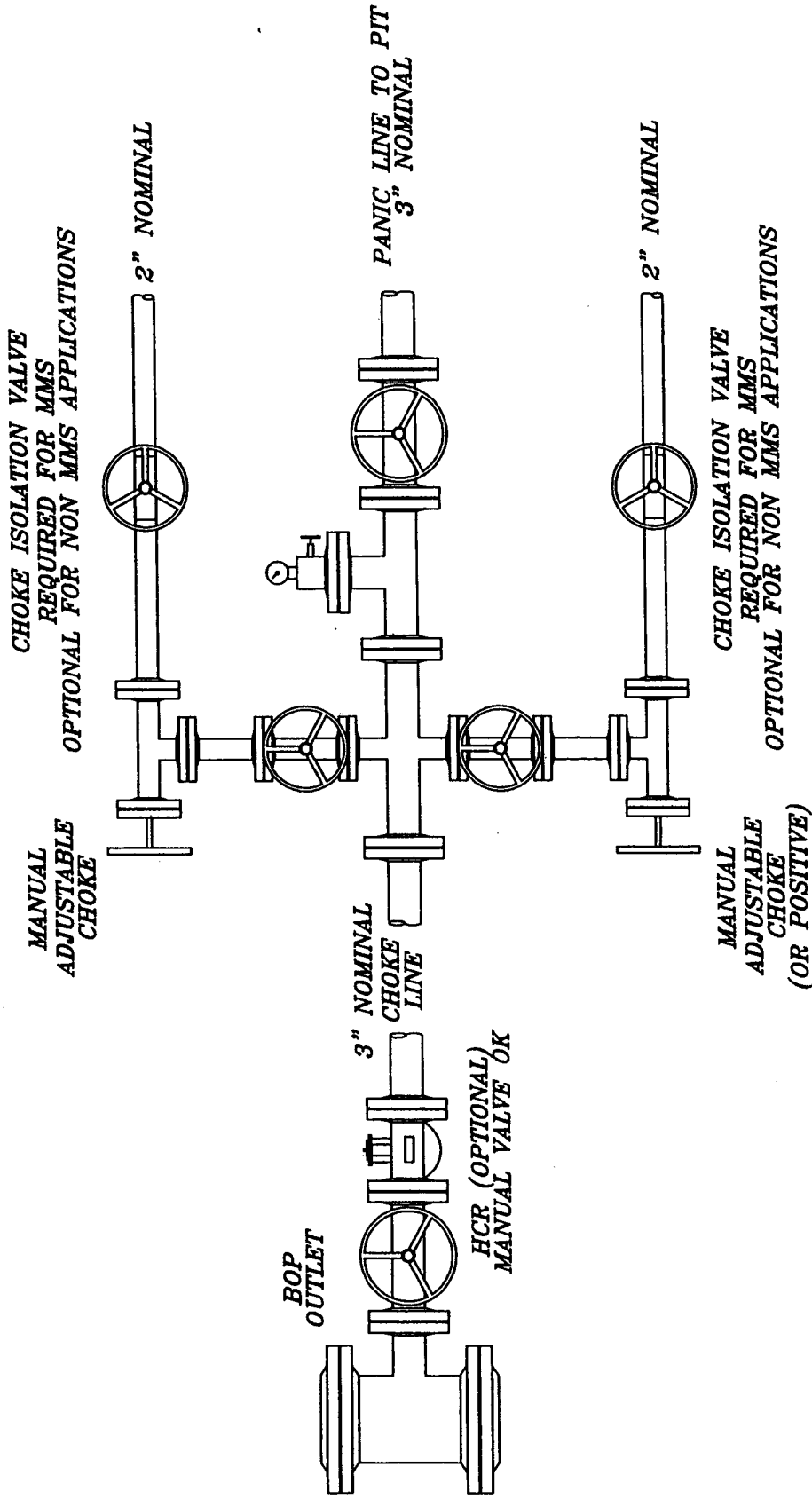


EXHIBIT J

DATE: 8/17/05	DATE: 8/17/05	DATE: 8/17/05
DRAWN BY: JJ	DRAWN BY: JJ	DRAWN BY: JJ
FILE: 05/00000000/0000	FILE: 05/00000000/0000	FILE: 05/00000000/0000

PARALLEL PETROLEUM
CHOKES MANIFOLD

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

NOT TO SCALE

**SURFACE AND OPERATIONS PLAN FOR
DRILLING, COMPLETION, AND PRODUCING**

**PARALLEL PETROLEUM CORPORATION
IDIOT BOX 1821-33 FEDERAL #1
SHL: 2066' FSL AND 111' FEL, SEC 33, T18S, R21E
EDDY COUNTY, NEW MEXICO**

LOCATED:

9 miles South of Hope, New Mexico

OIL & GAS LEASE:

NM 108920

RECORD LESSEE:

The Allar Co.
P.O. Box 1567
Graham, Texas 76450

BOND COVERAGE:

\$25,000 statewide bond # NMB000265 of Parallel Petroleum Corporation

ACRES IN LEASE:

1960

SURFACE OWNER:

Federal

SURFACE TENANT:

Phyllis Crockett
P.O. Box C
Hope, NM 88250
505-484-3687

POOL:

Wolfcamp

EXHIBITS:

- A. Area Road Map
- B. Drilling Rig Layout
- C. Pad Elevation Plat
- D. Vicinity Map
- E. Area Production Map
- F. Topographic & Location Verification Map
- G. Well Location & Acreage Dedication Map (NMOCD Form C-102)
- H. NMOCD Form C-144, Pit Registration (Original forwarded to NMOCD)
- I. Blow Out Preventer (BOP) Schematic
- J. Choke Manifold Schematic
- K. Estimated Horizontal Survey Calculation Program
- L. Estimated Wellbore Plot

1. EXISTING ROADS

- A. Exhibits A and D are area road maps showing existing roads in the vicinity of the site.
- B. Exhibit F and F-1 is a topographic map of the location showing existing roads and the proposed new access road.

2. ACCESS ROADS

- A. Length and Width
The access road will be built as shown on Exhibit F and F-1. The access road will come off Trails End Road and go east .5 mile to the location. The new access road 2590 feet long and surfaced with caliche and will be 16' to 24' wide.
- B. Surface Material
Caliche from a commercial source.
- C. Maximum Grade
Less than five percent.
- D. Turnouts
One turnout may be constructed on the new section of the access road.
- E. Drainage Design
No low water crossings will be constructed on this section of the access road.

F. Culverts

It is not anticipated that any culverts will be needed on the access road at this time.

G. Gates and Cattle Guards

No cattle guards or gates will be installed on this section of access road.

3. LOCATION OF EXISTING WELLS

Existing wells in the immediate area are shown in Exhibit "E".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Necessary production facilities for this well will be located on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY

A water well may be drilled on this location for water supply for both drilling and completion. Upon completion of operations on this site the well may be used for drilling of additional wells on this lease. The well will be made available for the surface tenant upon completion of drilling in this area for use as stock water. A permit will be secured from the New Mexico Office of the State Engineer for this water well. Or water will be secured and trucked or transported by poly line to the location from a commercial source.

6. METHODS OF HANDLING WASTE DISPOSAL

A. Drilling fluids will be allowed to dry in the drilling pits until the pits are closed.

B. Water produced during tests will be disposed of in the drilling pits.

C. Oil produced during tests will be stored in test tanks.

D. Trash will be contained in a trash trailer and removed from well site.

E. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

F. The reserve pit for this site will be constructed in a corner that has a fence on the east and a power line on the north. The pits will be dug deep enough to contain all of the cuttings and water needed for drilling. The reserve pit will be closed as per BLM and NMOCD regulations and guidelines. This will

include leaving the drill cuttings in place in the pit, allowing them to dry, and covering the pit with at least 3' of backfill while not disturbing the pit liner. The cuttings may also be placed in a lined trench along side the drilling pit for disposal. If this disposal method is used the cuttings will be covered with a plastic liner and then covered with a minimum of 3' of backfill.

7. ANCILLARY FACILITIES

None required.

8. WELL SITE LAYOUT

Exhibit B shows the relative location and dimensions of the well pad, mud pits, reserve pit, and the location of major rig components. Drill site orientation is shown on Exhibit C.

9. PLANS FOR RESTORATION OF THE SURFACE

- A. After completion of drilling and/or completion operations, all equipment and other material that will not be used lease for operations will be removed from the site.
- B. After abandonment, all equipment, trash, and debris will be removed and the site will be reclaimed as per BLM permit stipulations.

10. OTHER INFORMATION

A. Topography

The project is located on open, rolling ridge slopes, on a ridge line with Northeast exposure. The regional drainage of the site being both to the south and east toward Bullis Canyon and north and east to New Tank Draw. Both of the draws go east and eventually combine to form Four Mile Draw.

B. Soil

Soils are very thin and shallow, tan/pink/grey loamy sandy silts, overlying limestone bedrock.

C. Flora and Fauna

The location is located on a ridge and the vegetation consist of broom snakeweed, grasses, creosote, cholla, yucca catclaw, prickly pear, beargrass and various species of cacti.

D. Ponds and Streams

Bullis Canyon has an intermittent stream which flows west to east, is located 1000' south of the site and New Tank Draw is an intermittent stream that flows west to east and is located 1000' north of the site. There are no other rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures

The Phyllis Crockett Ranch house is located 2 miles west of the site.

F. Archaeological, Historical, and Cultural Sites

See archaeological report to be submitted by:

Southern New Mexico Archaeological Services, Inc.,
P.O. Box 1
Bent, New Mexico 88314 Phone 505-671-4797

G. Land Use

Grazing

H. Surface Ownership

Federal

11. OPERATOR'S REPRESENTATIVE

Deane Durham, Engineer
Parallel Petroleum Corporation
1004 North Big Spring Street, Suite 400
Midland, Texas 79701
Office: (432) 684-3727

12. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Parallel Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

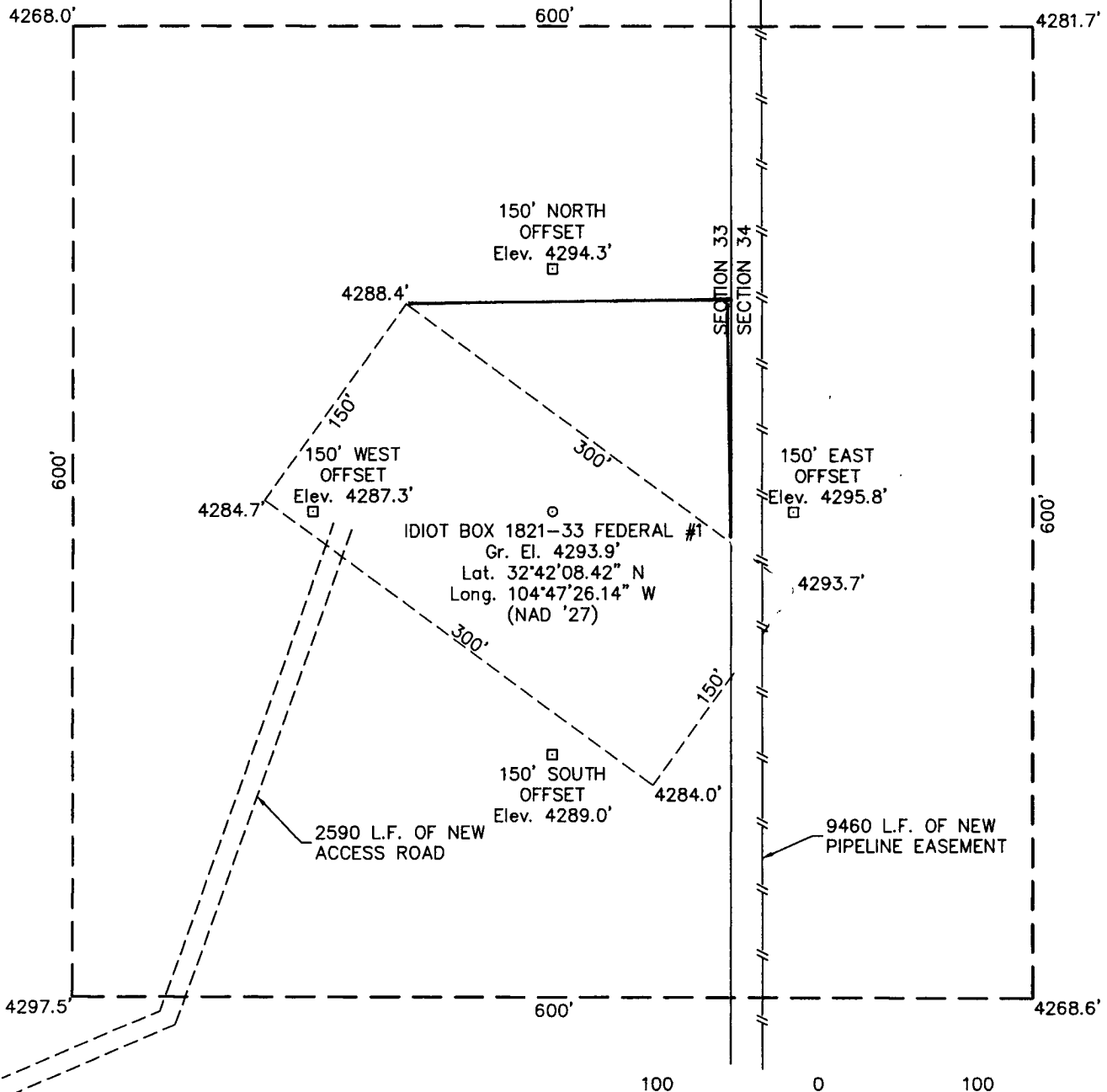
10-20-06
Date

Deane Durham
Name: Deane Durham
Title: Engineer

SECTION 33, TOWNSHIP 18 SOUTH, RANGE 21 EAST, N.M.P.M.

EDDY COUNTY

NEW MEXICO



DRIVING DIRECTIONS

FROM THE INTERSECTION OF U.S. HIGHWAY 82 AND STATE HIGHWAY 449 IN HOPE, NM GO SOUTH ON SAID STATE HIGHWAY 449 2.2 MILES TO THE END OF SAID STATE HIGHWAY 449 AND THE BEGINNING OF COUNTY ROAD 12, THEN CONTINUE SOUTH ANOTHER 2.9 MILES (5.1 TOTAL) TO A FORK IN THE ROAD, THE INTERSECTION OF SAID COUNTY ROAD 12 AND TRAIL END RD. THEN GO SOUTHWEST ALONG SAID TRAIL END RD. 4.5 MILES TO A POINT WHERE A NEW ACCESS ROAD BEGINS TO THE EAST (LEFT) SIDE OF SAID ROAD, THEN GO NORTHEAST ALONG SAID ACCESS ROAD 0.5 MILE TO THE PROPOSED LOCATION.

PARALLEL PETROLEUM CORPORATION

IDIOT BOX 1821-33 FEDERAL #1

Located 2066' FSL & 111' FEL, Section 33
Township 18, South, Range 21 East, N.M.P.M.
Eddy County, New Mexico

Drawn By: LVA	Date: October 12, 2006
Scale: 1"=100'	Field Book: 352 / 1-9
Revision Date:	Quadrangle: Holt Tank
W.O. No: 2006-0988	Dwg. No.: L-2006-0988-A



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

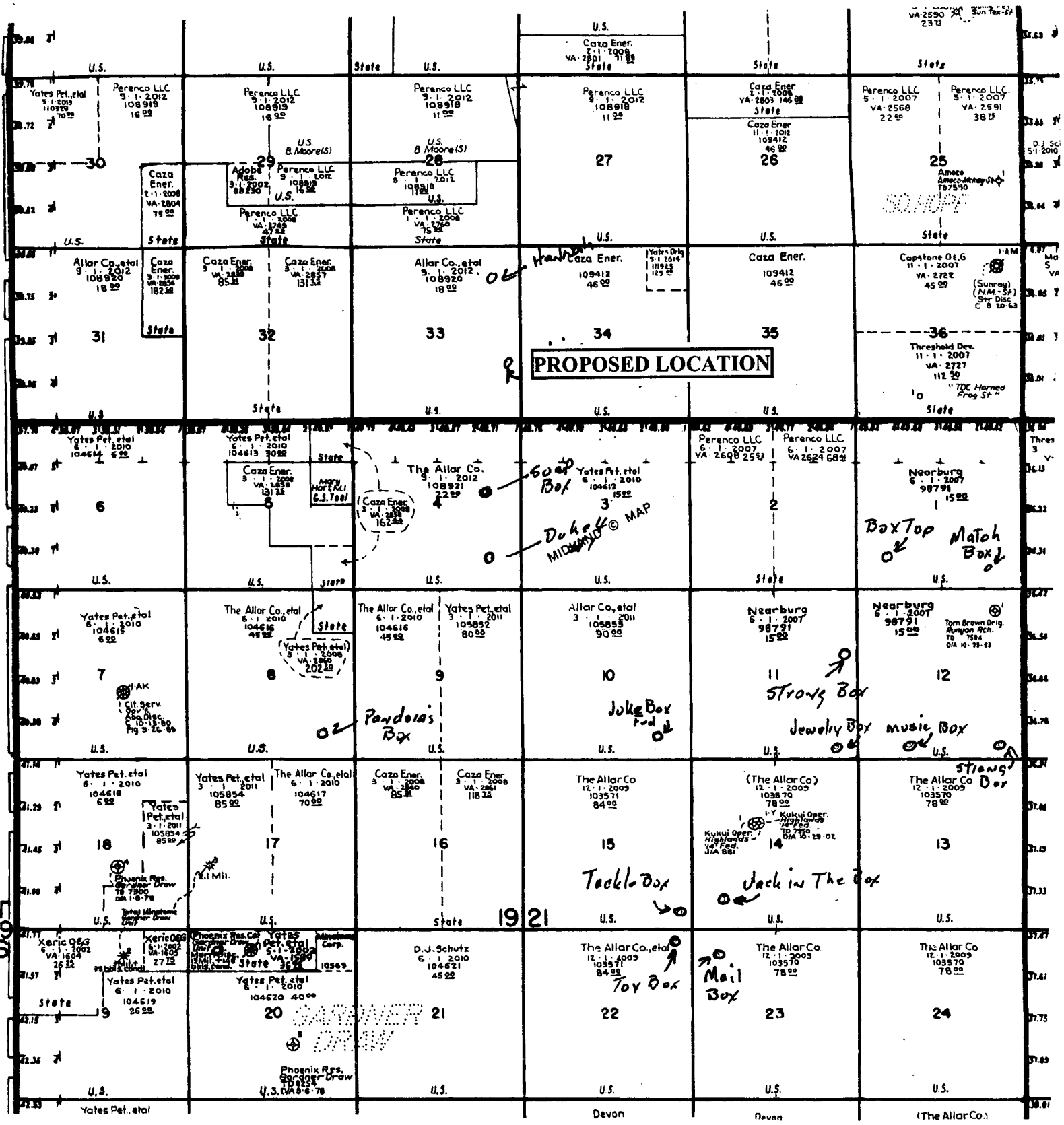
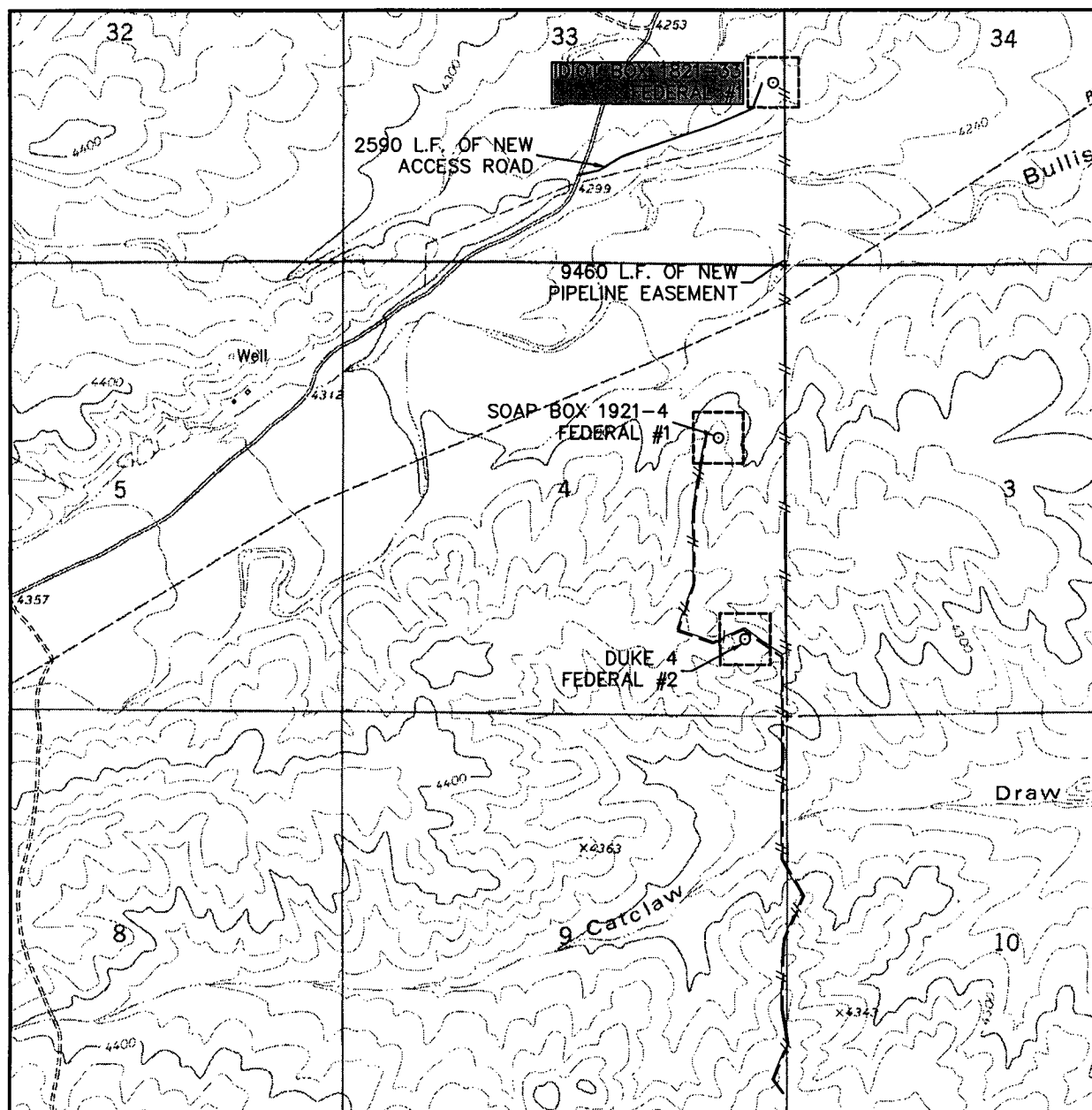


Exhibit "E"
AREA PRODUCTION MAP
PARALLEL PETROLEUM CORPORATION
IDIOT BOX 1821-33 FEDERAL #1
SHL: 2066' FSL AND 111' FEL, SEC 33, T18S, R21E
EDDY COUNTY, NEW MEXICO

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
HOLT TANK - 20'

SEC. 33 TWP. 18-S RGE. 21-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 2066' FSL & 111' FEL

ELEVATION 4294'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE IDIOT BOX 1821-33 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
HOLT TANK, N.M.



Exhibit F



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

PARALLEL SURVEY CALCULATION PROGRAM PETROLEUM CORPORATION

OPERATOR:	Parallel Petroleum Corporation		Supervisors:	
WELL:	Idiot Box 1821-33 Federal #1			
LOCATION:	Sec. 33 T-18-S R-21-E			
API NUMBER:				
COMMENTS:				
			MAG DEC. (-/+)	
			GRID CORR. (+/-)	
			TOTAL CORR. (-/+)	0.0

DATE: 10/19/06 TIME: 1:25 PM TRUE TO GRID

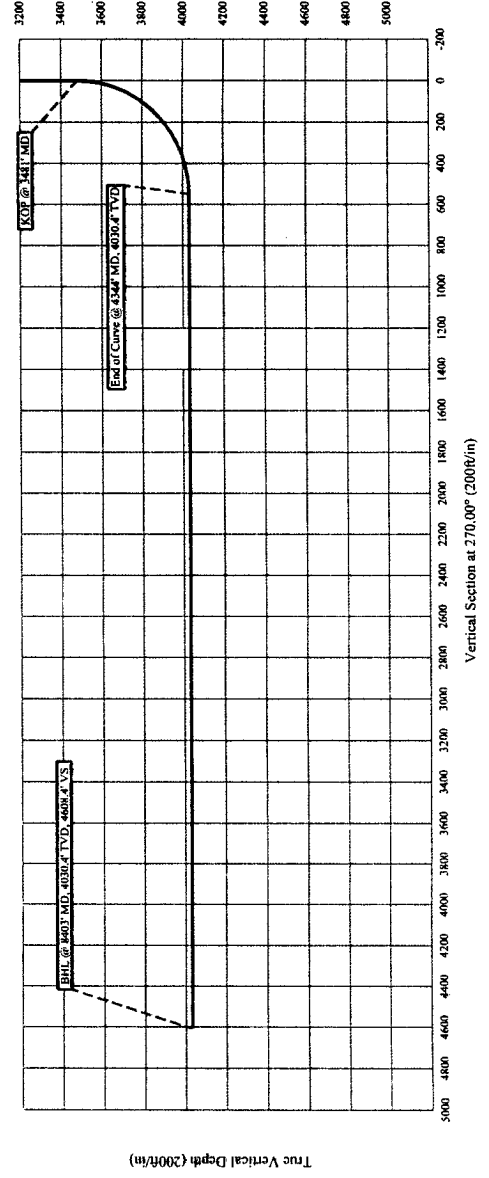
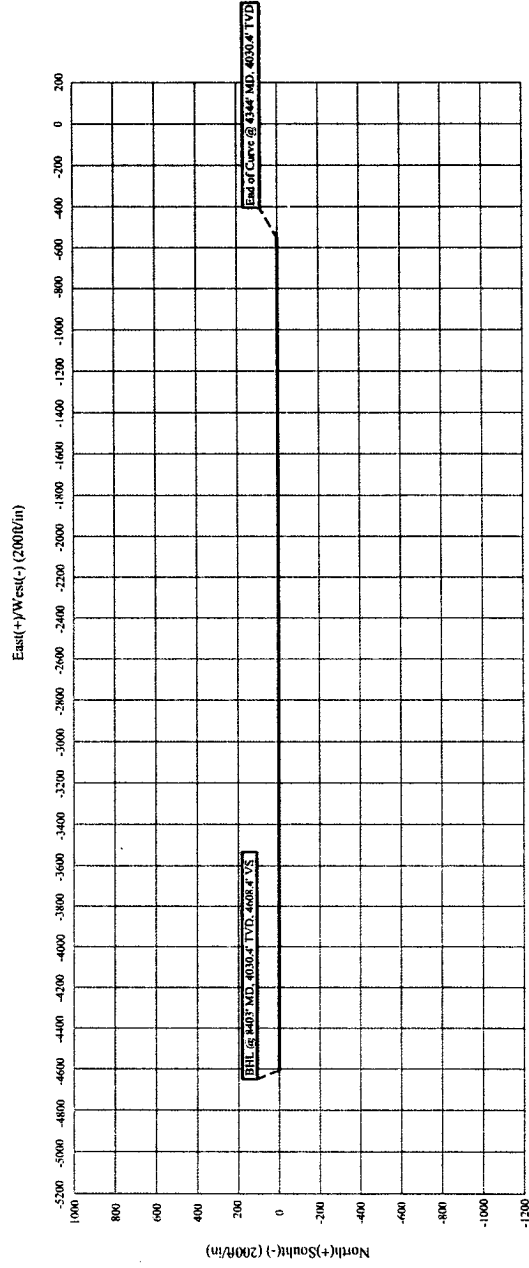
MINIMUM CURVATURE CALCULATIONS(SPE-3362)									PROPOSED DIRECTION 270.0		TARGET TRACKING TO CENTER	
SVY	MD	INC	GRID	VERT					DLS/		ABOVE(+)	RIGHT(+)
NUM			AZM	TVD	SECT	N-S	E-W		100		BELOW(-)	LEFT(-)
TIE	0	0.0	0.0	0.0	0.0	0.0	0.0					
1	3481	0.0	0.0	3481.0	0.0	0.0	0.0	0.0	549.0	0.0		
2	3491	1.0	270.0	3491.0	0.1	0.0	-0.1	10.4	539.0	0.0		
3	3501	2.1	270.0	3501.0	0.4	0.0	-0.4	10.4	529.0	0.0		
4	4344	90.0	270.0	4030.4	549.4	0.0	-549.4	10.4	-0.4	0.0		
5	8403	90.0	270.0	4030.4	4608.4	0.0	-4608.4	0.0	-0.4	0.0		

KOP @ 3481' MD
 BUR = 10.4 DEG per 100 FT
 End Curve @ 4344' MD, 4030.4' TVD
 BHL @ 8403' MD, 4030.4' TVD, 4608.4' VS

Parallel Petroleum Corp.

Idiot Box 1821-33 Federal #1
Sec. 33, T-18-S, R-21-E
Eddy County, New Mexico

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





PARALLEL

Petroleum Corporation

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June 12, 2006

Mr. Bryan Arrant
New Mexico Oil Conservation Division
1301 W. Grand Ave.
Artesia, New Mexico 88210

Re: Hydrogen Sulfide Potential
South Hope Area Wolfcamp Program
SW Chaves and Eddy Counties, New Mexico

Dear Mr. Arrant:

Parallel Petroleum Corporation operates the Boxtop 1921-1 Federal #1 well located in Section 1, T-19-S, R-21-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 in the area of these new drilling locations.

Should you need any additional information regarding this issue, please contact me at the address or phone number listed or email at ddurham@p111.com.

Sincerely,

A. Deane Durham
Senior Engineer

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Parallel Petroleum Corporation Well Name & #: Idiot Box 1821-33 Federal # 1
Location surface Hole: 2066' F S L & 111' F E L; Sec. 33, T. 18 S., R. 21 E.
Bottom Hole: 2040' F S L & 660' F W L; Sec. 33, T. 18 S., R. 21 E.
Lease #: NM-108920 County: Eddy State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- ☐ Lesser Prairie Chicken (stips attached) ☐ Flood plain (stips attached)
☐ San Simon Swale (stips attached) ☒ Other (Aplomado Falcon Stips Attached)

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

☒ The BLM will monitor construction of this drill site. Notify the ☒ Carlsbad Field Office at (505) 234-5972 ☐ Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

☒ Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

☐ All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.

☒ Other. **Pits Northeast V-Door Southeast, Pits will have to be deepened to avoid fence on the east side a electrical powerline on the north side of the pad.**

III. WELL COMPLETION REQUIREMENTS

☐ A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

☒ Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. If broadcasting, the seeding rate must be doubled.

- ☐ A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0
Plains lovegrass (*Eragrostis intermedia*) 0.5

- ☐ B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus crptandrus*) 1.0
Sand Lovegrass (*Eragostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

- ☐ C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (*Bouteloua curtipendula*) 5.0
Green Spangletop (*Leptochloa dubia*) 2.0
Plains Bristlegrass (*Setaria magrostachya*) 1.0

- ☐ D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (*Sporobolus airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

☒ OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

☐ Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic.

Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is **NOT TO BE RUPTURED** to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

CONDITIONS OF APPROVAL - DRILLING

Well Name & No. Idiot Box 1821-33 Federal # 1
Operator's Name: Parallel Petroleum Corp.
Location: 2066' FSL, 111' FEL, SEC 33, T18S, R21E, Eddy County, NM
BHL: 2040' FSL, 660' FWL, SEC 33, T18S, R21E, Eddy County, NM
Lease: NM-108920

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:
 - A. Spudding
 - B. Cementing casing: 16 inch 8 5/8 inch 5 1/2 inch
 - C. BOP tests
2. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.
3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

1. The 8 5/8 inch surface casing shall be set @ APPROXIMATELY 1500 FEET, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall CIRCULATE TO THE SURFACE.
3. Any casing changes, from those in the approved APD, must be approved before they are implemented
4. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8 5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - A variance to test the _____ to the reduced pressure of ____psi with the rig pumps is approved.
 - The tests shall be done by an independent service company.
 - The results of the test shall be reported to the appropriate BLM office.
 - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - Testing must be done in a safe workman-like manner. Hard line connections shall be required.

Engineers can be reached at 505-706-2779 for any variances that might be necessary.

F Wright 11/1/06