

RECEIVED

JUN 14 2006

OCD-ARTESIA

Form 3160-3 (April 2004)

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

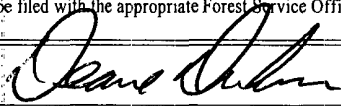
FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

APPLICANT

| | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NM NM 103570 at BHL | |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name | |
| 2. Name of Operator Parallel Petroleum Corporation | | 7. If Unit or CA Agreement, Name and No. | |
| 3a. Address 1004 North Big Spring, Suite 400 Midland, Texas | | 8. Lease Name and Well No. Flat Top Box Federal #1 35781 | |
| 3b. Phone No. (include area code) 432/684-3727 | | 9. API Well No. 30-015-34949 | |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 300' FSL and 1762' FWL, 12-19S-21E At proposed prod. zone BHL 660' FSL and 1760' FWL, 13-19S-21E | | 10. Field and Pool, or Exploratory Wolfcamp | |
| 11. Sec., T. R. M. or Blk. and Survey or Area FSL12-19S-21E, BHL 13-19S-21E | | 12. County or Parish Eddy | |
| 13. State NM | | 14. Distance in miles and direction from nearest town or post office* 9 miles south of Hope, New Mexico | |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660' | | 16. No. of acres in lease 2,560.00 | |
| 17. Spacing Unit dedicated to this well 320 | | 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 18' west of Music Box | |
| 19. Proposed Depth 5500' TVD, 8547' MD | | 20. BLM/BIA Bond No. on file NMB000265 | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 4187' | | 22. Approximate date work will start* 06/01/2006 | |
| 23. Estimated duration 30 days | | 24. Attachments Roswell Controlled Water Basin | |

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

| | | |
|------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------|
| 25. Signature  | Name (Printed/Typed) Deane Durham | Date 5-4-06 |
| Title Drilling Engineer, Parallel Petroleum Corporation | | |
| Approved by (Signature) /s/ Tony J. Herrell | Name (Printed/Typed) /s/ Tony J. Herrell | Date JUN 12 2006 |
| Title FIELD MANAGER 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)

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

DISTRICT I
1625 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 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 96086 | Pool Name WILDCAT; WOLFCAMP |
| Property Code | Property Name FLAT TOP BOX FEDERAL | Well Number 1 |
| OGRID No. | Operator Name PARALLEL PETROLEUM CORPORATION | Elevation 4187' |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| N | 12 | 19 S | 21 E | | 300 | SOUTH | 1762 | WEST | 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| N | 13 | 19 S | 21 E | | 660 | SOUTH | 1760 | WEST | EDDY |

| | | | |
|------------------------|-----------------|--------------------|-----------|
| Dedicated Acres 320 | Joint or Infill | Consolidation Code | Order No. |
|------------------------|-----------------|--------------------|-----------|

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| <p>NOTE:</p> <p>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.</p> | <p>Coordinate Table</p> <table><tr><th>Description</th><th>Plane Coordinate</th></tr><tr><td>Flat Top Box Federal #1</td><td>X = 371,766.2</td></tr><tr><td>Surface Location</td><td>Y = 607,134.7</td></tr><tr><td>Flat Top Box Federal #1</td><td>X = 371,758.8</td></tr><tr><td>Bottom Hole Location</td><td>Y = 602,213.5</td></tr></table> | Description | Plane Coordinate | Flat Top Box Federal #1 | X = 371,766.2 | Surface Location | Y = 607,134.7 | Flat Top Box Federal #1 | X = 371,758.8 | Bottom Hole Location | Y = 602,213.5 | <p>OPERATOR CERTIFICATION</p> <p>I hereby certify 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.</p> <p><i>Deane Perkins</i> 5-4-06 Signature Date <i>Deane Perkins</i> Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>April 4, 2006 Date of Survey LVA Signature & Seal of Professional Surveyor <i>W.O. McDonald</i> Num. 2006-0240 Certificate No. MACON McDONALD 12185</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------|-------------------------|---------------|------------------|---------------|-------------------------|---------------|----------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | Plane Coordinate | | | | | | | | | | | |
| Flat Top Box Federal #1 | X = 371,766.2 | | | | | | | | | | | |
| Surface Location | Y = 607,134.7 | | | | | | | | | | | |
| Flat Top Box Federal #1 | X = 371,758.8 | | | | | | | | | | | |
| Bottom Hole Location | Y = 602,213.5 | | | | | | | | | | | |

Exhibit G

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: Surface Location Lease # NM NM 98791
 Bottom Hole Location Lease # NM NM 103570

Well will located on the same well site as the Music Box Federal #1

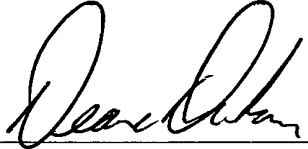
Legal Description of Land: Flat Top Box Federal #1
SHL: 300' FSL AND 1762' FWL, SEC 12, T19S, R21E
BHL: 660' FSL AND 1760' FWL, SEC 13, T19S, R21E
Eddy County, New Mexico

Formation(s) (if applicable: Wolfcamp

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

BLM Bond File No: NMB000265

5-4-06
Date



Name: Deane Durham
Title: Engineer

**SURFACE AND OPERATIONS PLAN FOR
DRILLING, COMPLETION, AND PRODUCING
PARALLEL PETROLEUM CORPORATION
FLAT TOP BOX FEDERAL #1
SHL: 300' FSL AND 1762' FWL, SEC 12, T19S, R21E
BHL: 660' FSL AND 1760' FWL, SEC 13, T19S, R21E
EDDY COUNTY, NEW MEXICO**

LOCATED:

9 miles South of Hope, New Mexico, located on the same pad as the proposed Music Box Federal #1.

OIL & GAS LEASE:

Surface Location Lease # NM NM 98791
Bottom Hole Location Lease # NM NM 103570

RECORD LESSEE:

| | |
|-----------------------|---------------------------------------------------------------------------------------------|
| Surface Location: | Nearburg Exploration Company, LLC 3300 N. A Street, Bldg. 2 #120 Midland, Texas 79705 |
| Bottom Hole Location: | Echo Production, Inc. P.O. Box 1210 Graham, Texas 76450 |

BOND COVERAGE:

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

ACRES IN LEASE:

2,560.00

SURFACE OWNER:

Federal

SURFACE TENANT:

Barbra Runyon Ranch
P.O. Box 2468
Roswell, NM 88202
Jim Bob Burnet, Ranch Manager, 505-484-3141

FLAT TOP BOX #1

Page 2

POOL:

Primary Objective - 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 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 D. The access road will come off County Road 20 and go east on to an existing 2 track road that runs along side an H-Frame power line. This access road may be utilized for as many as four drill sites including this one. The two track road will be improved for oilfield use. The road will go east 5995' and then turn left (north) 498' to the proposed location. Both the improved two track and new access road will be surfaced with caliche and will be 16' to 24' wide with a total length of 6493'. A 75' wide turn in will be constructed onto the access road at County Road 20 and at each wellsite turn in.

B. Surface Material

Caliche from a commercial source.

FLAT TOP BOX #1

Page 3

C. Maximum Grade

Less than five percent.

D. Turnouts

Two turnouts will be constructed on the access road.

E. Drainage Design

There will be at least three low water crossings constructed on the existing two track 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 gates or cattle guards will be installed as no fences will be crossed for this location or 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.

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.

FLAT TOP BOX #1

Page 4

- 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 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.

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, with east/southeast exposure. The area has a regional drainage being to the south and east toward Gardner Draw.

B. Soil

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

FLAT TOP BOX #1

Page 5

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

Gardner Draw, an intermittent stream which flows west to east, is located ½ mile south of the site. A small stock pond is located 1800' southeast of the location. Drainage from this site will eventually flow into Gardener Draw. There are no other rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures

The Barbra Runyon Ranch house is located 1 miles northeast of the proposed well site

F. Archaeological, Historical, and Cultural Sites

See archaeological report # SNMAS-06NM-2080 was originally prepared for the Music Box Federal #1, which will share this site.

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

FLAT TOP BOX #1

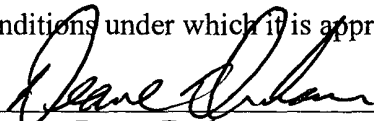
Page 6

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.

Date

5-4-06


Name: Deane Durham

Title: Engineer

ATTACHMENT TO FORM 3160-3
FLAT TOP BOX FEDERAL #1
Surface Hole Location
300 FSL AND 1762 FWL, SEC 12, 19S, 21E
Bottom Hole Location
660 FSL AND 1760 FWL, SEC 13, 19S, 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

Glorieta 1795'(+2392')
Tubb 2801'(+1386')
Yeso 2941' (+1246')
Abo Shale 3441' (+746')
Abo Carbonate 3585' (+602')
Wolfcamp 4393' (-206')
Wolfcamp Shale 4499'(-312')

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

Fresh water 790'
Oil and Gas Wolfcamp 4393' (-206')
No H₂S gas should be encountered

4. CASING AND CEMENTING PROGRAM

| <u>Casing Size</u> | <u>From To</u> | <u>Weight</u> | <u>Grade</u> | <u>Joint</u> |
|--------------------|----------------|---------------|--------------|--------------|
| 20" conductor | 0'-120' | | | |
| 8 5/8" | 0' - 1300' | 24# | J-55 | STC |
| 5 1/2" | 0' - 9,325' | 17# | N-80 | LTC |

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

FLAT TOP BOX 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 most likely be required. Top out to surface with 1" pipe in the annulus.

Note: 5-1/2" Cement per completion procedure.

Drilling Procedure

- a. Set 20" conductor pipe at 120' with a rathole unit.
- b. Drill 12 1/4" surface hole to an approximate depth of 1300', 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 5500', using cut brine to an approximate depth of 3400' and a starch mud system to TD.
- e. Run open-hole logs
- f. Plug lower portion of the hole, per OCD/BLM specifications.
- g. Set CMT kick-off plug.
- h. Dress CMT to kick off point at approximately 4100', oriented at 0 degree (grid) azimuth.
- i. Build angle at 14 degrees per 100' to 90 degrees and hold.
- j. Drill 7 7/8" horizontal drain hole to a terminus of 660' FSL.
- k. Run 5 1/2" 17# N-80 CSG to TD. Cement with 500 sx Class C
- l. 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 1,300' with 8.3 ppg Fresh Water system and viscous sweeps for hole cleaning.
- c. The production section from 1,300' to 4,300' will utilize a cut brine mud system.

FLAT TOP BOX FEDERAL #1

Page 3

- d. The remaining production section from 4,300' to TD will be a starch mud system with mud weight sufficient to control formation pressures.

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.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS

None anticipated.

BHP expected to be 1,100 psi.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence around third quarter of 2006 with drilling and completion operation lasting about 35 days.

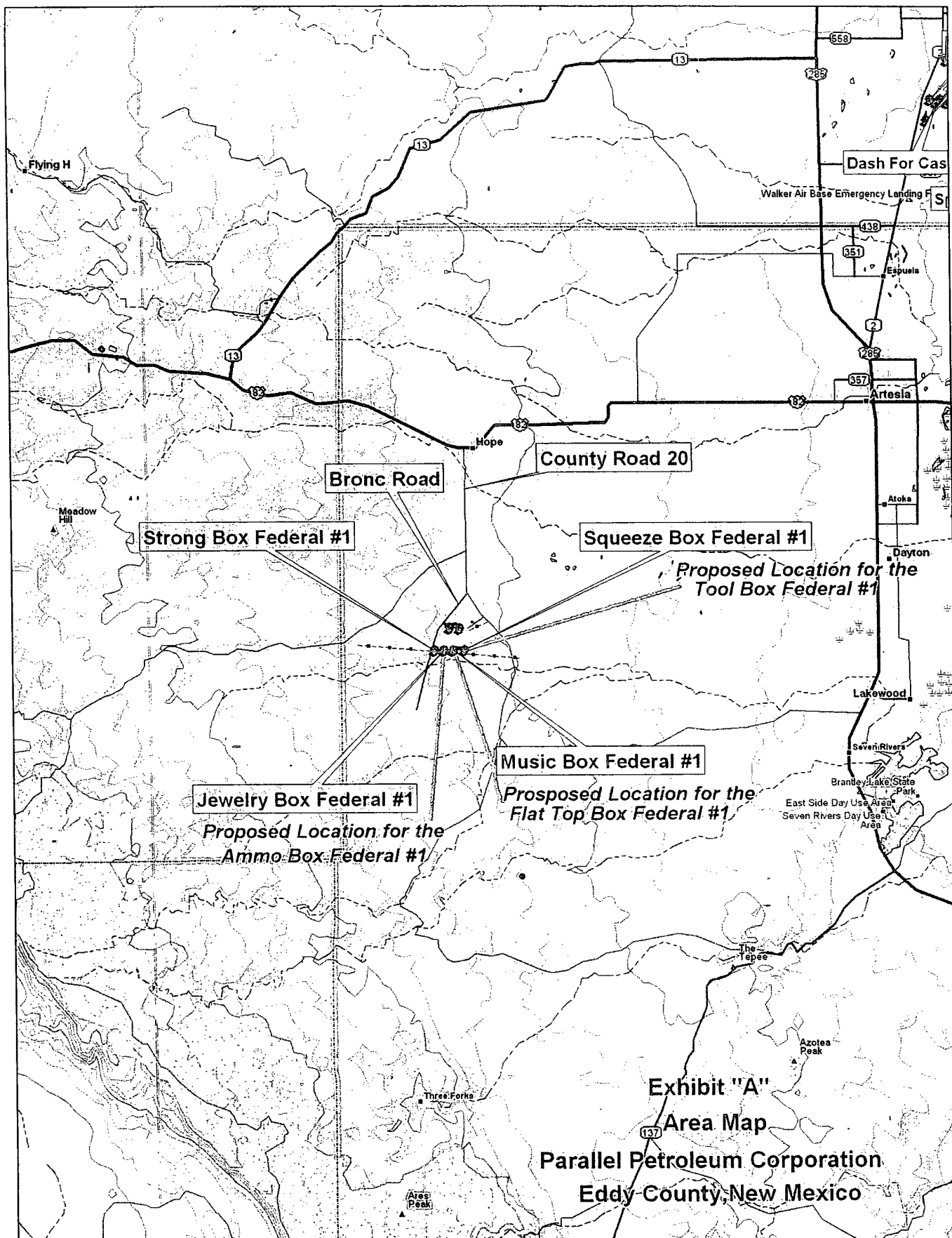
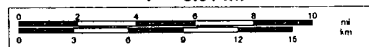


Exhibit "A"
Area Map
Parallel Petroleum Corporation
Eddy County, New Mexico



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www.delorme.com

Scale 1 : 400,000
1" = 6.31 mi



MINIMUM BOP SCHEMATIC

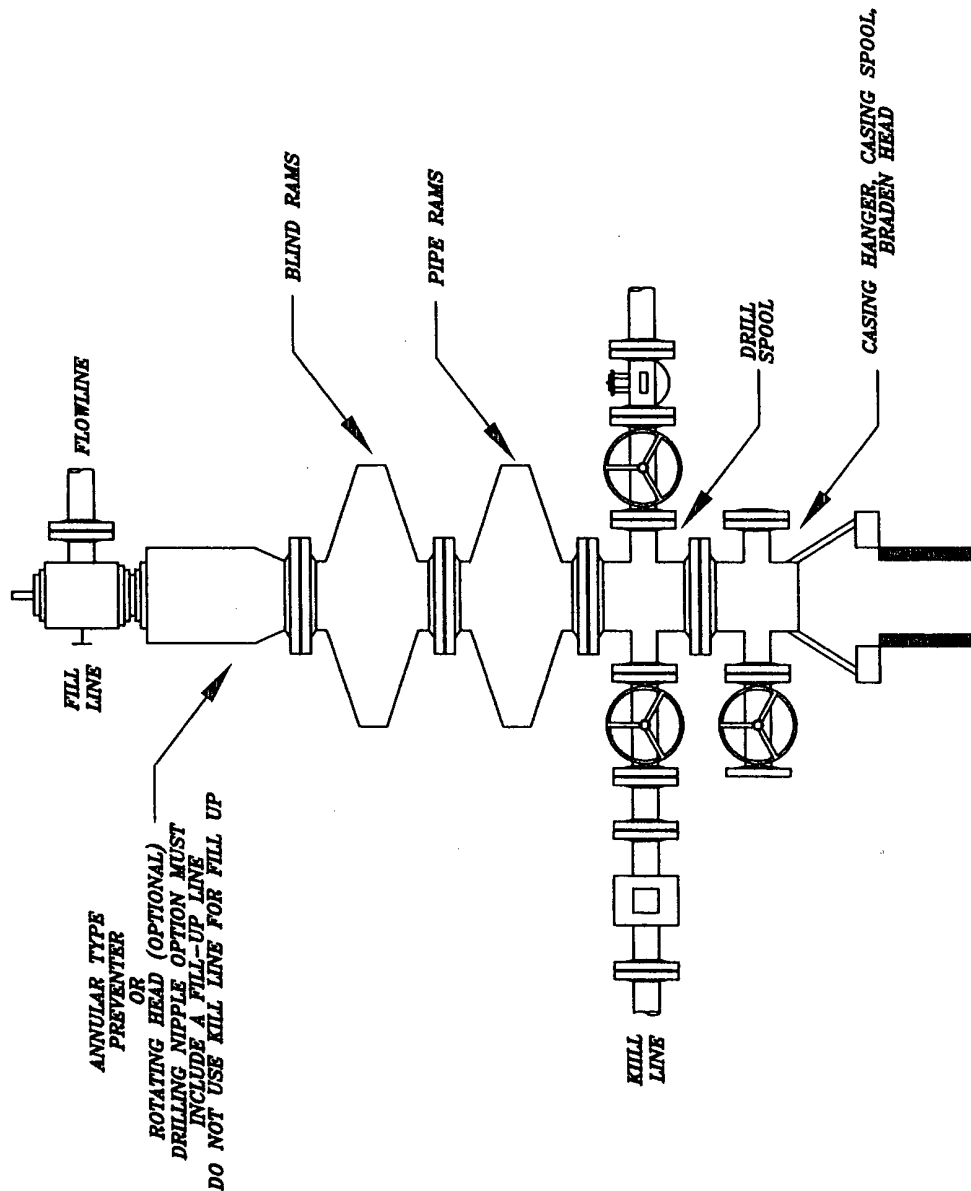


EXHIBIT I

PARALLEL PETROLEUM
BOP SCHEMATIC

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

| | |
|-----------|----------------------|
| DATE | 7/26/05 |
| Drawn By: | JJ |
| FILE | CAVEAT/2005/05/26/05 |

NOT TO SCALE

CHOKES MANIFOLD 5M SERVICE

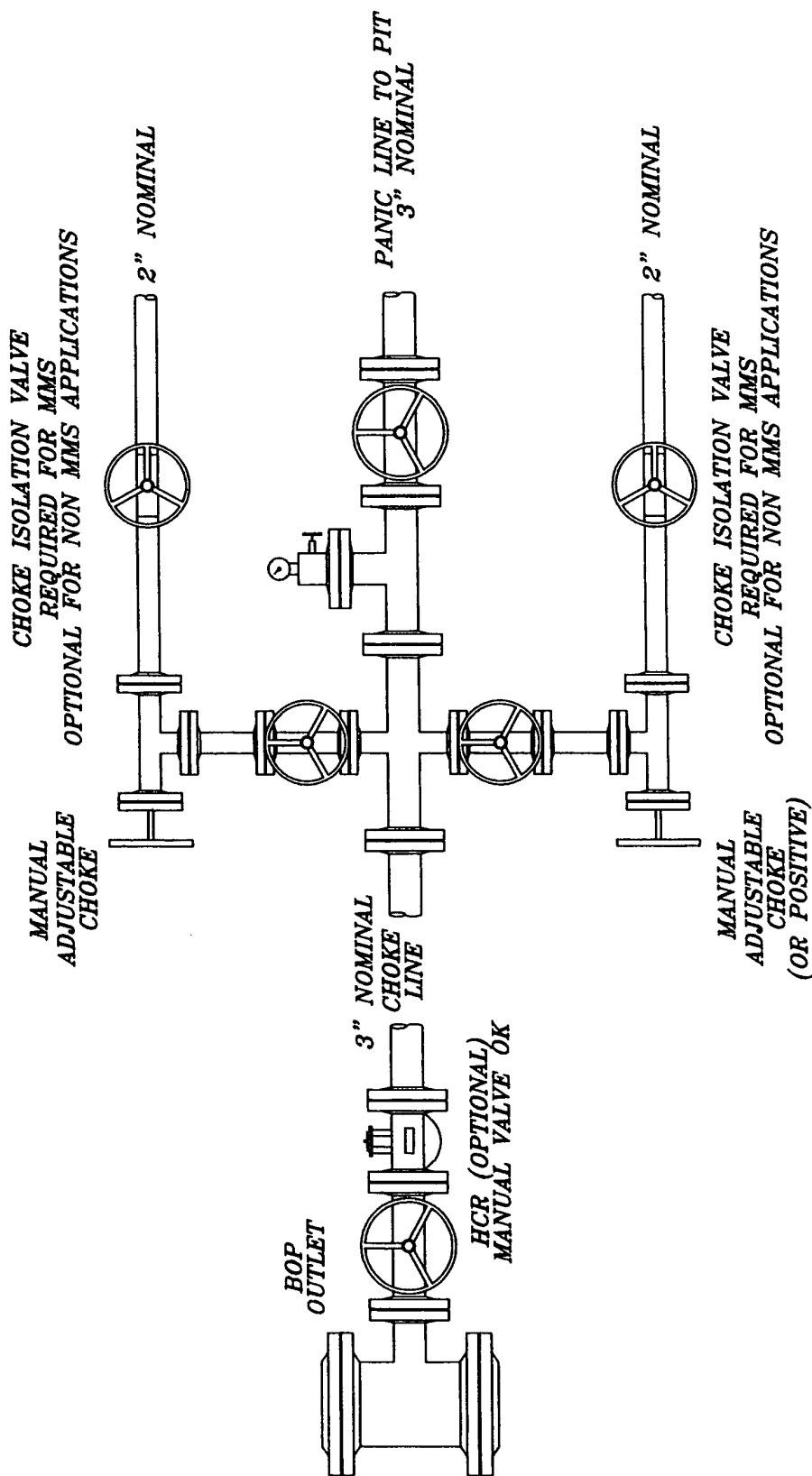


EXHIBIT J

| | |
|----------|---------------------------------|
| DATE | 8/17/05 |
| DRAWN BY | J.J. |
| FILE | C:\V\HALL\5M\5M CHOKES MANIFOLD |

PARALLEL PETROLEUM
CHOKES MANIFOLD

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

NOT TO SCALE

PARALLEL SURVEY CALCULATION PROGRAM PETROLEUM CORPORATION

| | | | |
|-----------------|----------------------------------------|-------------------|-----|
| OPERATOR: | Parallel Petroleum Corporation | Supervisors: | |
| WELL: | Flat Top Box Federal #1 | | |
| SURF. LOCATION: | 300 FSL, 1762 FWL Sec. 12 T-19-S R-21- | | |
| BH LOCATION: | 660 FSL, 1760 FWL Sec. 13 T-19-S R-21- | | |
| COMMENTS: | | | |
| | | MAG DEC. (-/+) | |
| | | GRID CORR. (-/+) | |
| | | TOTAL CORR. (-/+) | 0.0 |

DATE: 04/26/06 TIME: 3:41 PM TRUE TO GRID ☐

| MINIMUM CURVATURE CALCULATIONS(SPE-3362) | | | | | | | | PROPOSED DIRECTION | 180.0 | TARGET TRACKING TO CENTER | |
|------------------------------------------|------|------|-------------|--------|--------------|---------|-----|--------------------|-------|------------------------------|---------------------|
| SVY NUM | MD | INC | GRID AZM | TVD | VERT SECT | N-S | E-W | DLS/ 100 | | ABOVE(+) BELOW(-) | RIGHT(+) LEFT(-) |
| TIE | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 1 | 3403 | 0.0 | 0.0 | 3403.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 990.0 | 0.0 |
| 2 | 3433 | 1.5 | 180.0 | 3433.0 | 0.4 | -0.4 | 0.0 | 5.0 | | 960.0 | 0.0 |
| 3 | 3463 | 3.0 | 180.0 | 3463.0 | 1.6 | -1.6 | 0.0 | 5.0 | | 930.0 | 0.0 |
| 4 | 4958 | 89.6 | 180.0 | 4400.3 | 982.4 | -982.4 | 0.0 | 5.8 | | -0.4 | 0.0 |
| 5 | 8895 | 89.6 | 180.0 | 4427.8 | 4919.3 | -4919.3 | 0.0 | 0.0 | | -0.4 | 0.0 |

KOP @ 3403' MD
 BUR = 5 DEG per 100 FT
 End Curve @ 4958' MD, 4400.3' TVD
 BHL @ 8895' MD, 4427.8' TVD, 4919.3' VS

Parallel Petroleum Corp.

COMPANY DETAILS

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

Flat Top Box Federal #1
Section 12, T 19-S, R 21-E
Eddy County, New Mexico

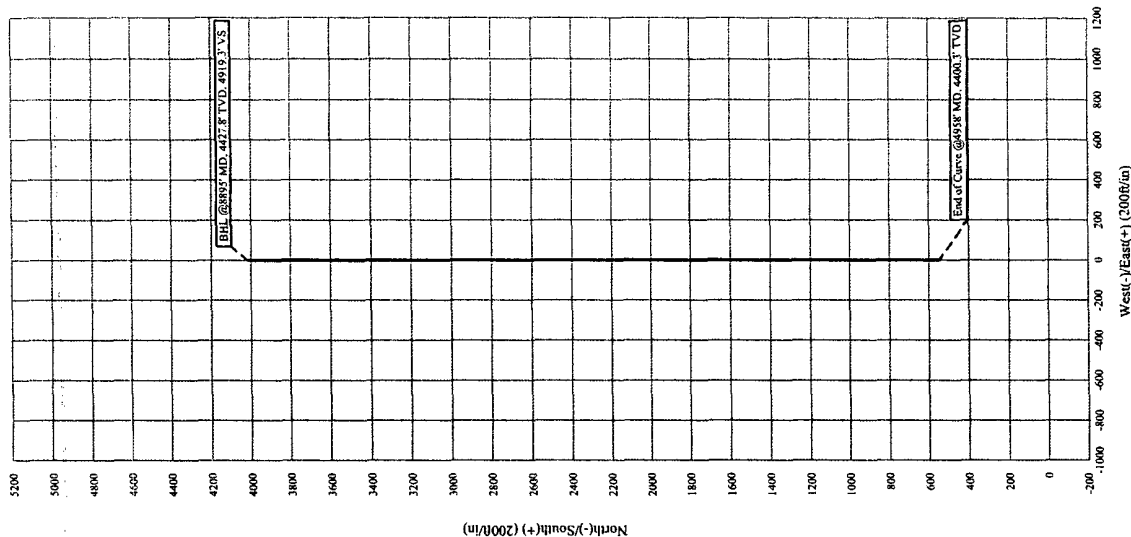
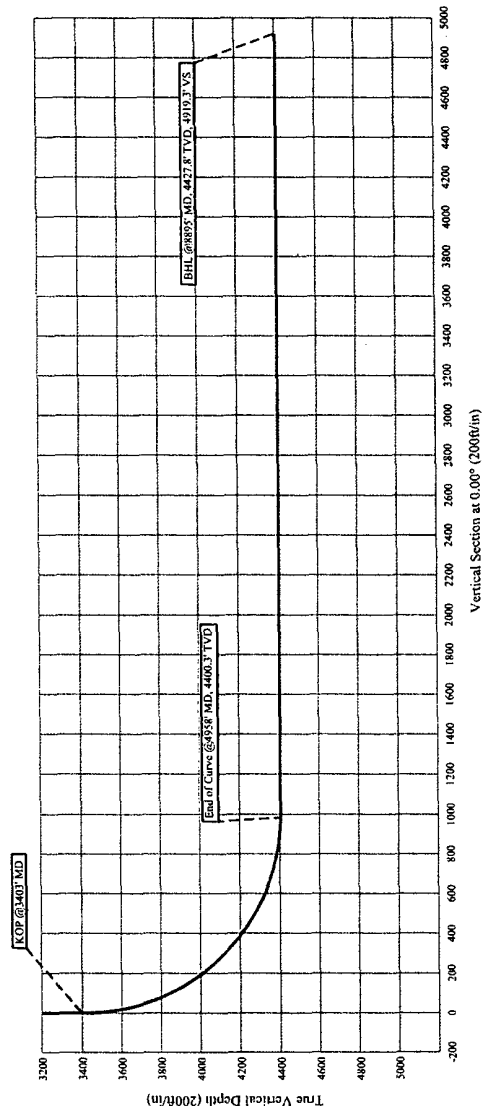


Exhibit L





PARALLEL

Petroleum Corporation

1004 North Big Spring, Suite 400 • Midland, TX 79701 • Ph: 432-684-3727 • Fax: 432-684-3905

November 9, 2005

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

Re: Hydrogen Sulfide Potential
Parallel Petroleum Corporation, Box Area wells,
T-19-S, R-21-E
Eddy County, New Mexico

Dear Mr. Arrant;

The Box Top Federal 19 21-1 #1 site which is being drilled seven miles south of Hope, New Mexico was reviewed for its potential for hydrogen sulfide. Mr. John Simitz, Geologist for the Bureau of Land Management, Roswell, New Mexico reviewed the site and stated that no potential for gas was found a Morrow test in this area. Based on this information we believe the potential H₂S at well locations in this area are negligible.

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

Sincerely,

Deane Durham
Engineer

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Parallel Petroleum Corporation

Well Name & No: Flat Top Box Federal No. 01

Location: Surface 300' FSL & 1760' FWL, Sec.12, T.19 S. R. 21 E.

Lease: NMNM 103570

Eddy County, New Mexico

Location Bottom Hole: 660' FSL & 1760' FWL, Sec. 13, T.19S., R.21E.

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; 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: 8 5/8 inch; 5 1/2 inch;

C. BOP Tests

2. A Hydrogen Sulfide (H2S) Drilling Plan is not required for this well bore.

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.

II. CASING:

1. The 8 5/8 inch shall be set at 1300 Feet with 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 to circulate to surface.

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 13 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) shall be 2 M psi.

(III Cont):

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.

- The test 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 safe workman-like manner. Hard line connections shall be required.
- Both low pressure and high pressure testing of BOPE is required.

G. Gourley RFO 05/23/ 06