Form 3160 -3 (April 2004)

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

UNITED STATES

JUN 1 4 200c

| BUREAU OF LAND MAN | | | | NM NM 1035 | 70 at BHI | L | |
|--|--|---|---------------------|--|------------------|----------------|--|
| APPLICATION FOR PERMIT TO | | @ Q Q | TEOM | 6. If Indian, Allotee | or Tribe l | Name | |
| la. Type of work: DRILL REENTE | | 7 If Unit or CA Agreement, Name and No. | | | | | |
| lb. Type of Well: Oil Well Gas Well Other | v | Single Zone Multip | ole Zone | 8. Lease Name and Ammo Box Fo | | 3577 | |
| 2. Name of Operator Parallel Petroleum Corporation | 230 | 0387 | | 9. API Well No. | - 3 | 1958 | |
| 3a. Address 1004 North Big Spring, Suite 400 Midland, Texas | | No. (include area code) 1684-3727 | Vi lde | 10. Field and Pool, or | Explorator G A S | y | |
| 4. Location of Well (Report location clearly and in accordance with an | y State requ | | | 11. Sec., T. R. M. or E | | rvey or Area | |
| At surface 285' FSL and 721' FEL, 11-19S-21F At proposed prod. zone BHL 660' FSL and 722' FWL. 14-19 | | Pu. Dunham | oct to Appro | FSL, 11-198-7 | 21E, BHL | . 14-19S-21E | |
| 14. Distance in miles and direction from nearest town or post office* | | | | 12. County or Parish | | 13. State | |
| 9 miles south of Hope, New Mexico | | | | Eddy | | NM | |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660' | 16. No. 2,560 | of acres in lease | 17. Spacin | g Unit dedicated to this | well | | |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 18' SW of Jewelry Box | Ι. | oosed Depth TVD, 8491 MD | | 20. BLM/BIA Bond No. on file NMB000265 | | | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 4217' | 22. Approximate date work will start* 07/01/2006 | | | 23. Estimated duration 30 days | | | |
| | 24. A | ttachments | | | | | |
| The following, completed in accordance with the requirements of Onsho | re Oil and | Gas Order No.1, shall be a | ttached to th | is form: | - | | |
| Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Porest Service Office). | Lands, th | ltem 20 above). e 5. Operator certific | cation specific inf | ormation and/or plans a | Ü | ` | |
| 25. Signature Contache | N | ame (Printed/Typed) Deane Durham | | | Date 5- | 4-06 | |
| Title Drilling Engineer, Parallel Petroleum Corporation | on | | | | | | |
| Approved by (Signature) /s/ Tony J. Herrell | N | ame (Printed/Typgd) Fo l | ny J. I | Herrell | DateU | 1 3 2006 | |
| FIELD MANAGER | 0 | ffice CARLS | BAD | FIELD OF | | _ | |
| Application approval does not warrant or certify that the applicant hole conduct operations thereon. Conditions of approval, if any, are attached. | ds legal or | equitable title to those rigi | APP | ROVAL FO | OR S | applicantto AR | |

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)

Roswell Controlled Water Basin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

DISTRICT_I 1625' N. Frenc's Dr., Hobbs, NM 88240

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

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT III

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

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

| API Number | Pool Code | P | ool Name | |
|---------------|----------------|------------------|-----------|--|
| | 46086 | Wild cor. | Wolfrent | |
| Property Code | Property Name | | | |
| | AMMO B | OX FEDERAL | 1 | |
| OGRID No. | Opera | ator Name | Elevation | |
| | PARALLEL PETRO | LEUM CORPORATION | 4218 | |

WELL LOCATION AND ACREAGE DEDICATION PLAT

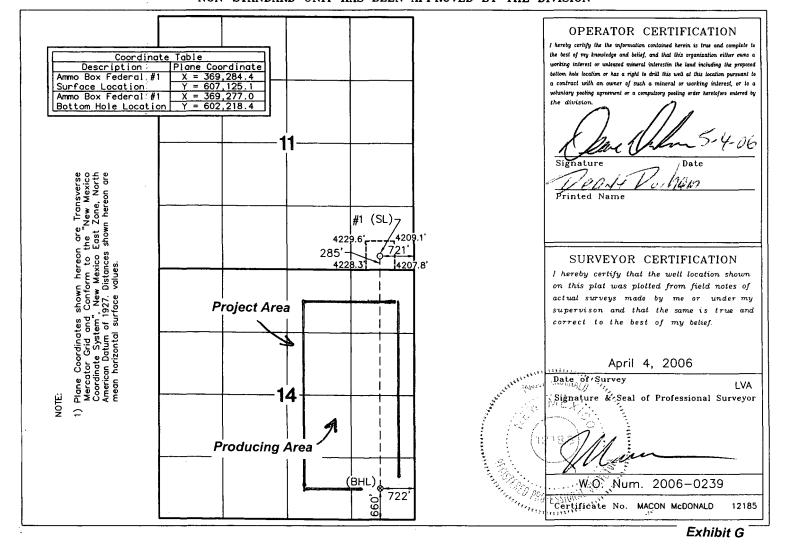
Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| Р | 11 | 19 S | 21 E | | 285 | SOUTH | 721 | 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 |
|---|---------|----------|---------|---------|---------------|------------------|---------------|----------------|--------|
| P | 14 | 19 S | 21 E | | 660 | SOUTH | 722 | EAST | EDDY |
| Dedicated Acres Joint or Infill Consolidation Cod | | Code Or | der 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



ATTACHMENT TO FORM 3160-3 AMMO BOX FEDERAL #1 **Surface Hole Location** 285 FSL AND 721 FEL, SEC 11, 19S, 21E

Bottom Hole Location 660 FSL AND 722 FEL, SEC 14, 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 1775'(+2442') Tubb 2781'(+1436') Yeso 2921' (+1296') Abo Shale 3421' (+796')

Abo Carbonate 3535' (+682')

Wolfcamp 4373' (-156')

Wolfcamp Shale 4479'(-262')

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

Fresh water

790'

Oil and Gas

Wolfcamp 4373' (-156')

No H₂S gas should be encountered

4. **CASING AND CEMENTING PROGRAM**

| Casing Size | From To | Weight | <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.

AMMO 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

<u>Note</u>: 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 ¼" 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
- 1. 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.

AMMO 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. <u>LOGGING, TESTING, AND CORING PROGRAM</u>

Mud logs as well as DLL/CNL/LDT/CAL/GR logging is planned. Drill stem tests, cores and sidewall cores are possible.

9. <u>ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS</u>

None anticipated.

BHP expected to be 1,100 psi.

10. <u>ANTICIPATED STARTING DATE:</u>

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

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 Jewelry Box Federal #1

Legal Description of Land:

Ammo Box Federal #1

SHL: 285' FSL AND 721' FEL, SEC 11, T19S, R21E BHL: 660' FSL AND 722' FEL, SEC 14, 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

Date

Name: Deane Durham

Title: Engineer

SURFACE AND OPERATIONS PLAN FOR DRILLING, COMPLETION, AND PRODUCING PARALLEL PETROLEUM CORPORATION AMMO BOX FEDERAL #1

SHL: 285' FSL AND 721' FEL, SEC 11, T19S, R21E BHL: 660' FSL AND 722' FEL, SEC 14, T19S, R21E EDDY COUNTY, NEW MEXICO

LOCATED:

9 miles South of Hope, New Mexico, Located on the same pad as the proposed Jewelry 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

Ammo Box Federal #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 3200' and then turn left (north) 353' 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 3553'. 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.

Ammo Box Federal #1

Page 3

C. Maximum Grade

Less than five percent.

D. Turnouts

No turnouts will be constructed on this 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 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". The well will share a drilling pad and reserve pit with the Jewelry Box Federal #1

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. <u>METHODS OF HANDLING WASTE DISPOSAL</u>

- 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.

Ammo Box Federal #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.

Ammo Box Federal #1

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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. 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 1.5 miles northeast of the proposed well site

F. Archaeological, Historical, and Cultural Sites

See archaeological report # SNMAS-06NM-2082 was originally prepared for the Jewelry 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. <u>Land Use</u> Grazing

H. <u>Surface Ownership</u> Federal

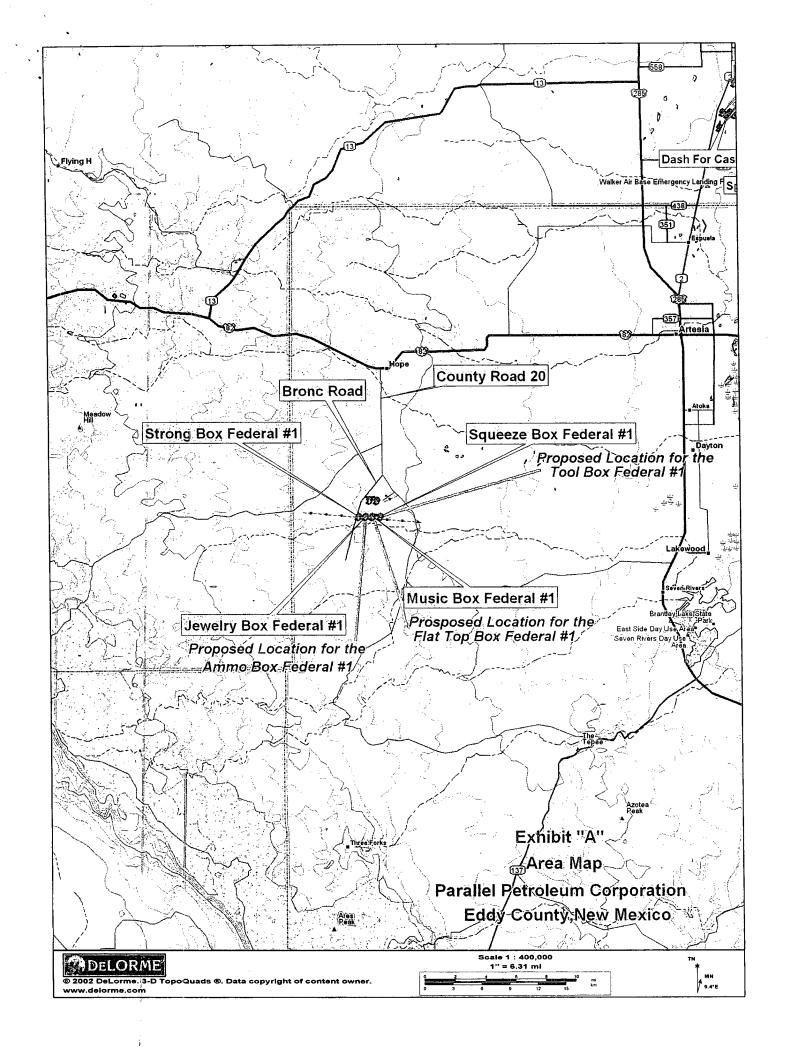
11. OPERATOR'S REPRESENTATIVE

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

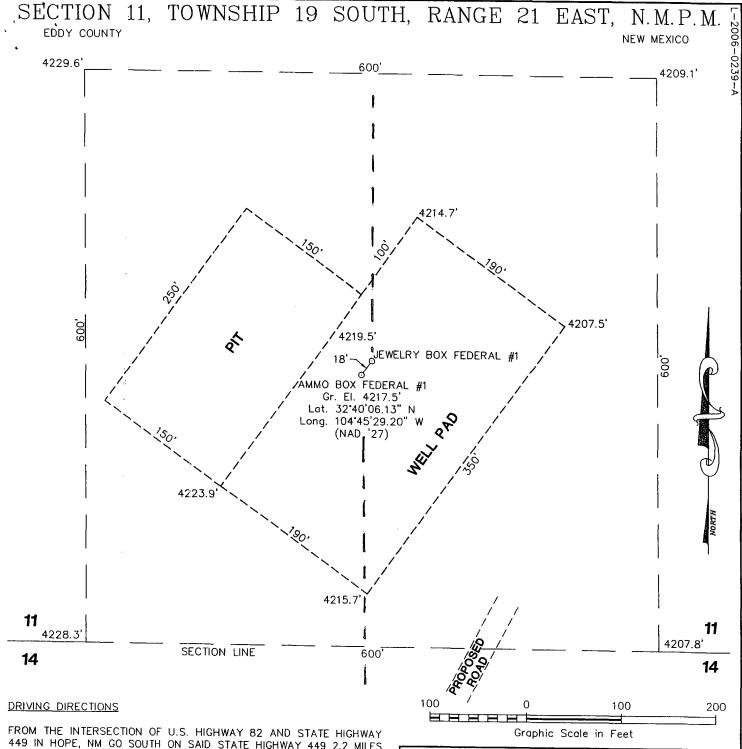
12. <u>CERTIFICATION</u>

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 Corpo conformity with this plan and the terms an | ration and its contractors and subcontractors in d conditions under which it is approved. |
|--|---|
| 5-4-06 | 1 / On a h le lean |
| Date | Name: Deane Durham |
| | Title: Engineer |



DOUBLE HORSESHOE RESERVE PIT 200' x 200' 100' X 100' INSIDE **POSSIBLE** FLARE PIT USE STINGER FOR DERRICK IF NECESSARY MUD PITS MUD PITS 47' EXISTING - WELLHEAD 20' *- 200*' NEW30 - 145' -DRILLING RIG **EQUIPMENT** PIPE RACKS _ FUEL TANKS, GENERATORS ECT. 140' WELL PAD TRAILERS ECT. TRAILERS ECT. EXHIBIT B PARALLEL PETROLEUM DRILLING RIG LAYOUT DUAL WELL LOCATIONS DATE: 4/28/06 DHOL BY: HIGHLANDER ENVIRONMENTAL CORP. MIDLAND, TEXAS NOT TO SCALE



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 4.8 MILES (7.0 TOTAL) TO A FORK IN THE ROAD, THE INTERSECTION OF SAID COUNTY ROAD 12 AND COUNTY ROAD 20 (BRONC ROAD), THEN GO SOUTHWEST ALONG SAID COUNTY ROAD 20 (BRONC ROAD) 3.5 MILES TO A POINT WHERE A PROPOSED ACCESS ROAD BEGINS ON EAST (LEFT) SIDE OF SAID COUNTY ROAD 20, THEN GO SOUTHEAST ALONG SAID ACCESS ROAD 0.6 MILE TO ANOTHER PROPOSED ACCESS ROAD ON NORTH (LEFT) SIDE OF SAID ACCESS ROAD, THEN GO NORTH ALONG SAID NEW ACCESS ROAD 353 FEET TO THE PROPOSED LOCATION.

WEST COMPANY of Midland, Inc.

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

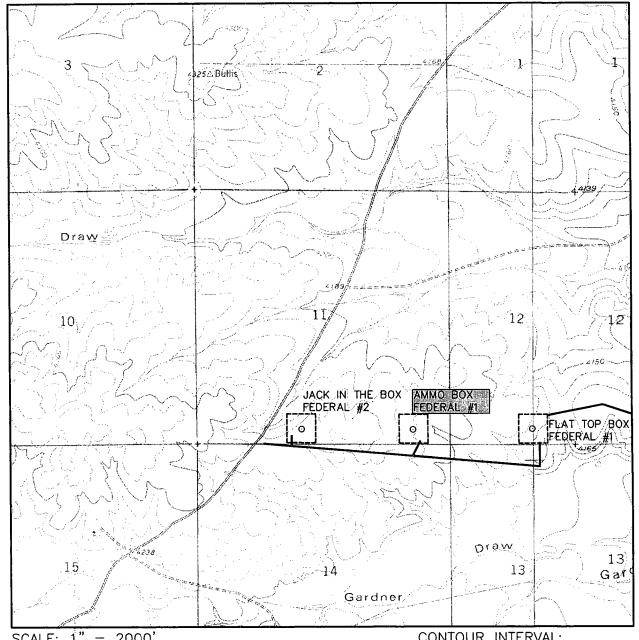
PARALLEL PETROLEUM CORPORATION

AMMO BOX FEDERAL #1

Located 285' FSL & 721' FEL, Section 11 Township 19 South, Range 21 East, N.M.P.M. Eddy County, New Mexico

| Drawn By: LVA | Date: April 11, 2006 |
|--------------------------|-------------------------|
| Scale: 1"=100' | Field Book: 326 / 49-51 |
| Revision Date: 4-17-2006 | Quadrangle: Holt Tank |
| W.O. No: 2006-0239 | Dwg. No.: L-2006-0239-A |

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: HOLT TANK - 20'

SEC. 11 TWP. 19-S RGE. 21-E SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 285' FSL & 721' FEL

ELEVATION 4218'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE AMMO BOX FEDERAL

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

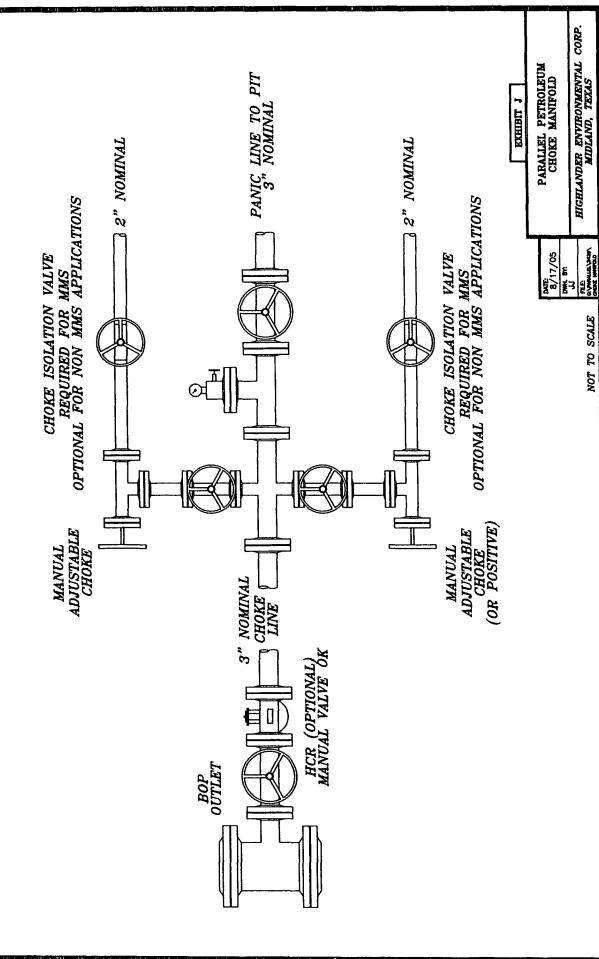


Exhibit F

WEST

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





HIGHLANDER ENVIRONMENTAL CORP. MIDLAND, TEXAS

NOT TO SCALE

| 110 | PET | A R | A L | ORATIO | | JRVEY C | ALCULA | TION | PROGR | - AM |
|------------|---------|---------|-------------|-------------|----------------|-------------|---|-------------|----------------------|---------------------------------------|
| OPER | ATOR: | | Parallel Pe | troleum C | orporati | on | Supervisor | s: | | |
| WELL | | | Ammo Bo | k Federal # | ‡ 1 | | | | | |
| | . LOCA | | | | | 19-S R-21-E | | | | |
| BH L | CATIC | N: | | | ec. 14 T- | 19-S R-21-E | | | | |
| | | | COMM | ENTS: | | | | | | |
| | | | | | | | | | EC.(-/+) | |
| | | | | | | | 1 * * * * * * * * * * * * * * * * * * * | | ORR.(-/+) | |
| | -1 | | | | | | | IUIAL | CORR.(-/+) | 0.0 |
| | | DATE: | 04/26/06 | | TIME: | 3:42 PM | TRUE TO GRID |) | | |
| MINIM |)M CURV | ATURE C | ALCULATION | IS(SPE-3362 | P | ROPOSED | DIRECTION | 180.0 | TARGET T | · · · · · · · · · · · · · · · · · · · |
| SVY NUM | MD | INC | GRID AZM | TVD | VERT SECT | N-S | E-W | DLS/ 100 | ABOVE(+) BELOW(-) | RIGHT(+) |
| TIE | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| 1 | 3383 | 0.0 | 0.0 | 3383.0 | 0.0 | 0.0 | 0.0 | 0.0 | 990.0 | 0.0 |
| 2 | 3413 | 1.5 | 180.0 | 3413.0 | 0.4 | -0.4 | 0.0 | 5.0 | 960.0 | 0.0 |
| 3 | 3443 | 3.0 | 180.0 | 3443.0 | 1.6 | -1.6 | 0.0 | 5.0 | 930.0 | 0.0 |
| 4 | 4937 | 89.6 | 180.0 | 4379.7 | 981.8 | -981.8 | 0.0 | 5.8 | 0.2 | 0.0 |
| 5 | 8875 | 89.6 | 180.0 | 4407.2 | 4919.7 | -4919.7 | 0.0 | 0.0 | 0.2 | 0.0 |

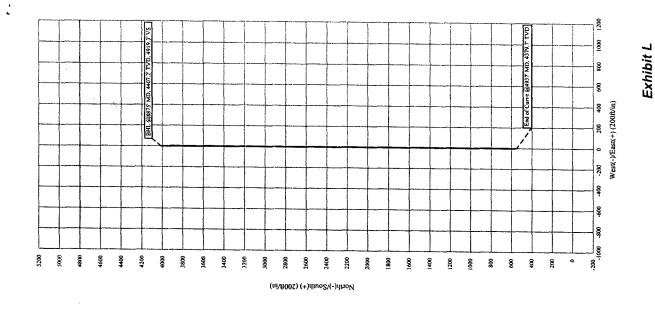
KOP @ 3383' MD BUR = 5 DEG per 100 FT End Curve @ 4937' MD, 4379.7' TVD BHL @ 8875' MD, 4407.2' TVD, 4919.7' VS

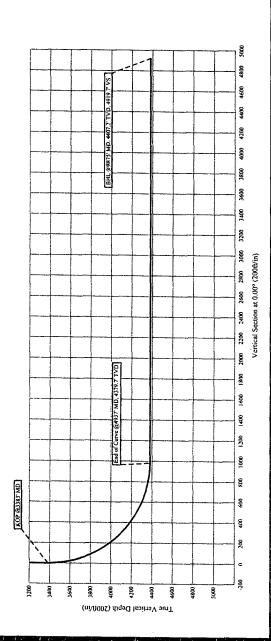
Parallel Petroleum Corp.

Ammo Box Federal #1 Section 11, T 19-S, R 21-E Eddy County, New Mexico

COMPANY DETAILS

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







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 H_2S 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@plll.com.

Sincerely,

Deane Durham

Engineer

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Parallel Petroleum Corporation Well Name & No: Ammo Box Federal No. 01

Location: Surface 660' FSL & 722' FEL, Sec. 11, T. 19 S. R. 21 E.

Lease: NMNM 103570

Eddy County, New Mexico Location BHL: 660' FSL & 722' FEL, Sec. 14, 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 % inch; 5 ½ 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 ½ 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 ½ 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 % 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.
- 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 05/15/06