

OCD-ARTESIA

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 4304-0137  
Expires March 31, 2007

5. Lease Serial/No.  
NM NM 115995

6. If Indian, A. Notee or Tribal Name

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

8. Lease Name and Well Name  
Dale Evans 1920-26 State Com #1

9. API Well No.  
30-005-63842

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

10. Field and Pool, or Exploratory  
Wolfcamp

4. Location of Well (Report location clearly and in accordance with any State requirements.)  
At surface 128' FSL and 760' FWL  
At proposed prod. zone Penetration Point in Wolfcamp 666' FSL, BHL 660' FNL and 760' FWL

11. Sec., T. R. M. or Blk. and Survey or Area  
26-19S-20E

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

12. County or Parish  
Chaves

13. State  
NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) 760'

16. No. of acres in lease  
1760

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' South

19. Proposed Depth  
5,000' TWD 8634' MD

20. BLM/BIA Bond No. on file  
NMB000265

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
GL 4735'

22. Approximate date work will start\*  
08/01/2005

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:

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*  
Title Drilling Engineer, Parallel Petroleum Corporation

Name (Printed/Typed)  
Deane Durham

Date  
21 JUNE 06

Approved by (Signature)  
/s/ Tony J. Herrell  
Title FIELD MANAGER

Name (Printed/Typed)  
/s/ Tony J. Herrell  
Office CARLSBAD FIELD OFFICE

Date  
JUL 30 2006

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)

WITNESS SURFACE CASING

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

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 DALE EVANS 1920-26 STATE COM	Well Number 1
OGRID No.	Operator Name PARALLEL PETROLEUM CORPORATION	Elevation 4735'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	26	19 S	20 E		128	SOUTH	760	WEST	CHAVES

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	26	19 S	20 E		660	NORTH	760	WEST	CHAVES

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

Project Area

Producing Area

26

Wolfcamp  
Penetration  
Point  
666' FSL

760'

660'

(BHL)

4701.7'

4715.0'

4737.5'

4702.3'

128' (SL)

35

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
Dale Evans 1920-26 State Com #1	X = 333,688.4
Surface Location	Y = 591,323.3
Dale Evans 1920-26 State Com #1	X = 333,704.6
Bottom Hole Location	Y = 595,815.5

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.

Signature: *Deane Durham* Date: 12 JUNE 06

Printed Name: Deane Durham

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.

Date of Survey: May 31, 2006

Signature & Seal of Professional Surveyor: *[Signature]* LVA

W.O. Num: 2006-0457

Certificate No. MACON McDONALD 12185



*District I*  
1625 N. Fre  
*District II*  
1301 W. G  
*District II*  
1000 R  
*District*  
1220

MENT TO FORM 3160-3  
ANS 1920-26 STATE COM #1  
Surface Hole Location  
FSL AND 760 FWL, SEC 26, 19S, 20E  
Bottom Hole Location  
660 FNL AND 760 FWL, SEC 26, 19S, 20E  
CHAVES 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'(+2960')  
Tubb 2781'(+1954')  
Yeso 2921' (+1814')  
Abo Shale 3421' (+1314')  
Abo Carbonate 3535' (+1200')  
Wolfcamp 4373' (+362')  
Wolfcamp Shale 4479'(+256')

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

Fresh water 790'  
Oil and Gas Wolfcamp 4373' (+362')  
No H<sub>2</sub>S 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'			
9 5/8" <b>WITNESS</b>	0' - 1400'	36#	J-55	STC
5 1/2"	0' - 8,634'	17#	N-80	LTC

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



*Feb*

**DALE EVANS 1920-26 STATE COM #1**

**Page 2**

9-5/8" slurry: Lead: 125 sacks (N2 Foamed): 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 1400', using fresh water and viscous sweeps for hole cleaning. Set 9 5/8", 36# J-55 casing with 460 sx, Class C cement (lead will be N2 Foamed cement, circulate to surface, 1" if necessary).
- c. Set slips on 9 5/8" CSG. Cut 9 5/8" CSG and NU & test BOP.
- d. Drill 8 3/4" production hole to 4800', using cut brine to an approximate depth of 3400' and a starch mud system to TD.
- e. Log vertical hole and evaluate for Wolfcamp horizontal well.
- f. Set cement kick-off plug.
- g. Dress cement to kick-off-point at approximately 3835'.
- h. Drill 8 3/4" curve. Kick off and build angle at 10.7 degrees per 100' to 90 degrees and hold.
- i. Drill 7 7/8" horizontal drain hole to a terminus of 660' FNL.
- j. Run 5 1/2" 17# N-80 CSG to TD. Cement with sufficient Class C acid soluble cement to tie back to surface casing.
- 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 1,400' with 8.3 ppg Fresh Water system and viscous sweeps for hole cleaning.
- c. The production section from 1,400' to 3,400' will utilize a cut brine mud system.
- d. The remaining production section from 3,400' 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 log is planned. Drill stem tests, cores and sidewall cores as well as DLL/CNL/LDT/CAL/GR logging 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 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: NM NM 115995

Legal Description of Land: Dale Evans 1920-26 <sup>RED</sup> State Com #1  
SHL: 128' FSL AND 760' FWL, SEC 26, T19S, R20E  
BHL: 660' FNL AND 760' FWL, SEC 26, T19S, R20E  
Chaves County, New Mexico

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

12 JUNE 06  
Date

Deane Durham  
Name: Deane Durham  
Title: Engineer



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

**PARALLEL PETROLEUM CORPORATION  
DALE EVANS 1920-26 STATE COM #1  
SHL: 128' FSL AND 760' FWL, SEC 26, T19S, R20E  
BHL: 660' FNL AND 760' FWL, SEC 26, T19S, R20E  
CHAVES COUNTY, NEW MEXICO**

**LOCATED:**

12 miles South of Hope, New Mexico

**OIL & GAS LEASE:**

NM NM 115995

**RECORD LESSEE:**

Upland Corporation  
P.O. Box 582  
Midland, TX 79705

**BOND COVERAGE:**

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

**ACRES IN LEASE:**

1760

**SURFACE OWNER:**

State of New Mexico

**SURFACE TENANT:**

Michael Bennett Ranch  
Hope, NM  
505-484-3687

**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. and F-1. Location Topographic & Location Verification Maps
- 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 County Road 20 and go west on an existing caliche road for approximately 1.25 mile. At the cattle guard turn left or west on two track road and go .75 mile to a fence and gap gate that is located on the Chaves County, Eddy County line. A cattle guard will be installed at this gate location. Then continue on west approximately 2 miles to the location. Both the caliche road and the two track will be surfaced with caliche and will be 16' to 24' wide with a total length of 4.2 miles. A 75' wide turn in will be constructed onto the access road at County Road 20.

B. Surface Material

Caliche from a commercial source.

C. Maximum Grade

Less than five percent.



D. Turnouts

Three turnouts may 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

A cattle guard and gate will be installed on the fence line between sections 25 and 30.

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 that is located 800' east of the wellsite may be utilized for water supply for both drilling and completion. If the well is found to be inadequate for drilling a completion, 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 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. It is planned to drill two wells for this pad. The Roy Rodgers 1920-35 Federal #1, which is being applied for in a separate APD will be directionally drilled into section 35, the section south of the subject well.

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 southeast exposure. The regional drainage of the site being to the south and east toward Collier Tank 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

Collier Tank Draw, an intermittent stream which flows west to east, is located ½ mile south of the site. There are no other rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures

The Michael Bennet Ranch house is located 2.5 miles south west of the site and the Barbra Runyon Ranch house is located 8.5 miles northeast of the proposed well site

F. Archaeological, Historical, and Cultural Sites

See archaeological report # SNMAS-06NM-2271-A

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

State of New Mexico

11. OPERATOR'S REPRESENTATIVE

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

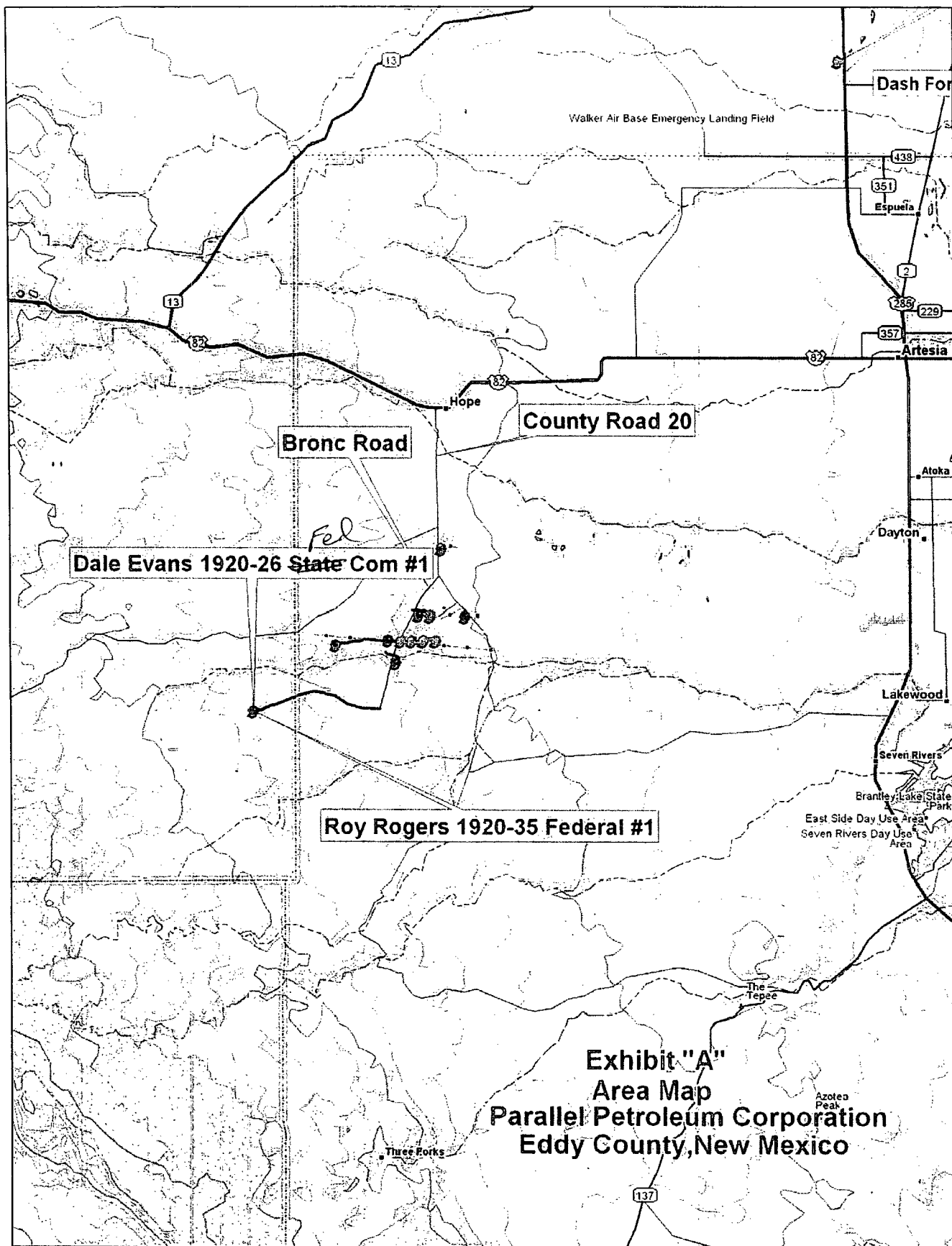
12. CERTIFICATION

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.

12 JUNE 06  
Date

Deane Durham  
Name: Deane Durham  
Title: Engineer





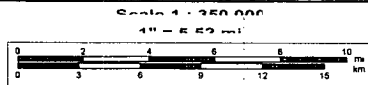
*Fed*  
**Dale Evans 1920-26 State Com #1**

**Roy Rogers 1920-35 Federal #1**

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



© 2002 DeLorme. 3-D TopoQuads ©. Data copyright of content owner.  
www.delorme.com



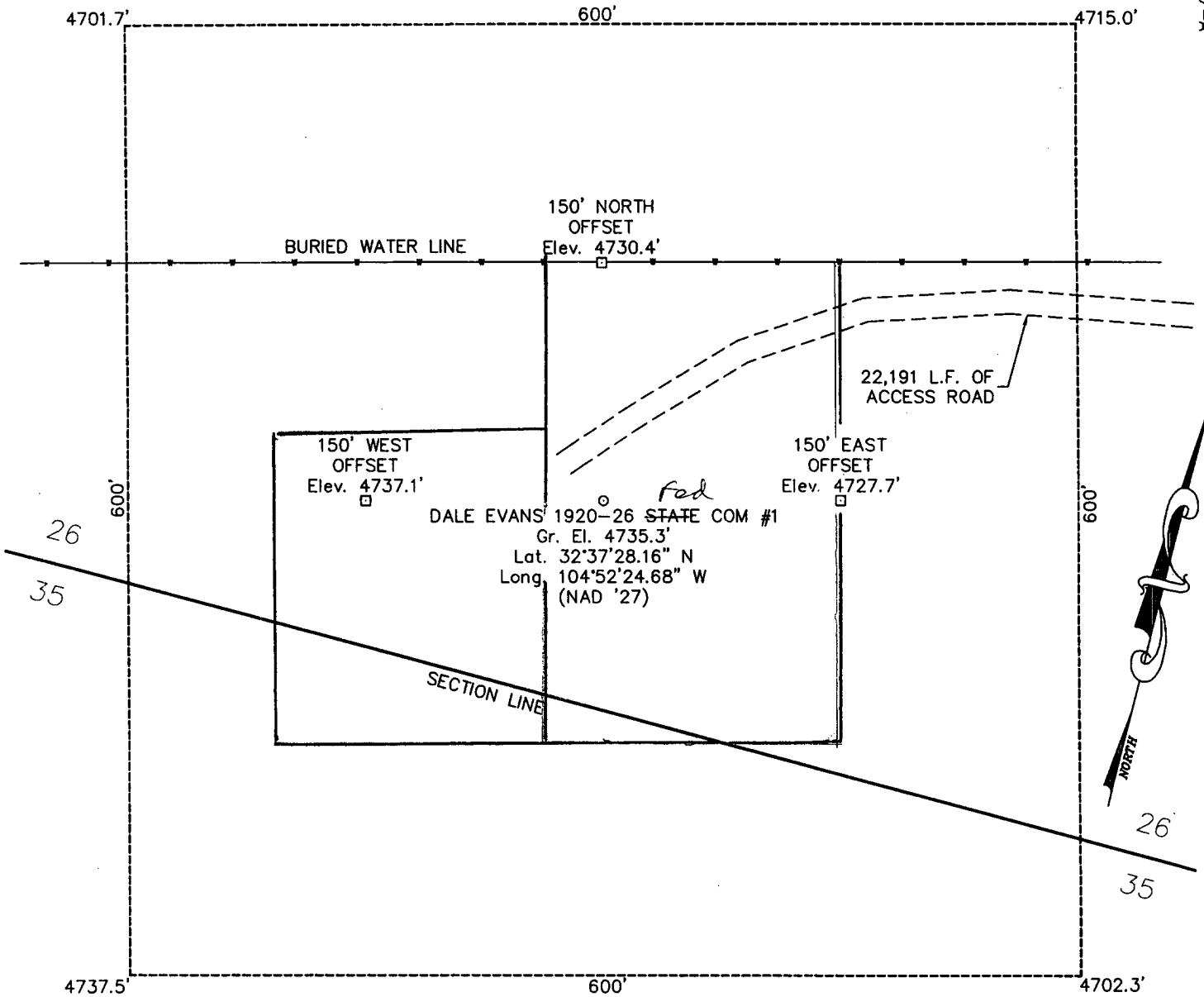


# SECTION 26, TOWNSHIP 19 SOUTH, RANGE 20 EAST, N.M.P.M.

CHAVES COUNTY

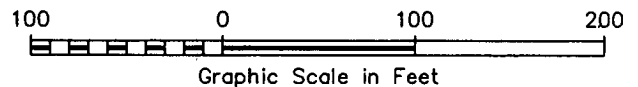
NEW MEXICO

L-2006-0457-A



## 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 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) 7.0 MILES TO A POINT WHERE A TRAIL ROAD BEGINS ON WEST (RIGHT SIDE OF SAID COUNTY ROAD 20 (BRONC ROAD), THEN GO NORTHWEST ALONG SAID TRAIL ROAD 1.4 MILES TO A FENCE LINE AND POINT WHERE PROPOSED ACCESS ROAD BEGINS ON WEST (RIGHT) SIDE OF SAID TRAIL ROAD, THEN GO SOUTHWEST ALONG SAID ACCESS ROAD 2.8 MILE TO THE PROPOSED LOCATION.



## PARALLEL PETROLEUM CORPORATION

### DALE EVANS 1920-26 STATE COM #1

Located 128' FSL & 760' FWL, Section 26  
Township 19 South, Range 20 East, N.M.P.M.  
Chaves County, New Mexico

Drawn By: LVA	Date: June 5, 2006
Scale: 1"=100'	Field Book: 338 / 28-29
Revision Date:	Quadrangle: Strychnine Draw
W.O. No: 2006-0457	Dwg. No.: L-2006-0457-A

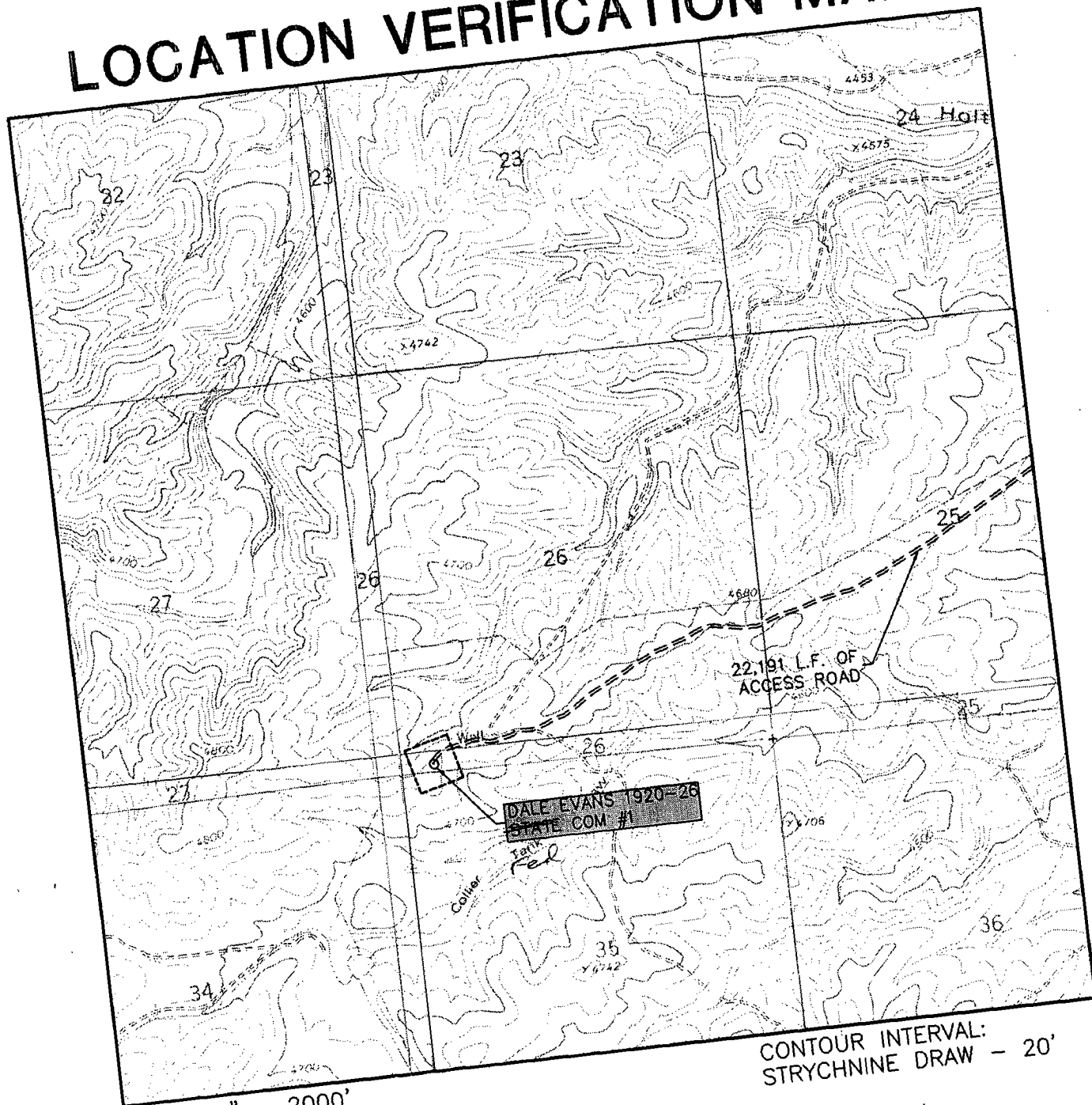
**WEST**  
**COMPANY**  
of Midland, Inc.

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

Exhibit C



# LOCATION VERIFICATION MAP



CONTOUR INTERVAL:  
STRYCHNINE DRAW - 20'

SCALE: 1" = 2000'

SEC. 26 TWP. 19-S RGE. 20-E

SURVEY N.M.P.M.

COUNTY CHAVES

DESCRIPTION 128' FSL & 760' FWL

ELEVATION 4735'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE DALE EVANS 1920-26 STATE COM

U.S.G.S. TOPOGRAPHIC MAP

STRYCHNINE DRAW, N.M.



Exhibit F

**WEST**  
**COMPANY**  
of Midland, Inc.

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



# MINIMUM BOP SCHEMATIC

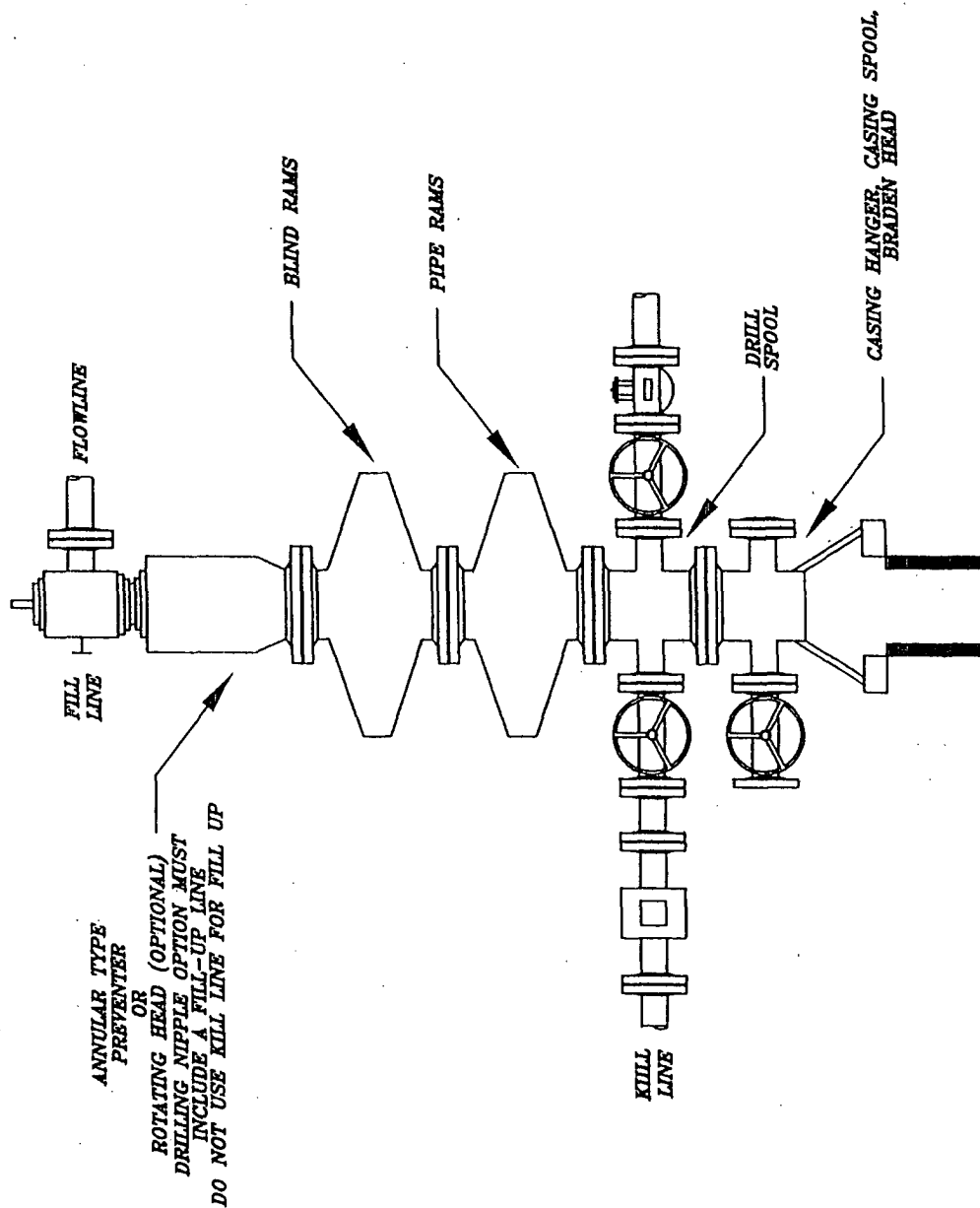


EXHIBIT I

PARALLEL PETROLEUM  
BOP SCHEMATIC

HIGHLANDER ENVIRONMENTAL CORP.  
MIDLAND, TEXAS

DATE	7/26/05
DRN. BY	JU
FILE	ENVIRONMENTAL BOP SCHEMATIC



# CHOKES MANIFOLD 5M SERVICE

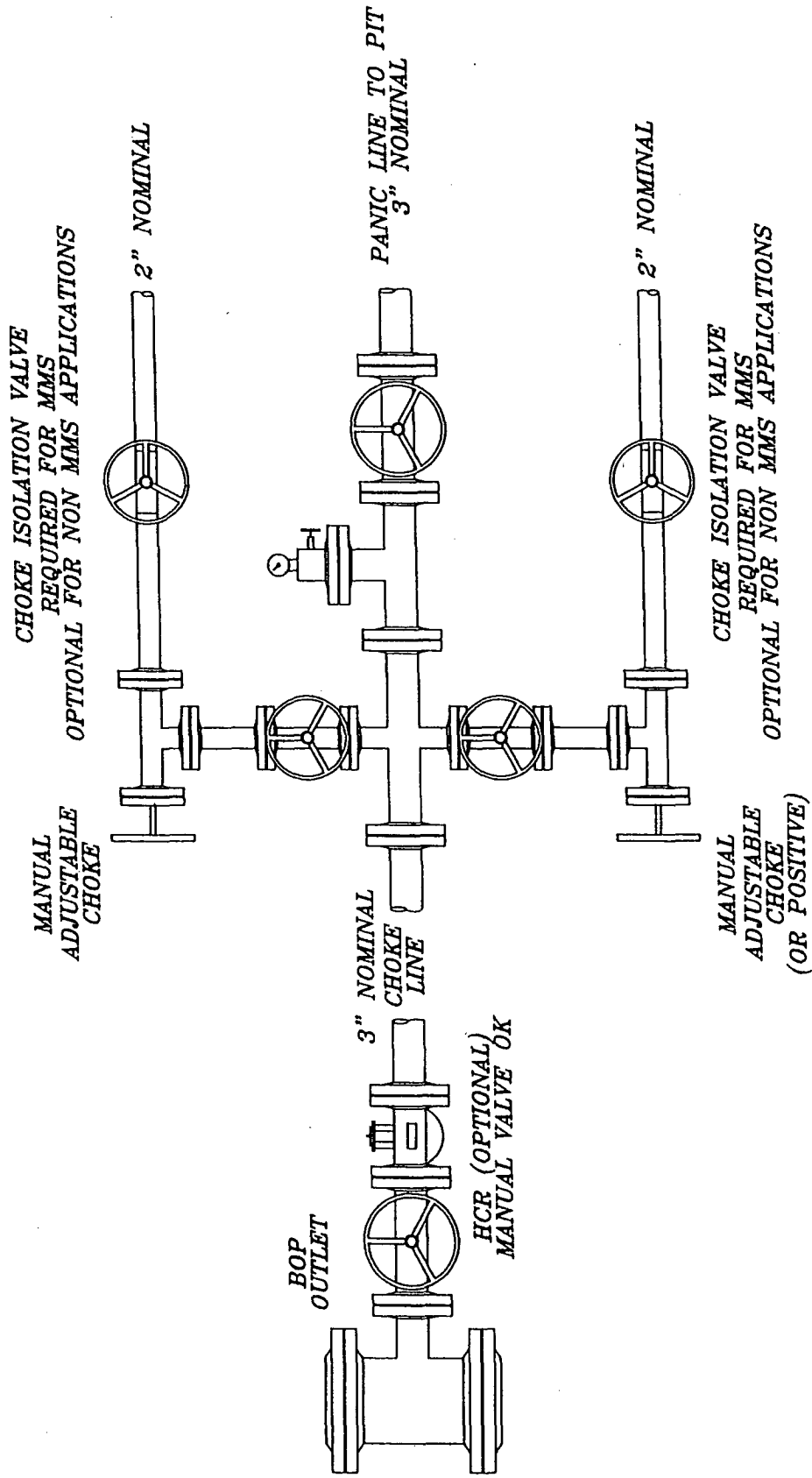


EXHIBIT J

DATE:	8/17/05
OWN. BY:	JJ
FILE:	05/00000000/0000
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:	Dale Evans 1920-26 State Com #1		
LOCATION:	Sec. 26 T-19-S R-20-E <i>Full</i>		
API NUMBER:			
COMMENTS:			

	MAG DEC. (-/+)	
	GRID CORR. (-/+)	
	TOTAL CORR. (-/+)	0.0

DATE: 06/15/06	TIME: 5:33 PM	TRUE TO GRID	▼
----------------	---------------	--------------	---

MINIMUM CURVATURE CALCULATIONS(SPE-3362)					PROPOSED DIRECTION			0.0	TARGET TRACKING TO CENTER		
SVY		GRID		VERT		DLS/		ABOVE(+)		RIGHT(+)	
NUM	MD	INC	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	3835	0.0	0.0	3835.0	0.0	0.0	0.0	0.0	538.0	0.0
2	3845	1.1	0.0	3845.0	0.1	0.1	0.0	10.7	528.0	0.0
3	3855	2.1	0.0	3855.0	0.4	0.4	0.0	10.7	518.0	0.0
4	4680	90.0	0.0	4372.9	538.0	538.0	0.0	10.6	0.1	0.0
5	8634	90.0	0.0	4372.9	4492.0	4492.0	0.0	0.0	0.1	0.0

KOP @ 3835' MD  
 BUR = 10.6 DEG per 100 FT  
 End Curve @ 4680' MD, 4372.9' TVD  
 BHL @ 8634' MD, 4372.9' TVD, 4492' VS



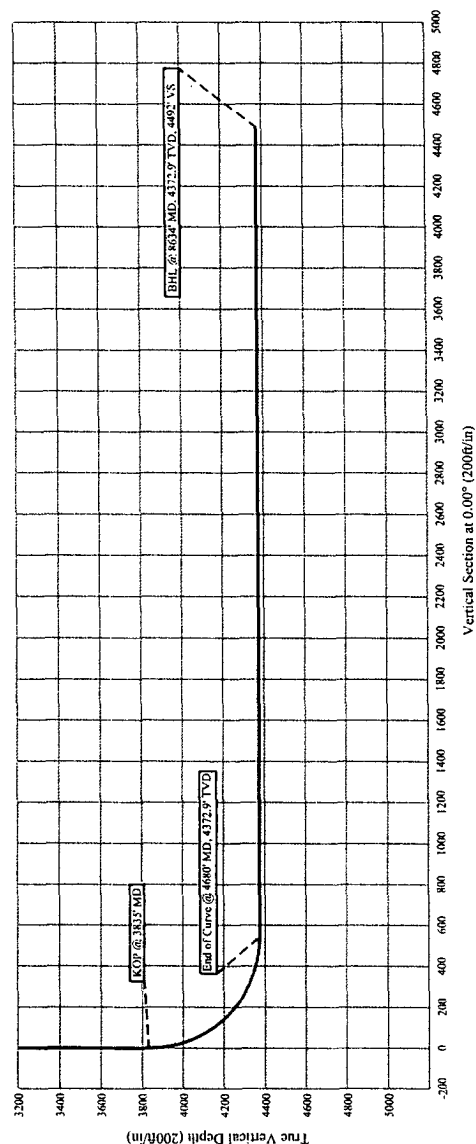
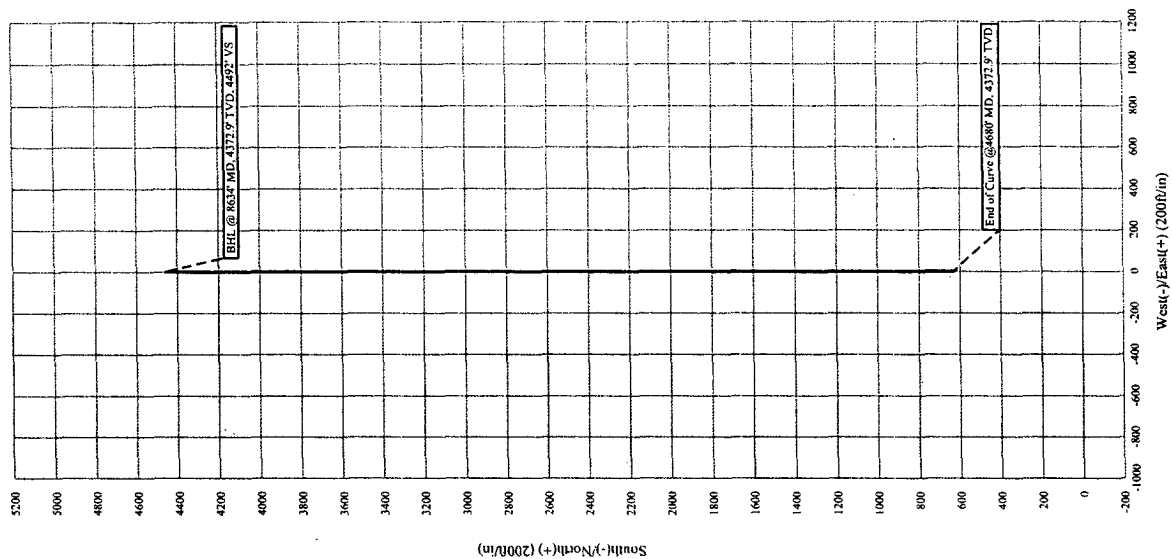
# Parallel Petroleum Corp.

*Red*

Dale Evans 1920-26 State Com #1  
Section 26, T 19-S, R 20-E  
Eddy County, New Mexico

## COMPANY DETAILS

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







# PARALLEL

Petroleum Corporation

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

June 16, 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  
Specifically: Dale Evans 1920-26 ~~State~~ <sup>Fed</sup> Com #1  
Chaves County, 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 within 2 miles of this well.

Should you need any additional information regarding this issue, please contact me at the address or phone number listed or email at [ddurham@ppll.com](mailto:ddurham@ppll.com).

Sincerely,

A. Deane Durham  
Senior Engineer



## **Conditions of Approval**

### **Cave and Karst**

EA#: NM-520-06-1105

Lease #: NMNM-115995

**Parallel Petroleum Corporation**

**Dale Evans 1920-26 Fed. Com. # 1, & Roy Rogers 1920-35 Federal # 1**

#### **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

##### **Berming:**

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

##### **Buried Cuttings Pit:**

A 70X100 foot cuttings pit will be utilized for this location. The cuttings pit will be lined with 4 oz. felt and a layer of 20 mil. plastic. Upon completion of the well all excess fluids will be vacuumed off the cuttings pit and allowed to dry. The pit liner will then be folded over the cuttings, covered with a 20 mil plastic cover and then covered with at least three feet of top soil.

##### **Closed Mud System with Cuttings Removed:**

A closed mud system or steel tanks will be utilized to drill the well. All fluids and cuttings will be hauled off site for disposal.

#### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

##### **Rotary Drilling with Fresh Water:**

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. See geologist report for depth.

##### **Florescene Dye (Acid Yellow 73):**

Sixteen ounces of Yellow Green (Acid Yellow 73) Florescene dye will be added to the drilling fluid during the drilling of the first 750 feet of the well.

##### **Florescene Dye Orange (Eosin Y):**



Sixteen ounces of Orange (Eosin Y) Florescene dye will be added to the drilling fluid during the drilling of the first 2,500 feet of the well.

**Directional Drilling:**

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone as identified in the geologic report.

**Casing:**

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

**Cementing:**

All casing strings will be cemented to the surface.

**Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

**Delayed Blasting:**

Any blasting will be a phased and time delayed.

**Abandonment Cementing:**

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

**Pressure Tests:**

Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

**Differential Shut-off Systems:**

A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

**Record Keeping:**

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence



of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.



## Stipulations for Drilling in Aplomado Falcon Habitat

The following well pad construction and reclamation measures will be implemented to provide for minimal long-term disturbance:

No Yuccas over 5 feet in height will be damaged by vehicular use or any other activity associated with this project.

Remove all caliche from well pads and roads that are plugged and abandoned. Reclamation will consist of disking, mulching, seeding with a drill (See seed mixture below), and application of water to encourage seed germination.

Well pad size will not exceed 300 ft. x 390 ft. (unless multiple wells are drilled from the same well pad). All unused portions of the well pad associated with producing wells will be reclaimed using the seed mixture below:

Buffalograss ( <i>Buchloe dactyloides</i> )	4 lbs/acre
Blue grama ( <i>Bouteloua gracilis</i> )	1 lbs/acre
Cane bluestem ( <i>Bothriochloa barbinodis</i> )	5 lbs/acre
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5 lbs/acre
Plains bristleggrass ( <i>Setaria macrostachya</i> )	6 lbs/acre

**Reserve pits for drilling and disposal are not allowed unless the pit can be effectively netted to the satisfaction of the BLM. Steel tank circulation system must be used if the reserve pit is not netted.**

All active raptor nests will be avoided by a minimum of 400 meters by all activities or curtail activities until fledging is complete.

All inactive raptor nests will be avoided by a minimum of 200 meters by all activities.

All roads associated with well development will not exceed 30 ft in width



## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Parallel Petroleum Corporation  
Well Name & No. Dale Evans 1920-26 Federal Com #1  
SH Location: 128' FSL, 760' FWL, Section 26, T. 19 S., R. 20 E., Chaves County, New Mexico  
BH Location: 660' FNL, 760' FWL, Section 26, T. 19 S., R. 20 E., Chaves County, New Mexico  
Lease: NM-115995

### 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 in sufficient time for a representative to witness:

A. Well spud

B. Cementing casing 9-5/8 inch 5-1/2 inch

C. BOP tests

2. 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.

3. 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.

4. 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 9-5/8 inch surface casing shall be set at approximately 1400 feet 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 7 inch production casing is to reach at least 500 feet above the top of the uppermost productive hydrocarbon interval.

### 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 9-5/8 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 2000 psi.

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

- 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.

6/29/2006

acs



#### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

6/29/2006

acs

6/29/2006

acs