

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

DIVISION CASE # 13864
EXHIBIT # 2
Submitted By: Parallel Petroleum
2/15/07

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004
ice

☐ AMENDED REPORT

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

Operator Name and Address Parallel Petroleum Corp. 1004 N. Big Spring Street, Suite 400, Midland, TX. 79701		OGRID Number 230387
Property Code 35993	Property Name Personally 1525-33	API Number 30-005-63852
Proposed Pool 1 Wildcat Wolfcamp		Well No. 1
Proposed Pool 2		

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	32	15S	25E		760'	N	147'	E	Chaves

Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	15S	25E		760'	N	660'	E	Chaves

Additional Well Information

Work Type Code N	Well Type Code O & G	Cable/Rotary R	Lease Type Code P	Ground Level Elevation 3476'
Multiple No	Proposed Depth 9169MD, 4750TVD	Formation Wolfcamp	Contractor NA	Spud Date NA
Depth to Groundwater 65'		Distance from nearest fresh water well 800'		Distance from nearest surface water 6000'
Pit: Liner: Synthetic X 12 mils thick Clay <input type="checkbox"/> Pit Volume: 25,000 bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input type="checkbox"/>				

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36#	1400' @ 10.5 c/s	325	Surface
8-3/4"	5-1/2"	17#	TVD 4750'	NA	Tie back
*			MD 9169'		* To surface casing

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

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

1. Prepare surface location. Move in and rig up drilling rig, spud well and drill and set conductor. Install and test BOP's.
2. Drill 12 1/4" surface hole to a minimum depth of 1400'. Set 9 5/8" casing and cement.
3. Drill 8 3/4" production hole 5500' TD and evaluate running mud logs as well as DLL/CNL/LDT/CAL/GR to TD.
4. Set Kickoff point at 3956' and drill and advance hole to a Wolfcamp penetration point at approximately 760' FNL and 660' FWL of the section 33 and continue drilling to BHL (9169' MD & 4750' TVD)
5. Set 5 1/2" to TD and tie cement back to surface casing. Perforate porosity and stimulate as necessary (specific procedure to be determined).
6. Place well on test.
7. No H2S is anticipated during the drilling of this well.

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

Printed name: Deane Durham

Title: Drilling Engineer

E-mail Address: ddurham@plll.com

Date: 9-1-06

Phone: 432-684-3727

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARANT
DISTRICT II GEOLOGIST

Title:

Approval Date: SEP 07 2006

Expiration Date: SEP 07 2007

Conditions of Appro

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

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Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Frances Dr.
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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 PERSONALLY 1525-33	Well Number 1
OGRID No.	Operator Name PARALLEL PETROLEUM CORPORATION	Elevation 3476'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	32	15 S	25 E		760	NORTH	147	EAST	CHAVES

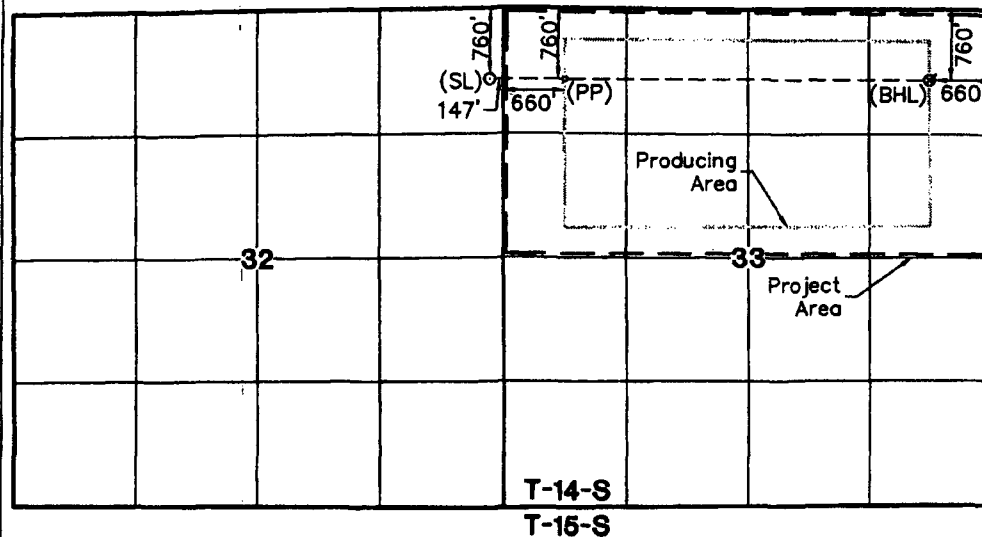
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	15 S	25 E		760	NORTH	660	EAST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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

Coordinate Table	
Description	Plane Coordinate
Personally 1525-33 #1	X = 462,253.6
Surface Location	Y = 719,111.6
Personally 1525-33 #1	X = 463,060.9
Penetration Point	Y = 719,108.6
Personally 1525-33 #1	X = 467,022.5
Bottom Hole Location	Y = 719,087.9



OPERATOR CERTIFICATION

I hereby certify that 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.

David Dulan 9-1-06
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.

August 21, 2006

Date of Survey
Signature & Seal of Professional Surveyor

W. O. Num. 2006-0876
12185

W.O. Num. 2006-0876

Certificate No. MACON McDONALD 12185

NOTE:

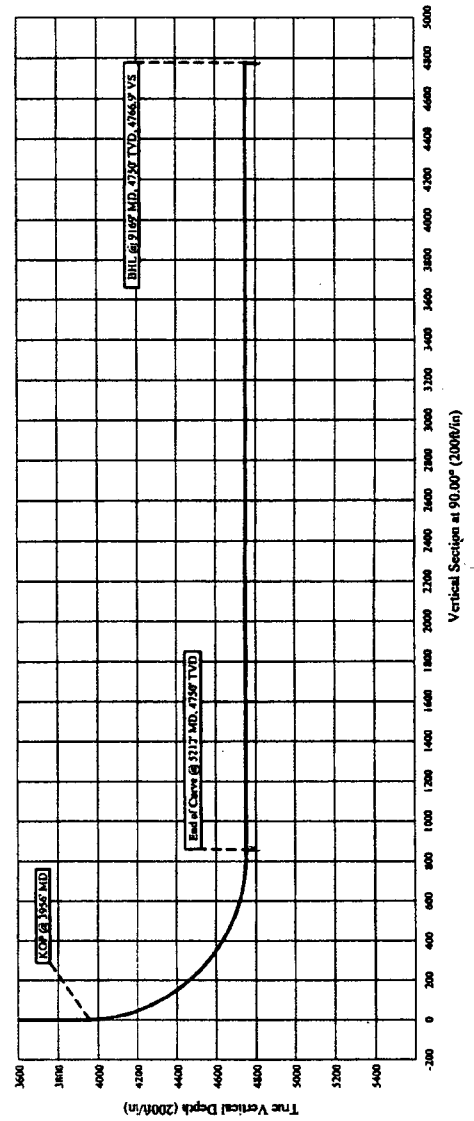
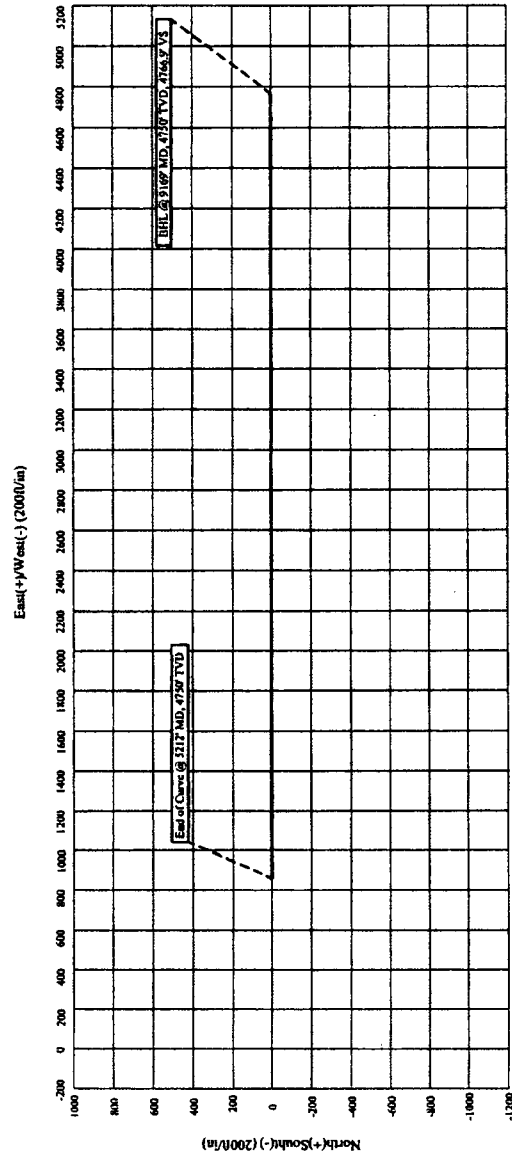
- Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.

Parallel Petroleum Corp.

Personally 1525-33 #1
Sec.33, T-15-S, R-25-E
Chaves County, New Mexico

COMPANY DETAILS

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



PARALLEL SURVEY CALCULATION PROGRAM PETROLEUM CORPORATION

OPERATOR:	Parallel Petroleum Corporation	Supervisors:	
WELL:	Personally 1525-33 #1		
LOCATION:	Sec. 33 T-15-S R-25-E		
API NUMBER:			
COMMENTS:			
		MAG DEC. (+/-)	
		GRID CORR. (+/-)	
		TOTAL CORR. (+/-)	0.0

DATE: 08/30/06 TIME: 1:13 PM TRUE TO GRID ☐

MINIMUM CURVATURE CALCULATIONS(SPE-3382)									PROPOSED DIRECTION 90.0		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	3956	0.0	0.0	3956.0	0.0	0.0	0.0	0.0	794.0	0.0		
2	3966	1.3	90.0	3966.0	0.1	0.0	0.1	13.0	784.0	0.0		
3	3976	2.6	90.0	3976.0	0.5	0.0	0.5	13.0	774.0	0.0		
4	5212	90.0	90.0	4749.5	809.9	0.0	809.9	7.1	0.5	0.0		
5	5260	90.0	90.0	4749.5	857.9	0.0	857.9	0.0	0.5	0.0		
6	9169	90.0	90.0	4749.5	4766.9	0.0	4766.9	0.0	0.5	0.0		

KOP @ 3956' MD
 BUR = 7.1 DEG per 100 FT
 End Curve @ 5212' MD, 4750' TVD
 BHL @ 9169' MD, 4750' TVD, 4766.9' VS