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

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

ources

Form C-101
May 27, 2004

RECEIVED Submit to appropriate District Office

1220 South St. Francis Dr. NOV 14 2005
Santa Fe, NM 87505 OCD-ARTESIA

☐ AMENDED REPORT

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

[1] Operator Name and Address	[2] OGRID Number
Parallel Petroleum Corp. 1004 N. Big Spring Street, Suite 400, Midland, TX. 79701	230387
	[3] API Number 30-015-34427

[5] Property Code	[7] Property Name	[6] Well No.
35233	Hot Box State	1

[9] Proposed Pool 1	[10] Proposed Pool 2
Undes. Rungan Ranch; Morrow 84350	Wildcat; Wolfcamp GAS

[7] 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	6	19S	23E		770	S	1880"	W	Eddy

[8] 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
C	6	19S	23E		660'	N	1880'	W	Eddy

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	O & G	R	P	4058'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	Primary 7700'	Morrow/Wolfcamp	NA	NA

Depth to Groundwater 700' | Distance from nearest fresh water well 1500' | Distance from nearest surface water 600'

Pit: Liner: Synthetic X _12__mils thick Clay ☐ Pit Volume:10,000 bbls

Closed-Loop System ☐

Drilling Method:

Fresh Water X Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
* 17-1/2"	13-3/8"	48#	300'	440	Surface
* 12-1/4"	9-5/8"	36#	1300'	325	Surface
8-3/4"	7"	23#	7700'	1070	3500'
See attached drilling plan for Casing and Cement Detail if completed as horizontal well.					

[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 Morrow Text. In the event of a non-productive Morrow, a horizontal test in the Wolfcamp formation will be drilled. The attached drilling plan will be utilized for this test and contains details on the cement and mud programs as well as the contingent directional information. The following is a summary of this plan. No H2S is anticipated in the well.

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 17 1/2" surface hole with rotary equipment to a minimum depth of 300'. Set 13 3/8" casing and cement.**
3. **Drill 12 ¼" intermediate hole to a minimum depth of 1300'. Set 9 5/8"casing and cement.**
4. **Drill 8 ¾" production hole 7700' TD and evaluate running mud logs as well as DLL/CNL/LDT/CAL/GR to TD.**
5. **If Morrow is productive, set 7" casing and cement and prepare for completion.**
6. **If Morrow is not completed the well will be plugged back and the alternate drilling plan used. Please see attached Plan.**
7. **Well will be plugged back and 7" set at 4000'. Kickoff point will be 4043', Wolfcamp penetration point at approximately 1100' FSL and 1880' FWL of Sec. , Drill to 8110' MD & 4425' TVD. Set 4 1/2" liner 3800' to TD and cement.**

[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: Phone: 432-684-3727

OIL CONSERVATION DIVISION

Approved by: Jim W. Gum

Title: District II Supervisor

Approval Date: NOV 16 2005 Expiration Date: NOV 16 2006

Conditions of Approval Attached ☐ Strip See pg 2

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000
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	Pool Name
	84350	

Property Code	Property Name	Well Number
	HOT BOX STATE	1

OGRID No.	Operator Name	Elevation
	PARALLEL PETROLEUM CORPORATION	4058'

Surface Location

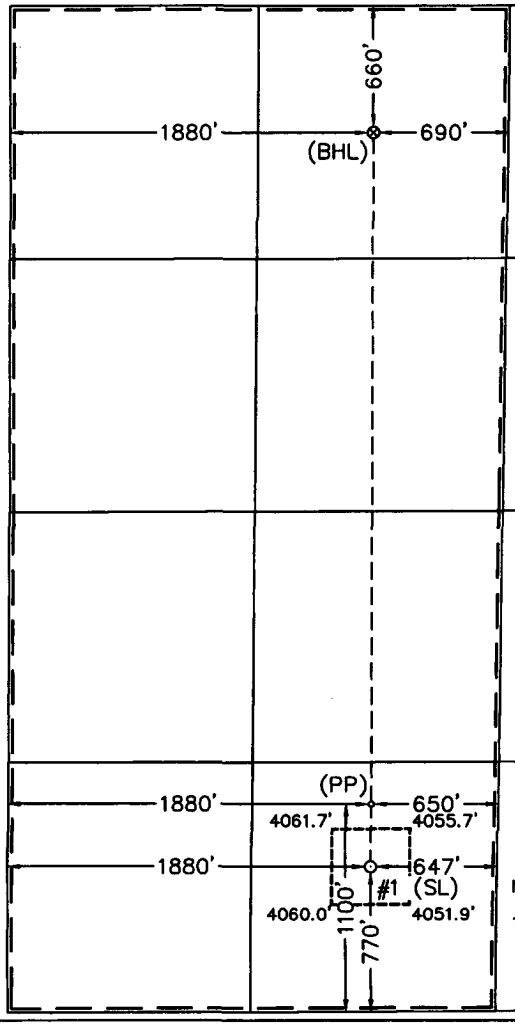
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	6	19 S	23 E		770	SOUTH	1880	WEST	EDDY

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
C	6	19 S	23 E		660	NORTH	1880	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



Coordinate Table	
Description	Plane Coordinate
Hot Box State #1 Surface Location	X = 377,197.2
	Y = 612,899.3
Hot Box State #1 Penetration Point	X = 377,198.4
	Y = 613,229.2
Hot Box State #1 Bottom Hole Location	X = 377,206.4
	Y = 616,758.5

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.

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name: Gary E. Miller

Title: Agent

Date: 11-9-05

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 upervison and that the same is true and orrect to the best of my belief.

October 7, 2005

Date Surveyed: LVA

Signature & Seal of Professional Surveyor

W.O. Num. 2005-0967

Certificate No. MACON McDONALD 12185

HOT BOX STATE #1
Surface Hole Location
770 FSL AND 1880 FWL, SEC 6, 19S, 23E
Alternate Bottom Hole Location
660 FNL AND 1880 FWL, SEC 6, 19S, 23E
EDDY COUNTY, NEW MEXICO

DRILLING PROGRAM

This well is designed as a vertical Morrow test. In the event that the Morrow is found to be non-productive, a horizontal test in the Wolfcamp formation will be drilled.

1. GEOLOGIC NAME OF SURFACE FORMATION

San Andres

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Glorieta 1850'(+ 2208')
Tubb 2860'(+1198')
Abo Shale 3500' (+558')
Abo Carbonate 3620' (+438')
Wolfcamp 4425' (-367')
Wolfcamp Shale 4615'(-557')
Penn Cisco 6085' (-2027')
Canyon 6550' (-2492')
Strawn 6965' (-2907')
Atoka 7350' (-3292')
Morrow 7475' (-3417')
Miss. Chester 7725'(-3667')

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

Fresh water	790'
Oil and Gas	Morrow 7475' (-3417') to 7550'(-3492')
Alternate Horizontal Completion	
Oil and Gas	Wolfcamp 4425'(-367')

No H_2S gas should be encountered

CEMENT TO COVER ALL OIL, GAS AND WATER BEARING ZONES

4. CASING AND CEMENTING PROGRAM

Casing Size	From To	Weight	Grade	Joint
20" conductor	0'-40'			
13 3/8"	0' - 300'	40#	H-40	STC
9 5/8"	300' – 1300'	36#	J-55	LTC
7"	1,300' – 7,700'	23#	J-55	LTC
Horizontal casing program for Production String				
7"	1300' – 4000'	23#	J-55	LTC
4 1/2" Liner	3,900' – 8110'	11.6#	N-80	LTC

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

Primary Drilling Procedure

a. Set 20" conductor pipe at 40' with a rathole unit.
b. Drill 17 1/2" surface hole with rotary equipment to a minimum depth of 300', using a fresh water gel spud mud. Set 13 3/8", 40# H-40 casing with 440 sx Class C cement (circulate to surface, 1" if necessary).
c. Drill 12 ¼" intermediate hole to a minimum depth of 1300', 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 50/50 Poz, circulate to surface, 1" if necessary).
d. Drill 8 3/4" production hole to 7700', using cut brine to an approximate depth of 3400' and a starch mud system to TD. Set 7" 23# J-55 casing at TD with 1070 sx Class C cement with the estimated top of cement at 3500'(lead be 50/50 Poz).

Alternate Drilling Procedure (if Morrow is Non-Productive)

a. Plug lower portion of the hole, per OCD/BLM specifications.
b. Set 7" 23# J-55 casing in the top of the Wolfcamp zone of interest at an approximate depth of 3950' with 600 sx, Class C.
c. Kick off point at approximately 4043', oriented at 0 degree (grid) azimuth.
d. Build angle at 15 degrees per 100' to 90 degrees and hold.
e. Drill 6 1/8" horizontal drain hole to a terminus of 660' FNL (8110' MD).
f. Run 4 ½" 11.6# N-80 liner from TD back to 3800', cement with 500 sx Class C 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 300' with fresh water gel spud mud for surface string.
b. The intermediate section from 300' to 1,300' will be 8.3 ppg Fresh Water system and viscous sweeps for hole cleaning.
c. The production section from 1,300' to 3,500' will utilize a cut brine mud system.
d. The remaining production section from 3,500' 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

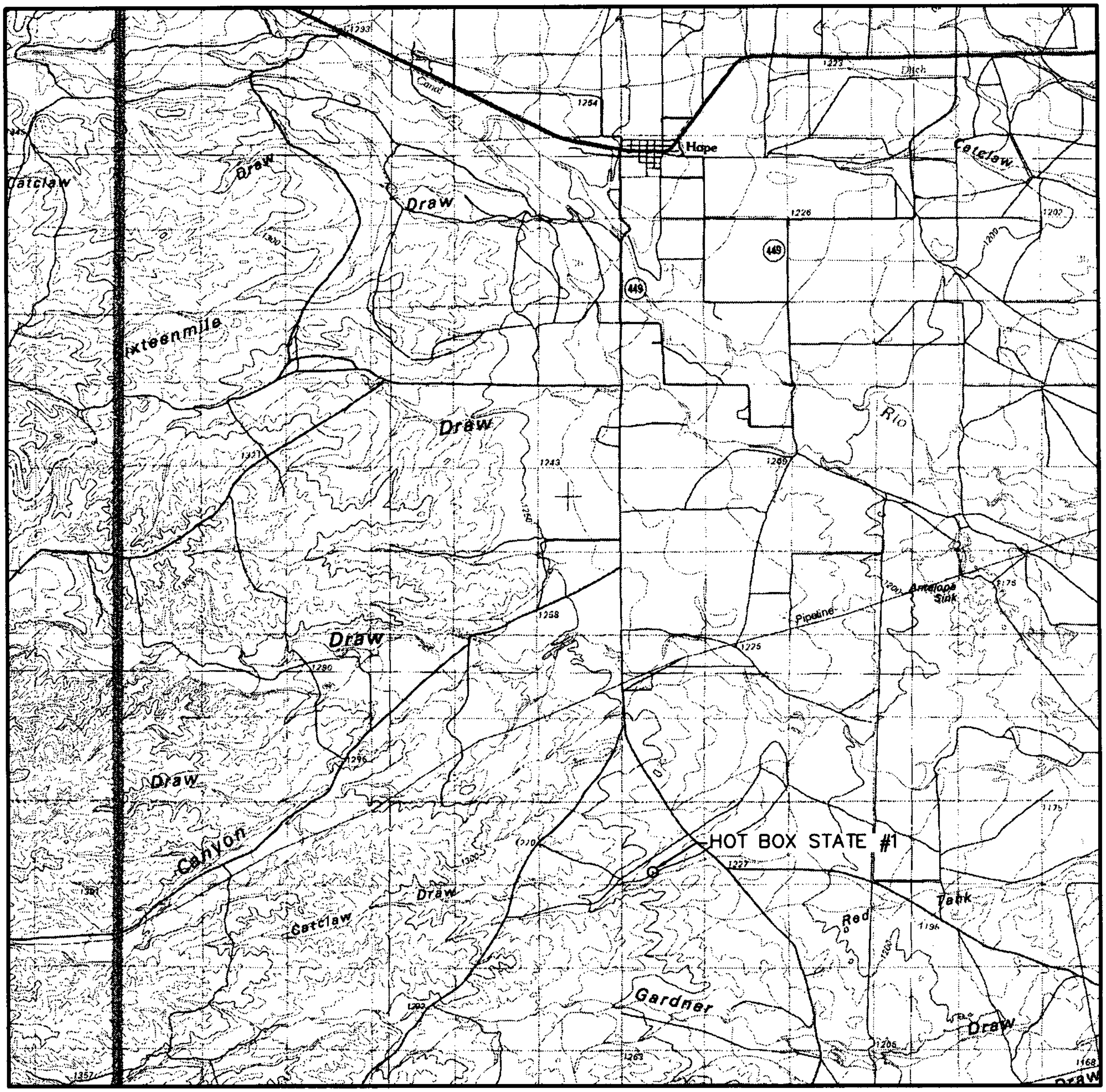
None anticipated.

BHP expected to be 1,100 psi.

10. ANTICIPATED STARTING DATE:

Is planned that operations will commence around first quarter of 2006 with drilling and completion operation lasting about 30 days.

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 6 TWP. 19–S RGE. 23–E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 770' FSL & 1880' FWL

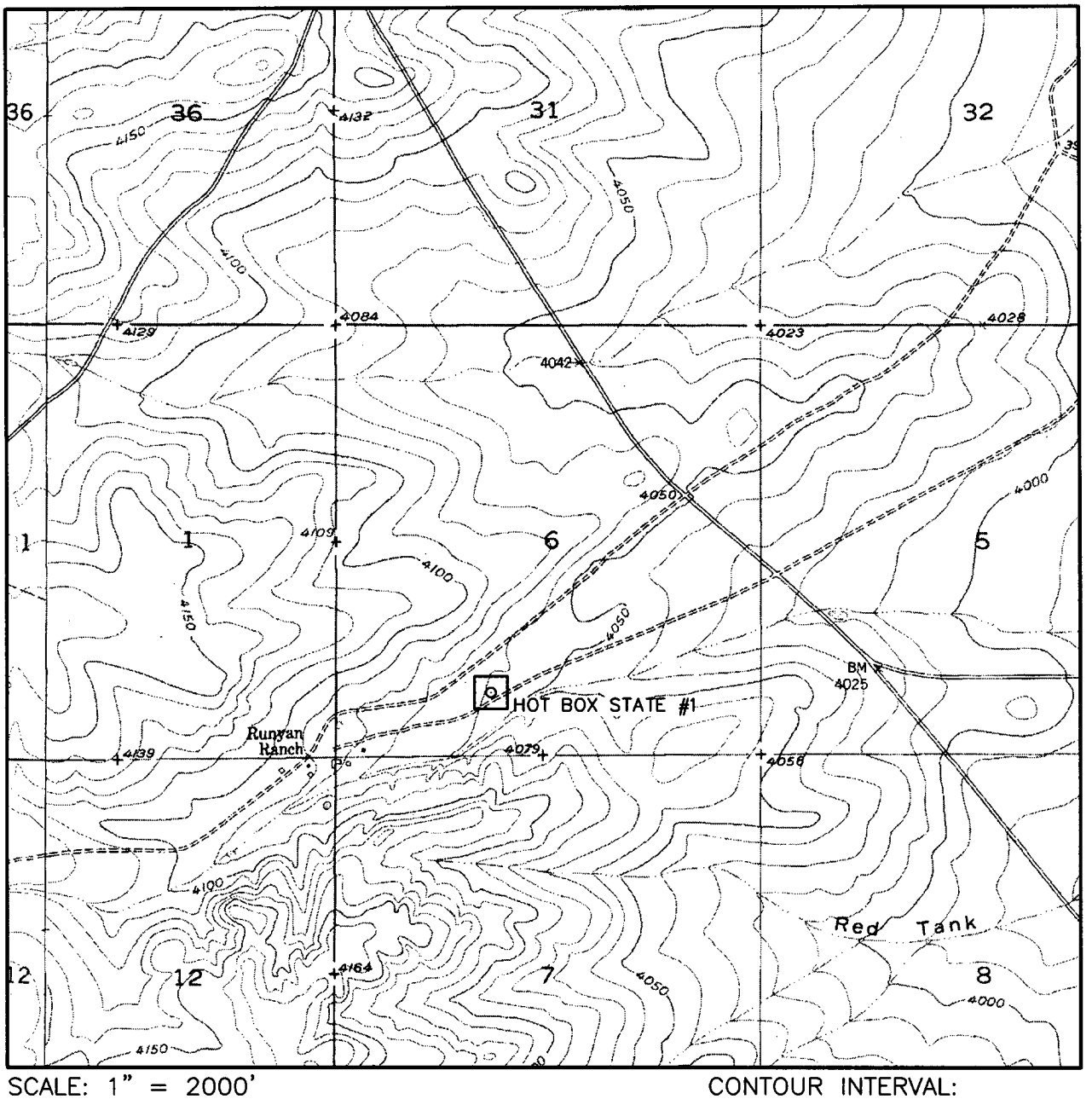
ELEVATION 4058'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE HOT BOX STATE

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
ANTELOPE SINK – 10'

SEC. 6 TWP. 19–S RGE. 23–E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 770' FSL & 1880' FWL

ELEVATION 4058'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE HOT BOX STATE

U.S.G.S. TOPOGRAPHIC MAP
ANTELOPE SINK, N.M.

WEST COMPANY of Midland, Inc.

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

PARALLEL PETROLEUM CORPORATION

SURVEY CALCULATION PROGRAM

OPERATOR:	Parallel Petroleum Corporation	Supervisors:	
WELL:	Hot Box State #1		
LOCATION:	Sec. 6 T-19-S R-23-E		
API NUMBER:			
COMMENTS:			
		MAG DEC.(-/+)	
		GRID CORR.(-/+)	
		TOTAL CORR.(-/+)	0.0
DATE: 11/09/05	TIME: 9:09 AM	TRUE TO GRID	

MINIMUM CURVATURE CALCULATIONS(SPE-3362) PROPOSED DIRECTION 0.0

SVY NUM	MD	INC	GRID AZM	TVD	VERT SECT	N-S	E-W	DLS/ 100	TARGET TRACKING TO CENTER ABOVE(+) BELOW(-)	RIGHT(+) LEFT(-)
TIE	0	0.0	0.0	0.0	0.0	0.0	0.0			
1	4043	0.0	0.0	4043.0	0.0	0.0	0.0	0.0	382.0	0.0
2	4053	1.5	0.0	4053.0	0.1	0.1	0.0	15.0	372.0	0.0
3	4063	3.0	0.0	4063.0	0.5	0.5	0.0	15.0	362.0	0.0
4	4642	90.0	0.0	4424.3	381.3	381.3	0.0	15.0	0.7	0.0
5	8110	90.0	0.0	4424.3	3849.3	3849.3	0.0	0.0	0.7	0.0

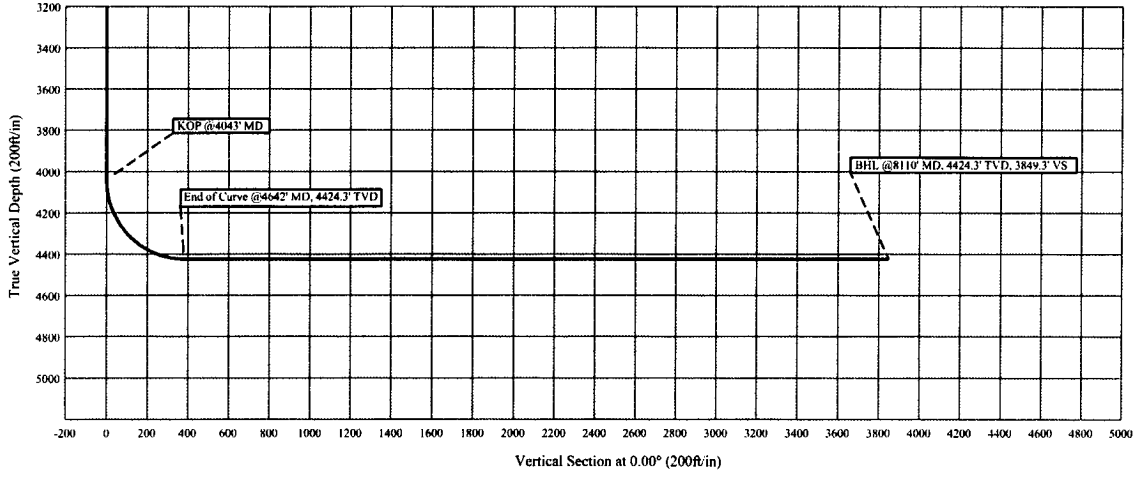
KOP @ 4043' MD
BUR = 15 DEG per 100 FT
End Curve @ 4642' MD, 4424.3' TVD
BHL @ 8110' MD, 4424.3' TVD, 3849.3' VS

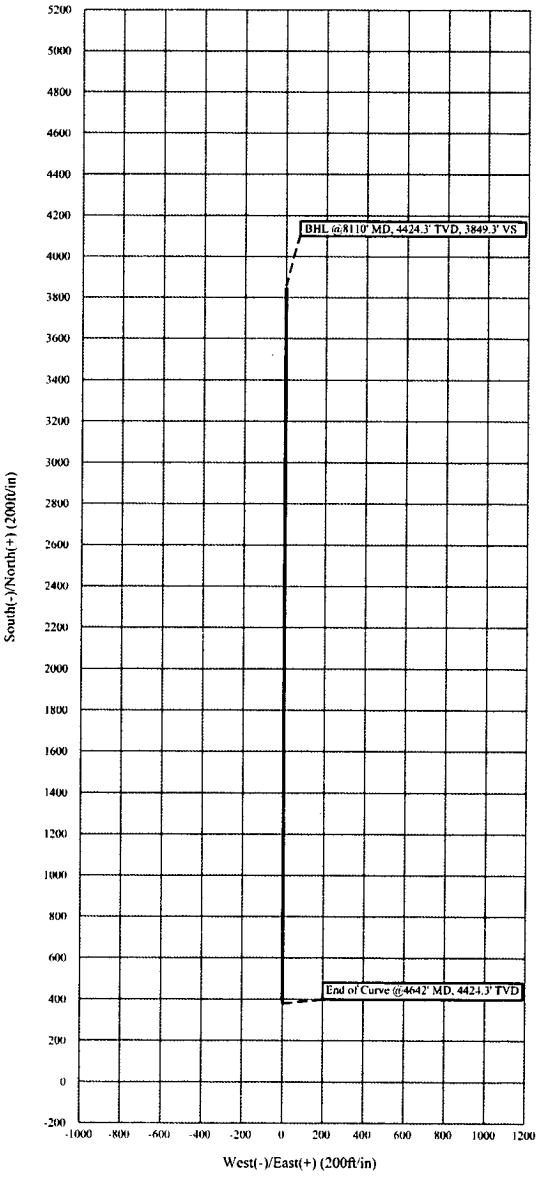
Parallel Petroleum Corp.

Hot Box State #1
Section 6, T 19-S, R 23-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: 432-684-3905

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

Deane Durham
Engineer