State of New Mexico 222322

Minerals and Natural Resources

Submit to appropriate District Office District I 1625 N. French Dr., Hobbs, NM 88240 Energy Minerals and Natural Resources District II 1301 W. Grand Avenue, Artesia, NM 88210 District III Oil Conservation Division 1000 Rio Brazos Road, Aztec, NM 87410 1220 South St. Francis Dr District IV Santa Fe, NM 87505 1220 S. St. Francis Dr., Santa Fe, NM 87505 RE-ENTER DEEPEN PLUGBACK, OR ADD A ZONE APPLICATION FOR PERMIT TO DRILL Operator Name and Address Parallel Petroleum Corp. 10168 1004 N. Big Spring Street, Suite 400, Midland, TX. 79701 So Property Name
Drewford's Boom Box 1921-19 State Com Property Code 2548 9 Proposed Pool 1 10 Proposed Pool 2 ⁷ Surface Location UL or lot no. Feet from the North/South line Feet from the East/West line Section Township Range Lot Idn County 19 19S 21E 710 North 660' West Eddy D 8 Proposed Bottom Hole Location If Different From Surface Range Feet from the North/South line East/West line UL or lot no. Section Township Lot Idn Feet from the County 28E 19 19S 710' North 660' East Eddv Α Additional Well Information 13 Cable/Rotary 11 Work Type Code ² Well Type Code 15 Ground Level Elevation ⁴ Lease Type Code R 4448' O & G P N 16 Multiple ⁷ Proposed Depth 18 Formation 20 Spud Date 19 Contractor 7700' No Morrow/Wolfcamp NΑ NΑ 500 Distance from nearest fresh water well 7000 Distance from nearest surface water 1000' Depth to Groundwater Liner: Synthetic X 12 mils thick Clay Pit Volume:25,000 bbls Drilling Method: Closed-Loop System 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 9-5/8" 12-1/4" 36# 1500 325 Surface 8-3/4" 5-1/2" 17# 7700 NA Tie back to Surface casing Survey 70 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 test with an Alternate Horizontal Wolfcamp test is unsuccessful. 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. Prepare surface location. Move in and rig up drilling rig, spud well and drill and set conductor. Install and test BOP's. Drill 12 1/4" Surface hole to a minimum depth of 1500'. Set 9 5/8" casing and cement. 2. Drill 8 3/" production hole 7700' TD and evaluate running mud logs as well as DLL/CNL/LDT/CAL/GR to TD, if successful proceed to Step 5 if unsuccessful, well will be plugged back to NMOCD specifications and alternate drilling plan utilized for the Wolfcamp. Wolfcamp alternate drilling plan. Set Kickoff Point at 3915' drill and advance hole to a Wolfcamp penetration point at approximately 1082' FWL and 710' FNL of the section and continue drilling to BHL. (8116' MD & 4337' TVD) Set 5 1/2" to TD and tie cement back to surface casing. Perforate porosity and stimulate as necessary (specific procedure to be determined). Place well on test. 6. No H2S if anticipated during the drilling of this well. 7. ²³ I hereby certify that the information given above is true and complete to the OIL CONSERVATION DIVISION 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

Approved by:

Approval DaSEP 0 7 2006

Conditions of Approval Attached

Title:

Phone: 432-684-3727

BRYAN G. ARRANT DISTRICT II GEOLOGIST

(attached) alternative OCD-approved plan ...

Printed name: Deane Durham

Title: Drilling Engineer E-mail Address: ddurham@plll.com]

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

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

1000 Rio Brazos Rd., Aztec, NM 87410

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

1220 South St. Frances Dr.

Santa Fe, NM 87505

State of New Mexico

Energy, Minerals & Natural Resources Department Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WE	ELL LOCATION	AND ACREA	GE DEDICATI	ON PLAT	e 76	
	Pool Code			Pool Na	ne	
	77340		Galdner	Draw;	Merrow	
				·		

AFI NUMBER	77340 Galdner Dr	aw; Merrow
Property Code	Property Name DREWFORD'S BOOM BOX 1921—19 STATE	COM Well Number
OGRID No.	Operator Name PARALLEL PETROLEUM CORPORATION	Elevation 4448'

Surface Location

UL	or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	D	19	19 S	21 E		710	NORTH	660	WEST	EDDY

Bottom Hole Location If Different From Surface

	Bottom note Bottom in principle 110m Surface									
-	UL or lot No.	Section	Township	Range	Lot Idin	Feet from the	North/South line	Feet from the	East/West line	County
	Α	19	19 S	21 E		710	NORTH	660	EAST	EDDY
Ì	Dedicated Acres	Joint or	Infill Co	nsolidation (Code Or	der 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

02 (PP) 1082 FWL 1	710 FUL	(BHL) 660'	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 interestin the land including the proposed bottom hale 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 posting agreement or a compulsory posting order heretefore entered by the division.
And the control of th	Producing Area		Signature Date Deane Dirrham Printed Name
Project Area	Coording Description Drewford's Boom Box 1921-19 Stat Surface Location Drewford's Boom Box 1921-19 Stat Bottom Hole Location	Y = 600,989.2	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 supervison and that the same is true and correct to the best of my belief.
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.		7 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	August 23, 2006 Date of Survey LVA Signature & Seal of Professional Surveyor W.O. Num 2006-0886 Certificate No. MACON McDONALD 12185

PARALLEL PETROLEUM CORPORATION DREWFORD'S BOOM BOX 1921-19 STATE COM #1 SL: 710' FNL AND 660' FWL, BHL: 710' FNL AND 660' FEL SEC 19, T19S, R21E EDDY COUNTY, NEW MEXICO

Objective

Drill a vertical well through the Morrow pay. Log and evaluate Morrow zone. Should the Morrow be non-productive, a contingency sidetrack to horizontal in the Wolfcamp will be drilled.

Expected Geologic Tops

GL: 4448', KB 4460'. Glorieta 1740' Tubb 2745' Abo Shale 3385' Wolfcamp 4337' Wolfcamp Shale 4430' Penn Cisco 5900' Canyon 6350' Strawn 6765' Atoka 7150' Morrow 7275' Miss. Chester 7525'

Well Geometry

- 9 5/8" casing at 1500'
- 7" casing at Morrow TD of 7700'
- If not Morrow completion, set cement plugs over hydrocarbon zones
- Set kick-off plug for horizontal through the zone of interest
- 5 1/2" casing through the horizontal Wolfcamp; Cement per completion.

Casing Program

<u>Hole</u>	<u>MD</u> (ft)	Casing	Weight	Grade	Coupling	COMMENT
12-1/4"	0 – 1500	9-5/8"	36	J55	ST&C	
8-3/4"	0 – 7700'	7"	23	J55	LT&C	Run through the Morrow to TD.
8-3/4" & 7-7/8	0 – TD'	5-1/2"	17	N80	LT&C	Run through the horizontal lateral.

Casing Cementing Program

9-5/8" 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 OCD. A temperature survey will be required. Top out to surface with 1" pipe in the annulus.

Note: 7" Cement with 600 sacks Class C. Top of Cement should be tied back to surface casing at a minimum.

Note: 5-1/2" Cement per completion procedure. Top of Cement should be tied back to surface casing at a minimum.

Mud Program

Depth	Hole	MW	Visc.	WL	Synopsis
0 - 1500	12-1/4"	8.4 –	28 - 29	No	FRESH WATER mud only to
		8.6		control	1200 ft. Severe loss potential.
					Circulate inner reserve. LCM:
					paper, fiber, cotton seed hulls.
1500 - 3300	8-3/4"	8.6 –	28 -29	No	Cut brine. Start w/existing & add
	_	9.2		control	brine t/80K-120K chlorides
3300 – TD	8-3/4"	8.9 –	38 - 45	6 - 10	XCD/Starch polymer as req'd
		9.5			for hole cleaning. Lubricants.
KOP – TD	8-3/4 &	8.9 –	38 - 45	6 - 10	XCD/Starch polymer as req'd
Horizontal	7-7/8"	9.5			for hole cleaning. Lubricants.

11	PETI	A R	A L UM CORP	LE		JRVEY C	CALCULA	NTION	I PROGR	AM		
OPERATOR: Parallel Petroleum Corporation WELL: Drewford's Boom Box 1921-19 State Con								Supervisors:				
WELL	: TION:		Drewford's Sec. 19 T-			19 State Co	<u> </u>	*				
	UMBER	:										
			COMM	ENTS:				MAGD	EC.(-/+)			
									ORR.(-/+)			
							- 0.0 - 0.0 0.0 c		CORR.(-/+)	0.0		
		DATE:	08/30/06		TIME:	8:33 AM	TRUE TO GRI)		▼		
MINIM	JM CURV	ATURE (CALCULATION	IS(SPE-3362) P	ROPOSED	DIRECTION		TARGET T	NTER		
SVY	MD	INC	GRID AZM	TVD	VERT SECT	N-S	E-W	DLS/ 100	ABOVE(+) BELOW(-)			
TIE	0	0.0	0.0	0.0	0.0	0.0	0.0					
1	3915	0.0	0.0	3915.0	0.0	0.0	0.0	0.0	422.0	0.0		
2	3925	1.4	90.0	3925.0	0.1	0.0	0.1	13.5	412.0	0.0		
3	3935	2.7	90.0	3935.0	0.5	0.0	0.5	13.5	402.0	0.0		
4	4578	90.0	90.0	4337.1	422.0	0.0	422.0	13.6	-0.1	0.0		
5	8116	90.0	90.0	4337.1	3960.0	0.0	3960.0	0.0	-0.1	0.0		

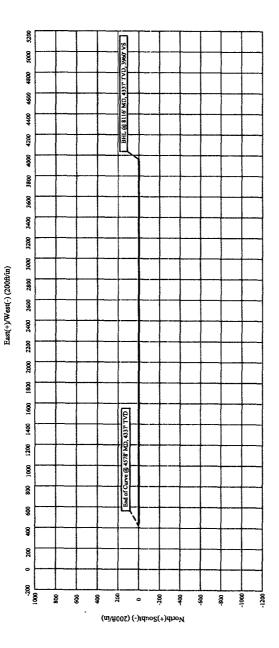
KOP @ 3915' MD BUR = 13.6 DEG per 100 FT End Curve @ 4578' MD, 4337' TVD BHL @ 8116' MD, 4337' TVD, 3960' VS

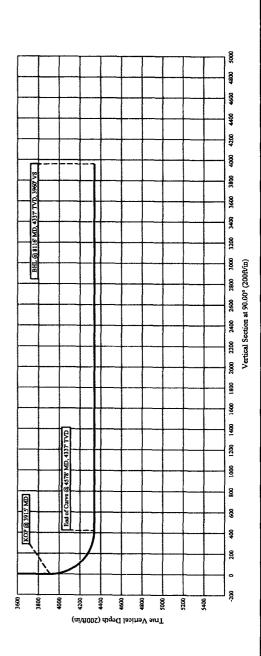
Parallel Petroleum Corp.

Drewford's Boom Box 1921-19 St. Com. #1 Sec. 19, T-19-S, R-21=E Eddy County, New Mexico

COMPANY DETAILS

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

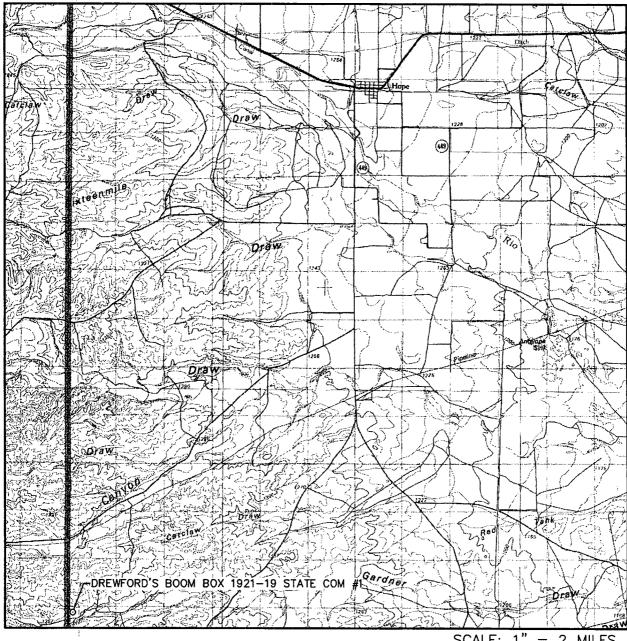
Should you need additional information regarding this issue, please contact me at the address or phone number listed above or my email address at ddurham@plll.com.

Sincerely,

Deane Durham

Engineer

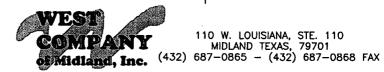
VICINITY MAP



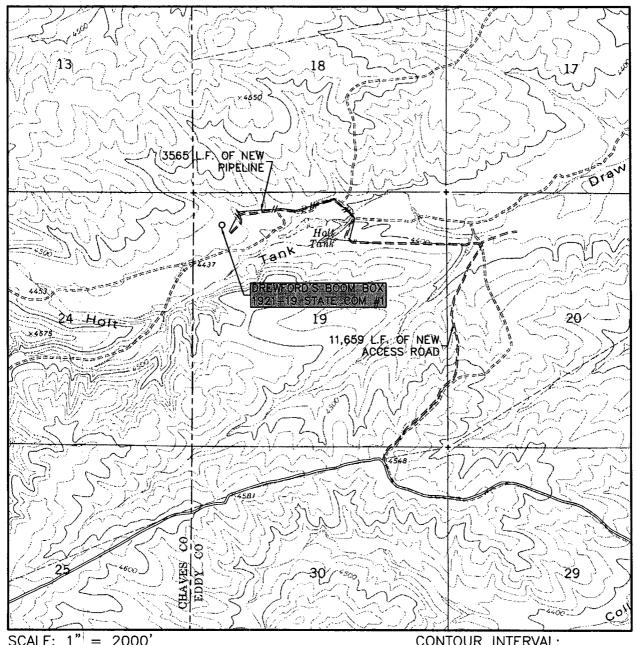
SCALE: 1" = 2 MILES

SEC. 19 TWP. 19-S RGE. 21-E SURVEY N.M.P.M. COUNTY EDDY DESCRIPTION 710' FNL & 660' FWL ELEVATION 4448' OPERATOR PARALLEL PETROLEUM CORPORATION LEASE DREWFORD'S BOOM BOX 1921-19 STATE COM





LOCATION VERIFICATION MAP



SCALE: 1 " = 2000'

CONTOUR INTERVAL: HOLT TANK - 20'

SEC. 19 TV	NP. <u>19-S</u>	RGE.	21-E				
SURVEY	N.M.F	⊃.M.					
COUNTY	EDI	ΟΥ					
DESCRIPTION	710' FNL	. & 66	50' FWL				
ELEVATION 4448'							
OPERATOR PARALLEL PETROLEUM CORPORATION							
LEASE DREWFO	RD'S BOOM BOX	1921-19	STATE COM				

U.S.G.S. TOPOGRAPHIC MAP

HOLT TANK, N.M.

COMPANY

110 W. LOUISIANA, STE. 110

MIDLAND TEXAS, 79701

65 Midland, Inc. (432) 687–0865 – (432) 687–0868 FAX

N PARALLEL Petroleum Corporation

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



∰Àugust 24, 2006

New Mexico Oil conservation Division 301 W. Grand Ave.
Artesia, New Mexico 88210

Re: Hydrogen Sulfide Potential

Hagerman Area Wolfcamp Program

Chavez County, New Mexico

Gentlemen:

Parallel Petroleum Corporation operates the Seabiscuit #1 and the Seabiscuit #2 wells located in Section 33, T-14-S, R-26-E and the Dash for Cash #1 in Section 4, T-15-S, R-26-E. These wells were tested in the Wolfcamp formation and did not have any indications of hydrogen sulfide from this formation. Please see the gas analysis attached to this letter. We believe the potential for H2S on locations in this area are negligible.

Should you need any additional information regarding this issue, please contact me at the address or phone number listed above.

Sincerely,

Deane Durham Drilling Engineer

Wildcat Measurement Service

P.O. Rox 1836

Artesia, New Mexico 88211-1836 TollFree #888-421-9453

Office #505-746-3481 "Quality and Service is our First Concern" PDS 06/25/00

Run Ro.

260728-01 07/28/2006

Date Run

Date Sampled 07/27/2006

Analysis for: PARALLEL PETROLEUM CORPORATION

Well Name: DASH FOR CASH #1

Field:

Sta. Number:

Purpose: SPOT Sampling Temp: 60

Volume/day:

Pressure on Cylinder: 733

DEG F

PSIG

Producer: PARALLEL PETROLEUM CORP.

County: CHAVES

State: NM

Sampled By: DON HORMAN Atmos Temp: 91

GAS COMPONENT ANALYSIS

Mol &

GPM

5.6514

Mitrogen N2 1.8667 Hydrogen Sulfide H2S 0.0000

Carbon Dioxide CO2

C1 80.6277 Methane 6.7430 Ethane C2

C3 3.0262 0.8332 Propane 0.4434 Iso-Butane IC4 0.1450 Nor-Butane NC4 0.8870 0.2796 Iso-Pentane IC5 0.2361 0.0864

NC5 0.2341 0.0848 Nor-Pentane C6+ 0.2844 0.1241 Hexanes Plus

TOTAL

100.0000

3.3555

1.8023

REMARKS:

H2S IN GAS STREAM: NONE DETECTED

Approved by: DON NORMAN

Fri Jul 28 15:04:04 2006

GPANGL.L62

DEG P

Pormation:

Line Pressure: 746.2 PSIA

Pressure Base: 14.7300

Real BTU Dry: 1092.27

Real BTU Wet: 1073.26

Real Calc. Specific Gravity:

Field Specific Gravity: 0.0000

Standard Pressure: 14.6960

BTU Dry: 1086.59 BTU Wet: 1067.68

% Factor: 0.9971 N Value: 1.2913

Avg Nol Weight: 20.6848 Avg CuFt/Gal: 56.8397 26 Lb Product: 0.4422 Methane+ GPM: 17.0215

Bthane+ GPM: 3.3555 Propane+ GPM: 1.5531

Butane+ GPM: 0.7199 Pentane+ GPM: 0.2953

Wildcat Measurement Service

P.O. Box 1836

Artesia, New Mexico 88211-1836 TollFree #888-421-9453

Office #505-746-3481

"Quality and Service is our First Concern"

PDS 06/25/00

Run No.

260728-02

Date Run

07/28/2006

Date Sampled 07/27/2006

Analysis for: PARALLEL PETROLEUM CORPORATION

Well Name: SEABISCUIT #2

Field: Sta. Number:

Purpose: SPOT

Sampling Temp: 60

Volume/day:

Pressure on Cylinder: 576

DEG P

PSIG

Producer: PARALLEL PETROLEUM CORP.

County: CHAVES

State: NM

Sampled By: DOW HORMAN

Pormation:

GAS COMPONENT ANALYSIS

Nol % **GPH**

Carbon Dioxide CO2 3.8765

Mitrogen N 2 1.1954 Hydrogen Sulfide H2S 0.0000

C1 84.4558 Methane Ethane C2 6.1856

C3 2.4877 0.6850 Propane -Iso-Butane IC4 0.3548 0.1161 Nor-Butane NC4 0.7054 0.2224 Iso-Pentane IC5 0.1941 0.0710

Nor-Pentane 0.1929 NC5 0.0699

Hexanes Plus C6+ 0.3518 0.1535

TOTAL

100.0000

2.9711

1.6534

REMARKS:

H2S IN GAS STREAM: NONE DETECTED

Fri Jul 28 15:04:04 2006

Approved by: DON NORMAN

GPANGL.L62

DEG P

Atmos Temp: 90

Line Pressure: 589.2 PSIA

Pressure Base: 14.7300

Real BTU Dry: 1098.66

Real BTU Wet: 1079.53 Real Calc. Specific Gravity: 0.6842

Field Specific Gravity: 0.0000

Standard Pressure: 14.6960

BTU Dry: 1093.16 BTU Wet: 1074.14

Z Pactor: 0.9973 N Value: 1.2930

Avg Hol Weight: 19.7705 · Avg CuFt/Gal: 56.9423

26 Lb Product: 0.4521 Methane+ GPM: 17.2860

Rthane+ GPM: 2.9711 Propane+ GPM: 1.3178 Butane+ GPM: 0.6328

Pentane+ GPM: 0.2944