N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

Artesia, NM 88210

Form 3160-3 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FORM APPROVED - APPROVED OMB No. 1004-01137 Expires March 31; 2007

5. Lease Serial No. NM NM 112249

If Indian Allotee or Tribe Name

APPLICATION FOR PERMIT TO	6. If fillidian, Anotee of Fride Name					
la. Type of work: DRILL REENTI	7. If Unit or CA Agr	reement, Nam	e and No.			
lb. Type of Well: Oil Well Gas Well Other	8. Lease Name and Well No. 7650 2. Bubbling Over 1525-20 Fed Com #14					
2. Name of Operator  Parallel Petroleum Corporation	303	87		9. API Well No.	00	5 - 6393
3a. Address 1004 North Big Spring, Suite 400 Midland, Texas		(include area code)	10. Field and Pool, or Exploratory  Wolfcamp			
4. Location of Well (Report location clearly and in accordance with an	ty State requireme			11. Sec., T. R. M. or	Blk. and Surve	ey or Area
At surface SHL 1880' FSL AND 190' FWL Se At proposed prod. zone BHL 1880' FSL AND 660' FWL Se	-			20, T15S, R2	5E	
14. Distance in miles and direction from nearest town or post office*  5 miles North of Artesia, New Mexico				12. County or Parish Chaves	1	3. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  660'				cing Unit dedicated to this well		
18. Distance from proposed location*	19. Proposed	Denth		20. BLM/BIA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft.	5500'	z i i oposed z opin		3000265		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 3490'	22. Approxim	nate date work will sta 05/15/2007		23. Estimated duration 30 days		
	24. Attac		_	WELL CONTROLLE	D WATER B	ASIN
The following, completed in accordance with the requirements of Onsho	re Oil and Gas	Order No.1, shall be a	ttached to th	nis form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		4. Bond to cover t Item 20 above).	he operatio	ons unless covered by a	n existing bo	nd on file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).	Lands, the	Operator certification     Such other site authorized officers	specific inf	formation and/or plans	as may be rec	juired by the
25. Signature Lane Chlom	,	(Printed/Typed) Deane Durham			Date 3-19	0-07
Title Engineer, Parallel Petroleum Corporation						
Approved by (ST) DAVID R. GLAS	22	(Printed/Typed)			MAY	08 2007
Title Jok Assistant Field Manager,	Office	ROSWELL FII	ELD OF	FICE /	APPROV	ED FOR 1 YEARS
Application approval does not warrant or certify that the applicant hol conduct operations thereon.  Conditions of approval, if any, are attached.	ds legal or equi	able title to those rigl	nts in the su	bject lease which would	d entitle the ap	plicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a states any false, fictitious or fraudulent statements or representations as	crime for any posto any matter w	erson knowingly and ithin its jurisdiction.	willfully to	make to any department	t or agency o	f the United

\*(Instructions on page 2)

DECLARED WATER BASIN

CEMBRI BEHIND THE 25".
CASING MUST BE CIRCULATED **WITNESS** 

**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. French Dr., Hobbs, NM 88240

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

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

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

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

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name				
	97489	WILDCAT;	WO LF CAMP			
Property Code						
	BUBBLING OVER	1525-20 FED COM		1		
OGRID No.	Opera	tor Name		Elevation		
	PARALLEL PETROL	EUM CORPORATION		3490'		

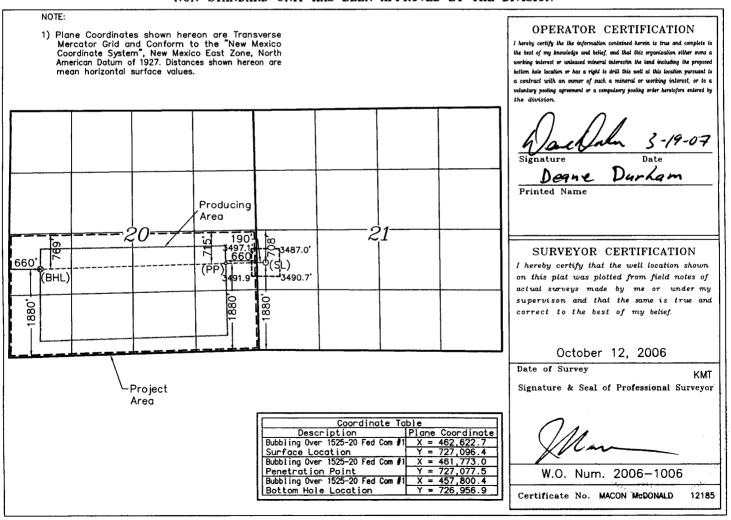
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	21	15 S	25 E		1880	SOUTH	190	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
L	20	15 S	25 E		1880	SOUTH	660	WEST	CHAVES
Dedicated Acres   Joint or Infill   Consolidation Code			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



#### 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 112249

Legal Description of Land:

Bubbling Over 1525-20 Fed Com #1

SHL: 1880' FSL and 190' FWL, Sec. 21, T15S, R25E BHL: 1880' FSL and 660' FWL, Sec. 20, T15S, R25E

Chaves County, New Mexico

Formation(s) (if applicable: Wolfcamp

Bond Coverage:

\$25,000 statewide bond of Parallel Petroleum Corporation

BLM Bond File No:

NMB000265

3-19-07

Name: Deane Durham

Title: Engineer

# ATTACHMENT TO FORM 3160-3 BUBBLING OVER 1525-20 FED COM #1 Surface Hole Location 1880 FSL AND 190 FWL, SEC 21, 15S, 25E Bottom Hole Location 1880 FSL AND 660 FWL, SEC 20, 15S, 25E 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 2565'(+925') Tubb 3575'(-85') Abo Shale 4325' (-835') Wolfcamp 5250' (-1760') Wolfcamp Shale 5425'(-1935')

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

Fresh water

65'

Oil and Gas

Wolfcamp 5250' (-1760')

No H<sub>2</sub>S gas should be encountered

#### 4. CASING AND CEMENTING PROGRAM

Casing Size	From To	Weight	<u>Grade</u>	<u>Joint</u>
16" conductor	0'-120'			
8 5/8"	0' - 1400'	24#	J-55	STC
5 1/2"	0' – TOTAL DEPTH	17#	N-80	LTC

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

8-5/8" slurry: Lead: 225 sacks (50:50) Poz (Fly Ash): Class C + 5% bwow Sodium Chloride + 10% bwoc Bentonite + 151.7% fresh water. Tail: 235 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 be required. Top out to surface with 1" pipe in the annulus.

Note: 5-1/2" Acid-soluble cement per completion procedure.

#### **Drilling Procedure**

- a. Set 16" conductor pipe as deep as possible up to 120' with a rathole unit.
- b. Drill 11" surface hole to an approximate depth of 1400', 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 kick off point at approximately 4,400'.
- e. Build angle at 6.7 degrees per 100' to 90 degrees and hold.
- f. Drill 7 7/8" horizontal drain hole to a terminus of 660' FWL approximately 9,690'.
- g. Run 5 1/2" 17# N-80 CSG to TD. Cement with 750 sx Class C Acid Soluble
- h. Circulate to surface or run temperature survey to verify tie in to surface casing.
- i. 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 1,500' to 4,300' will utilize a cut brine mud system from 8.8 to 9.2 ppg.
- d. The remaining production section from 4,300' to TD will be a polymer mud system with mud weight (8.8 9.6) sufficient to control formation pressure anticipated to be approximately 1,900 psi.

#### 7. <u>AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT</u>

None required.

#### 8. <u>LOGGING, TESTING, AND CORING PROGRAM</u>

Mud logs are planned. This is the second well on a dual pad, so no open-hole logs are planned, however, additional open-hole logs, drill stem tests, cores and sidewall cores are possible.

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

None anticipated.

BHP expected to be 1,900 psi.

#### 10. ANTICIPATED STARTING DATE:

It is planned that operations will commence around forth quarter of 2007 with drilling and completion operation lasting about 35 days.

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

#### PARALLEL PETROLEUM CORPORATION BUBBLING OVER 1525-20 FED COM #1 (Will share a location with the Noor 1525-21 Federal #1) SHL: 1880' FSL AND 190' FWL, SEC 21, T15S, R25E CHAVES COUNTY, NEW MEXICO

#### **LOCATED:**

5 miles north of Artesia, New Mexico

#### OIL & GAS LEASE:

NM NM 112249

#### **RECORD LESSEE:**

J Bar Cane Inc. P.O. Box 16 Stanley, NM 87056

#### **BOND COVERAGE:**

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

#### ACRES IN LEASE:

2435.41

#### FEDERAL SURFACE:

#### Surface Tenant:

Coleman Jackson 72 W. Jackson Rd. Lake Arthur, NM 88253 505-627-2342

#### POOL:

Wolfcamp (Gas)

#### **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
- I. Blow Out Preventer (BOP) Schematic
- J. Choke Manifold Schematic
- K. Estimated Horizontal Survey Calculation Program
- L. Estimated Wellbore Plot

#### 1. <u>EXISTING ROADS</u>

- 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

Access to this location will be from State Highway 285. A cattle guard has been placed in the fence and an access road constructed to the Parallel Petroleum Company, Forgo State #1 and the Swale 1525-16 State #1. The access road will continue south from the Swale location then south 2240' to the Letters 1525-20 Federal #1 location and continuing south 2133' to the location. The road will be surfaced with 4 to 6 inches of caliche and is 16' wide and this section will be 2133' in length.

#### B. Surface Material

Caliche from a commercial source.

#### C. <u>Maximum Grade</u>

Less than five percent.

#### D. Turnouts

No turnouts will be constructed.

#### E. Drainage Design

No Change.

#### F. Culverts

None necessary.

#### G. Gates and Cattle Guards

A cattle guard has been constructed at the entrance off State Highway 285.

#### 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 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. If no well is drilled water will be purchased 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.

#### Page 4

- 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.

#### 7. <u>ANCILLARY FACILITIES</u>

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 not needed for operations will be removed. The well site will be cleaned of all trash and junk to leave the site in as aesthetically pleasing condition as possible.
- B. After abandonment, all equipment, trash, and junk will be removed from the site.

#### 10. OTHER INFORMATION

#### A. Topography

The land surface at the well site is rolling native grass with a regional slope being to the south and east.

#### B. Soil

The limited topsoil at the well site is rocky, sandy soil.

#### C. Flora and Fauna

The location is in an area sparsely covered with mesquite and range grasses.

#### Page 5

#### D. Ponds and Streams

Walnut Creek, an intermittent stream runs west to east and is located approximately 3000' south of the site. Drainage from the site will be to the south and east, to a drainage that eventually flows to Walnut Creek. No lakes or playas are located in the immediate vicinity of the wellsite.

#### E. Residences and Other Structures

Homes are located 3.5 miles south and east of the site.

#### F. Archaeological, Historical, and Cultural Sites

See archaeological report submitted by:

Southern New Mexico Archaeological Services, Inc.,

P.O. Box 1

Bent, New Mexico 88314 Phone 505-671-4797

#### G. Land Use

Undeveloped pasture

#### H. Surface Ownership

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. CERTIFICATION

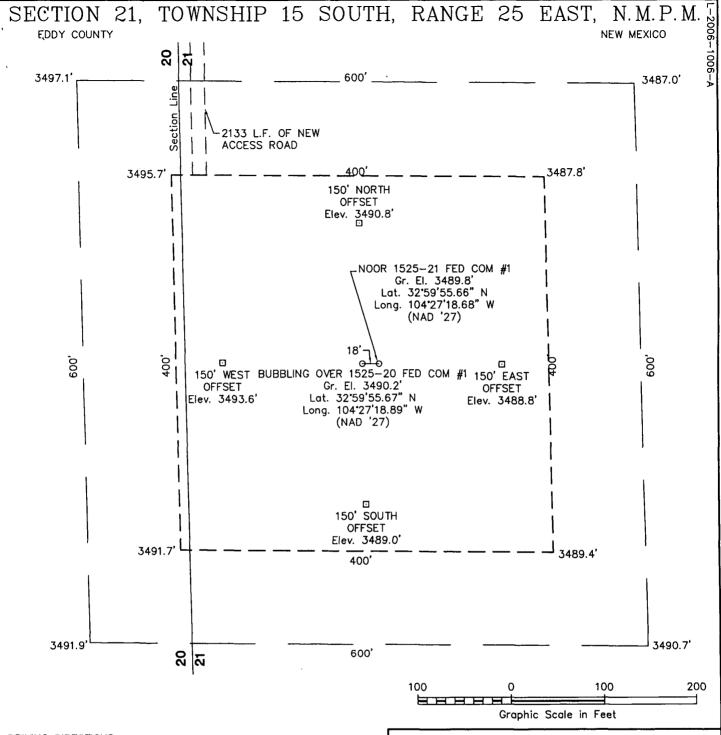
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated 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.

3-19-07

Name: Deane Durham

Title: Engineer

Date



#### DRIVING DIRECTIONS

FROM THE INTERSECTION OF U.S. HIGHWAY 380 and 285 IN ROSWELL, NM GO SOUTH ON SAID U. S. HIGHWAY 285 ABOUT 27 MILES TO A POINT WHERE AN ACCESS ROAD BEGINS ON THE WEST (RIGHT SIDE) OF SAID HIGHWAY 285, THEN GO WEST ON SAID ACCESS ROAD 0.3 MILES TO A POINT, THEN SOUTH 242 FEET TO A NEW ACCESS ROAD ON RIGHT SIDE, WEST OF ROAD, THEN GO WEST AND SOUTHWEST ON SAID ACCESS ROAD 3745 FEET. THEN GO SOUTH ON SAID ACCESS ROAD 2287. THEN GO SOUTH ON SAID ACCESS ROAD 2287. THEN GO SOUTH ON SAID ACCESS ROAD 2240 FEET. THEN GO 2132 FEET TO PROPOSED LOCATION.



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

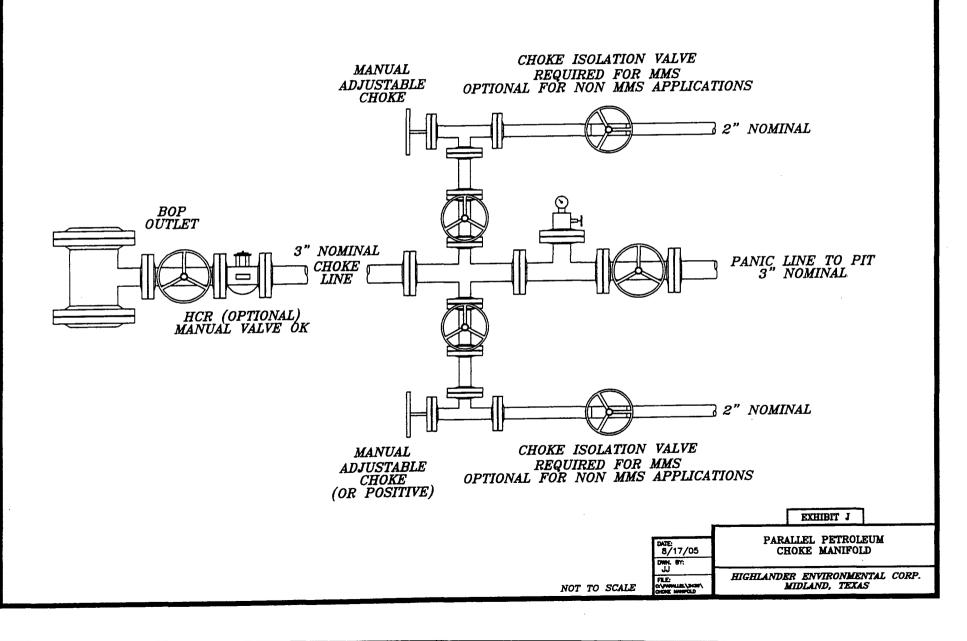
## PARALLEL PETROLEUM CORPORATION

#### BUBBLING OVER 1525-20 FED COM #1

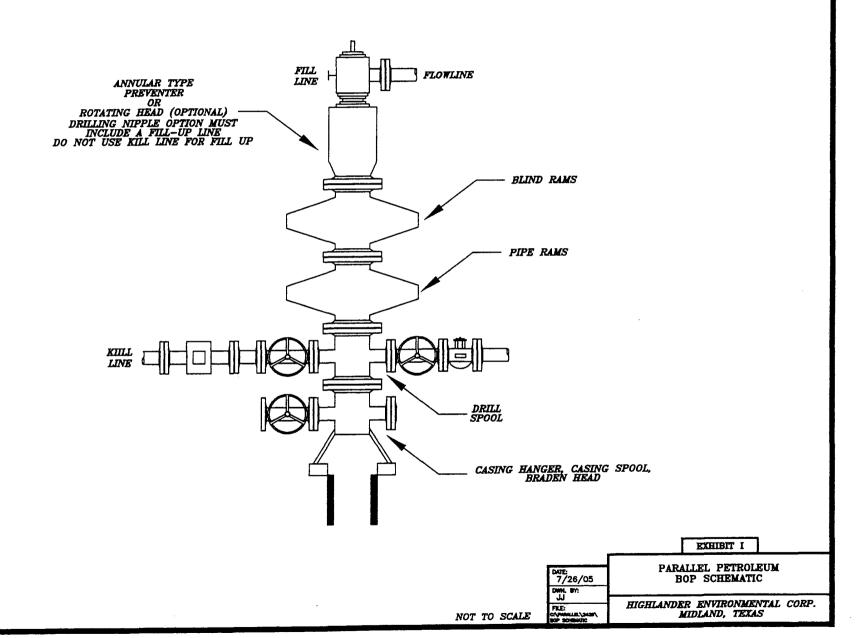
Located 1880' FSL & 190' FWL, Section 21 Township 15 South, Range 25 East, N.M.P.M. Chaves County, New Mexico

Drawn By: KMT	Date: October 31, 2006					
Scale: 1"=100'	Field Book: 272 / 59-61					
Revision Date:	Quadrangle: Hagerman SW					
W.O. No: 2006-1006	Dwg. No.: L-2006-1006-A					

## CHOKE MANIFOLD 5M SERVICE



### MINIMUM BOP SCHEMATIC



11	PET	AR	A L UM CORF	LE PORATIO		IRVEY C	CALCUL	ATION	I PROGR	MAM
OPER	ATOR:		Parallel P	etroleum (	Corporation	on	Superviso	rs:		
WELL: Bubbling Over 1525-20						COM #1				
	TION:		S/2 Sec. 2	0 T-15-S F	1-25-E		<u> </u>			
API N	UMBEF	<b>?</b> ::::::::::::::::::::::::::::::::::::	1.2.2.00							
			COMM	ENTS:			1			
								MAG D		
									ORR.(-/+) CORR.(-/+)	0.0
					11.02.01.01.01.01.01.01.01.01.01.01.01.01.01.				CORR.(4T)	0.0
		DATE	: 03/06/07			7:45 AM	TRUE TO GRI			
MINIME	JM CURV	ATURE	CALCULATIO	NS(SPE-3362	) P)	ROPOSED	DIRECTION	270.0	TARGET T	
SVY NUM	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	4400	0.0	0.0	4400.0	0.0	0.0	0.0	0.0	850.0	0.0
2	4410	0.7	270.0	4410.0	0.1	0.0	-0.1	6.7	840.0	0.0
3	4420	1.3	270.0	4420.0	0.2	0.0	-0.2	6.7	830.0	0.0
4	5736	90.0	270.0	5250.6	850.5	0.0	-850.5	6.7	-0.6	0.0
5	9690	90.0	270.0	5250.6	4804.5	0.0	-4804.5	0.0	-0.6	0.0

KOP @ 4400' MD BUR = 6.7 DEG per 100 FT End Curve @ 5736' MD, 5250' TVD BHL @ 9690' MD, 5250' TVD, 4804.5' VS

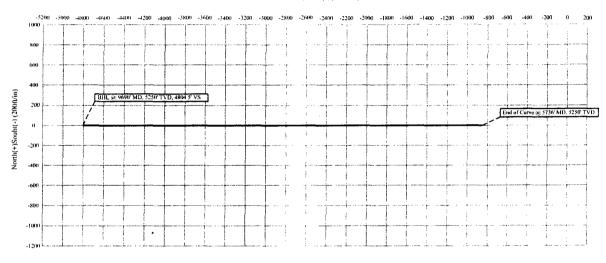
## Parallel Petroleum Corp.

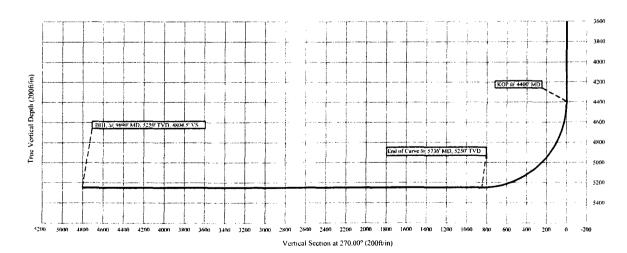
#### COMPANY DETAILS

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

Bubbling Over 1525-20 Fed. Com. #1 S/2 Sec. 20, T-15-S, R-25-E Chaves County, New Mexico

East(+)/West(-) (200tVin)







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

August 24, 2006

New Mexico Oil conservation Division 1301 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 Keasurement Service P.O. Box 1836 Artesia, New Mexico 88211-1836 TollFree #888-421-9453 Office 1505-746-3481

"Quality and Service is our First Concern"

PDS 06/25/00

Run No. Date Run 260728-01 07/28/2006

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

GPANGL, L62

Sampled By: DON NORMAN Atmos Temp: 91 DEG P

Pormation:

Line Pressure: 746.2 PSIA

GAS COMPONENT ANALYSIS

Hol &

GPK

1.8023

Pressure Base: 14.7300

Real BTU Dry: 1092.27 Real BTU Wet: 1073.26

Standard Pressure: 14,6960

BTU Dry: 1086.59

BTU Wet: 1067.68

% Factor: 0.9971

N Value: 1.2913

Avg Kol Weight: 20.6848

Avg CuFt/Gal: 56.8397

26 Lb Product: 0.4422 Methane+ GPM: 17.0215

Bthane+ GPK: 3.3555 Propane+ GPM: 1.5531 Butane+ GPM: 0.7199 Pentane+ GPM: 0.2953

Real Calc. Specific Gravity: 0.7159 Field Specific Gravity: 0.0000

Carbon Dioxide CO2 5.6514

Mitrogen 1.8667 Hydrogen Sulfide H2S 0.0000

80.6277 Hethane C1 Ethane C2 6.7430

0.8332 Propane C3 3.0262 0.4434 0.1450 Iso-Butane IC4 Nor-Butane BC4 0.8870 0.2796 Iso-Pentane IC5 0.2361 0.0864 Nor-Pentane NC5 0.2341 0.0848

Hexanes Plus C6+ 0.2844 0.1241

TOTAL

100.0000

3.3555

RENARKS:

H2S IN GAS STREAM: NONE DETECTED

Pri Jul 28 15:04:04 2006

Approved by: DOW NORMAN

AUG 09 2006

## Wildcat Measurement Service

P.O. Box 1836 Artesia, New Mexico 88211-1836

TollPree #888-421-9453 Office #505-746-3481

"Quality and Service is our First Concern"

PDS 06/25/00

Run Ro. Date Run 260728-02 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 DEG P

Volume/day:

Pressure on Cylinder: 576

PSIG

Producer: PARALLEL PETROLEUM CORP.

County: CHAVES State: NH

Sampled By: DOW WORKAR Atmos Temp: 90 DRG P

Formation:

GAS COMPONENT ANALYSIS

Hol & GPK

Carbon Dioxide CO2 3.8765

**K2** 1.1954 Nitrogen Hydrogen Sulfide H28 0.0000

Methane C1 84.4558 Ethane C2 6.1856

Propane C3 2.4877 0.6850 iso-Butane IC4 0.3548 0.1161 Nor-Butane NC4 0.7054 0.2224

Iso-Pentane IC5 0.1941 0.0710 Nor-Pentane NC5 0.1929 0.0699

Hexanes Plus C6+ 0.3518 0.1535

TOTAL

100.0000

2.9711

1.6534

H2S IN GAS STREAM: NONE DETECTED

Fri Jul 28 15:04:04 2006

Approved by: DON NORMAN

AUG 0 9 2006

GPANGL.L62

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

Pield Specific Gravity: 0.0000

Standard Pressure: 14.6960

BTU Dry: 1093.16

BTU Wet: 1074.14

I Factor: 0.9973 N Value: 1.2930

Avg Hol Weight: 19.7705 · Avg CuPt/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

#### III. WELL SUBSURFACE REQUIREMENTS:

#### A. GENERAL DRILLING REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at (505) 627-0272 in sufficient time for a representative to witness:
- a. Spudding
- b. Cementing casing: 8-5/8 inch 5-1/2 inch
- 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. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.
- 4. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

#### B. CASING:

- 1. <u>8-5/8</u> inch surface casing should be set <u>at approximately 1400 feet</u>, below usable water and circulate cement to the surface. If cement does not circulate to the surface, the Roswell Field Office shall be notified at (505) 627-0275 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. Minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>sufficient to tie back 500</u> <u>feet above the uppermost perforation in the pay zone.</u>

#### C. PRESSURE CONTROL:

- 1. Before drilling below the <u>8-5/8</u> inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.
- 3. The BOPE shall be installed before drilling below the <u>8-5/8</u> inch surface casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- a. The results of the test will be reported to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.
- b. 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.
- c. Testing must be done in a safe workman like manner. Hard line connections shall be required.