

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator Parallel Petroleum Corporation

3a. Address
1004 N. Big Spring St., Suite 400, Midland, Texas 797013b. Phone No. (include area code)
432/684-3727

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Surface: 660' FNL and 660' FEL, Sec. 33, T18S, R21E
BHL: 660' FNL and 660' FWL, Sec. 33, T18S, R21E

5. Lease Serial No.

108920

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Hannah 33 Federal #4

9. API Well No.

30-105-35087-30-015-85087

10. Field and Pool, or Exploratory Area
Wildcat; Wolfcamp 96086

11. County or Parish, State

Eddy County, NM

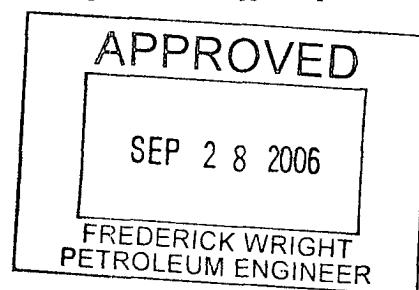
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomplate in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Change of operator submitted.

Change surface casing from 9 5/8" to 8 5/8" and request deeper setting depth of 1500' due to lost circulation in the karst as deep as 1450' in the surrounding area. Updated location construction plat for Patterson rig #144 attached. All other well plans are as the approved permit exists under Bold Energy permit approved on 8/15/2006.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Deane Durham

Title Engineer

Signature

Date

09/21/2006

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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)

SUNDRY NOTICE SPECIAL STIPULATIONS

1. Approval is granted for the following changes to the drilling procedure.
 - a) Change in depth of the 20 inch conductor from 40 feet to 120 feet.
 - b) Change in surface casing from 9 5/8 to 8 5/8 with cement to surface.
 - c) Change in the production casing from 4-½ inch to 5 ½ inch with cement to the surface.
 - d) Change in MD from 8100 feet to 8167 feet; without change in BHL.
2. **Surface casing setting depth remains at approximately 1300 feet in the base of the San Andres, but above the Glorieta.**
3. **See attached 5 ½ inch cementing procedure from operator; dated 9/26/06.**



"Deane Durham"
<ddurham@plll.com>
09/26/2006 04:02 PM

To <frederick_wright@nm.blm.gov>
cc
bcc
Subject Production string cement plan - Hannah 33 Federal #4

Mr. Wright:

Here is the planned production casing installation for the Hannah well.

5 1/2" 17# N-80 LTC – using turbolizer-type centralizer on every collar in the horizontal part of the hole and standard centralizer on every 3rd collar to 1200'.

5 1/2" run to surface. The cement volumes below are to circulate cement to surface. Should CMT not circulate, a temperature survey will be run to insure tie back into the surface casing at 1300'.

Lead: 450 sacks (25% excess) 50:50:10 C + 0.2%SMS+ 0.2%FL52 11.6 ppg, 2.43 yield

Tail: 525 sacks (10% excess) Class H + 6%BA10A+ 1%FL62 + 0.4%SMS + 20# CaCO (acid Soluble)
15.6 ppg, 1.42 yield

Deane Durham
Parallel Petroleum Corporation
NASDAQ: PLLL
<http://www.plll.com>
1004 N. Big Spring St., Suite 400
Midland, Texas 79701
Ofc: 432/684-3727 x3048
Fax: 432/685-6580
Cel: 432/413-9701

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 and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name HANNAH "33" FEDERAL	Well Number 4
OGRID No.	Operator Name BOLD ENERGY	Elevation 4264'

Surface Location

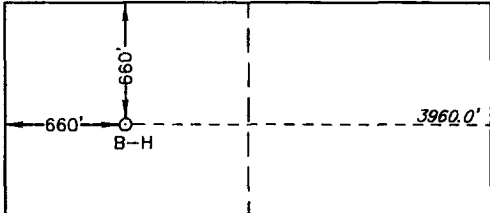
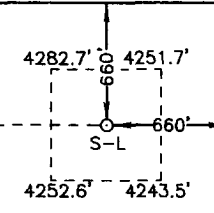
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	18 S	21 E		660	NORTH	660	EAST	EDDY

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
D	33	18 S	21 E		660	NORTH	660	WEST	EDDY

Dedicated Acres	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

 <p>BOTTOM HOLE LOCATION LAT.: N32°42'34.4" LONG.: W104°48'20.9" (NAD-83)</p>	 <p>SURFACE LOCATION LAT.: N32°42'34.4" LONG.: W104°47'34.6" (NAD-83)</p>	<p>OPERATOR CERTIFICATION</p> <p>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 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.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p>
		<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date Surveyed <u>JUL 3, 2005</u></p> <p>Signature & Seal of Professional Surveyor <u>GARY L. JONES</u></p> <p>Certificate No. <u>GARY L. JONES 7977</u></p> <p>BASIN SURVEYS</p>

**ATTACHMENT TO FORM 3160-5
HANNAH 33 FEDERAL #4
Surface Hole Location
660 FNL AND 660 FEL, SEC 33, 18S, 21E
Bottom Hole Location
660 FNL AND 660 FWL, SEC 33, 18S, 21E
EDDY 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

GL 4264'
Glorieta 1270'(+2994')
Yeso 1330' (+2934')
Tubb sand 2615'(+1649')
Lower Yeso 2730' (+1534')
Abo Shale 3200' (+1064')
Abo Carbonate 3350' (+914')
Wolfcamp 4030' (+234')
Wolfcamp Shale 4180'(+84')
TD 4400' Pilot Hole

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

Fresh water 790'
Oil and Gas Wolfcamp 4030' (+234')
No H₂S gas should be encountered

4. CASING AND CEMENTING PROGRAM

<u>Casing Size</u>	<u>From</u> <u>To</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
20" conductor	0'-120'			
8 5/8"	0' – 1500'	24#	J-55	STC
5 1/2"	0' – 8,167'	17#	N-80	LTC

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

HANNAH 33 FEDERAL #4

Page 2

8-5/8" 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

Note: 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" Cement per completion procedure.

Drilling Procedure

- a. Set 20" conductor pipe at 120' with a rathole unit.
- b. Drill 11" surface hole to an approximate depth of 1500', 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 4400', using cut brine to an approximate depth of 3100' and a starch mud system to TD.
- e. Run open-hole logs
- f. Plug lower portion of the hole, per OCD/BLM specifications.
- g. Set CMT kick-off plug.
- h. Dress CMT to kick off point at approximately 3950'.
- i. Build angle at 12.7 degrees per 100' to 90 degrees and hold.
- j. Drill 7 7/8" horizontal drain hole to a terminus of 660' FWL.
- k. Run 5 1/2" 17# N-80 CSG to TD. Cement with 500 sx Class C Per completion procedure.
- l. 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 1,500' with 8.3 ppg Fresh Water system and viscous sweeps for hole cleaning.
- c. The production section from 1,500' to 3,100' will utilize a cut brine mud system.
- d. The remaining production section from 3,100' 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. No MWD GR will be used.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS

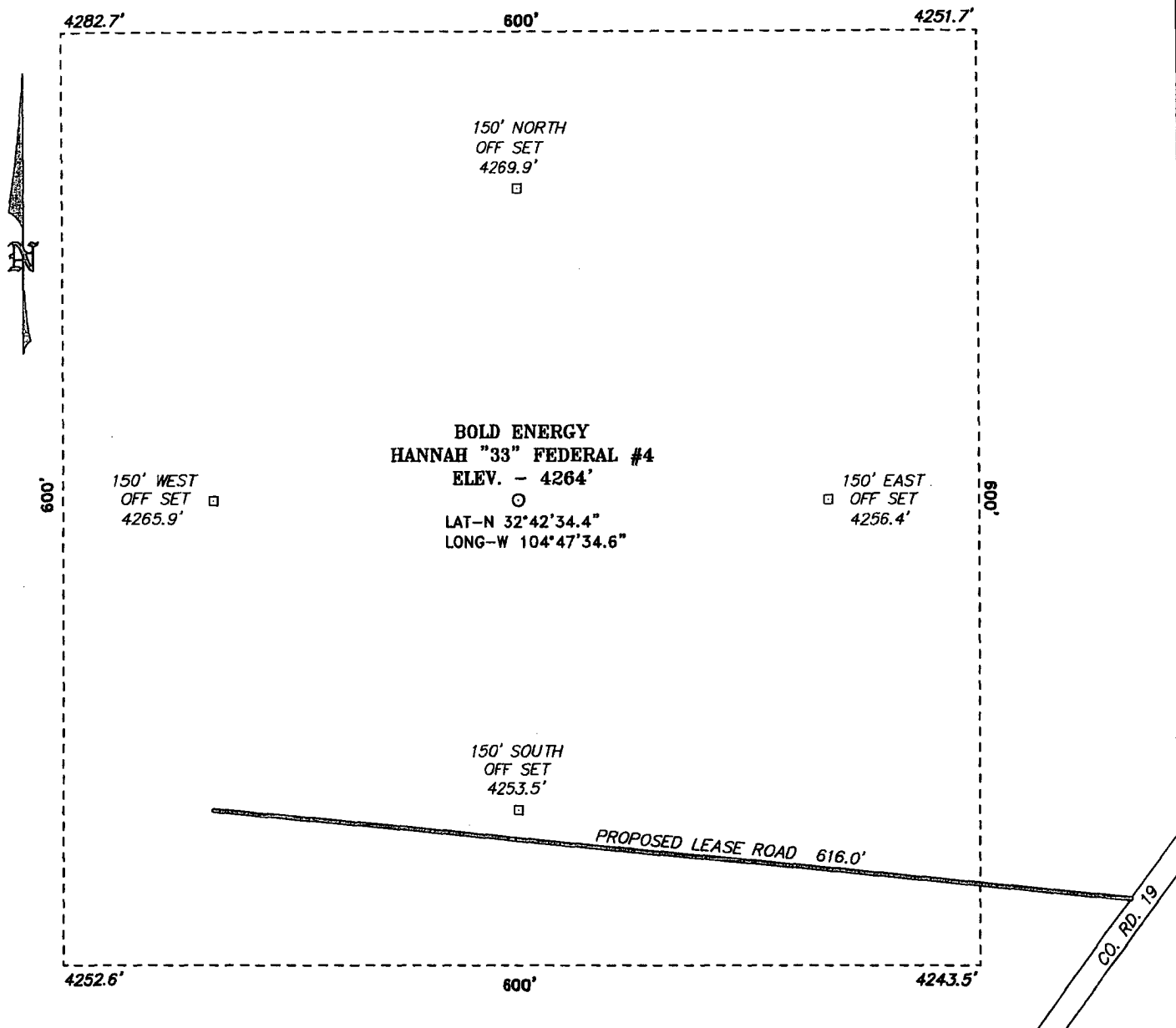
None anticipated.

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.

SECTION 33, TOWNSHIP 18 SOUTH, RANGE 21 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



100 0 100 200 FEET

SCALE: 1" = 100'

DIRECTIONS TO LOCATION:

FROM THE TOWN OF HOPE, TAKE CO. RD. 12 SOUTH
TO CO. RD. 19 (TRAILS ENDS); ON CO. RD. 19
PROCEED WEST 3.6 MILES TO PROPOSED LEASE ROAD.

BOLD ENERGY

REF: HANNAH "33" FEDERAL #4 / WELL PAD TOPO

THE HANNAH "33" FEDERAL No. 4 LOCATED 660' FROM
THE NORTH LINE AND 660' FROM THE EAST LINE OF
SECTION 33, TOWNSHIP 18 SOUTH, RANGE 21 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 6788

Drawn By: J. M. SMALL

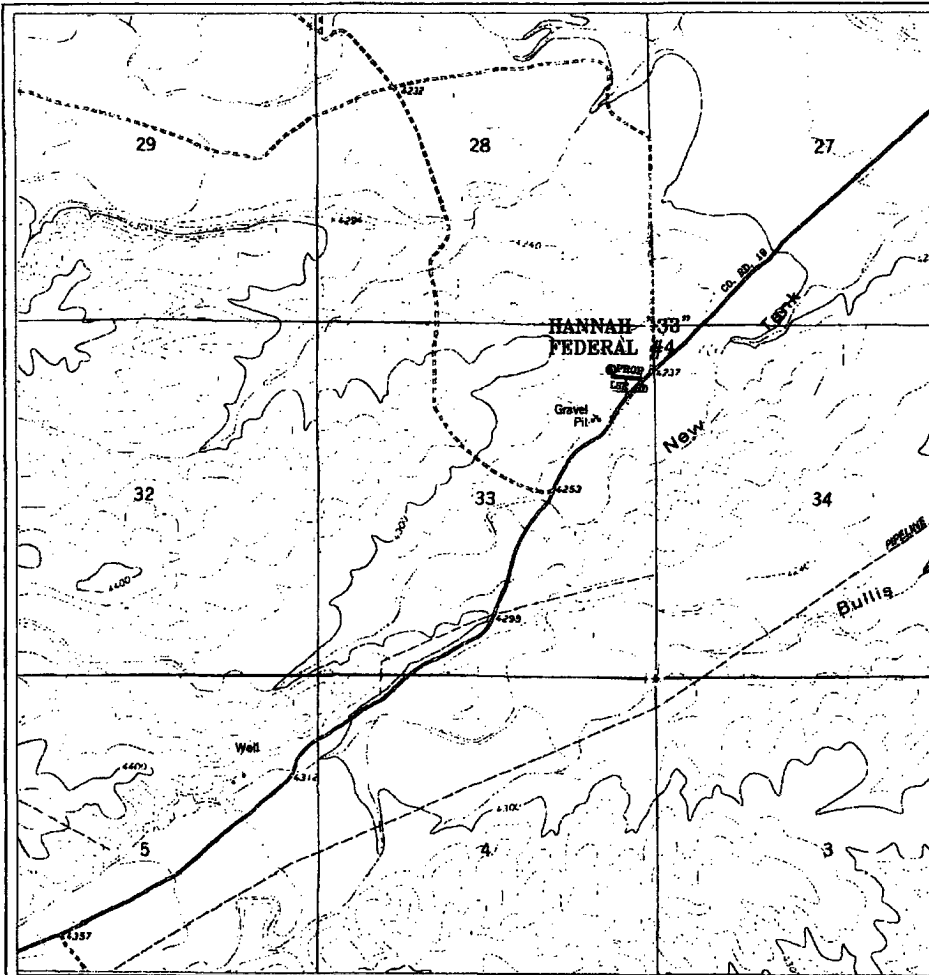
Date: 07-17-2006

Disk: JMS 6788W

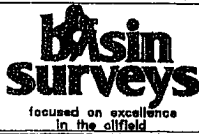
Survey Date: 07-13-2006

Sheet 1 of 1 Sheets

EXHIBIT "B"



HANNAH "33" FEDERAL #4
 Located at 660' FNL and 660' FEL
 Section 33, Township 18 South, Range 21 East,
 N.M.P.M., EDDY County, New Mexico.



P.O. Box 1788
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: 6788T

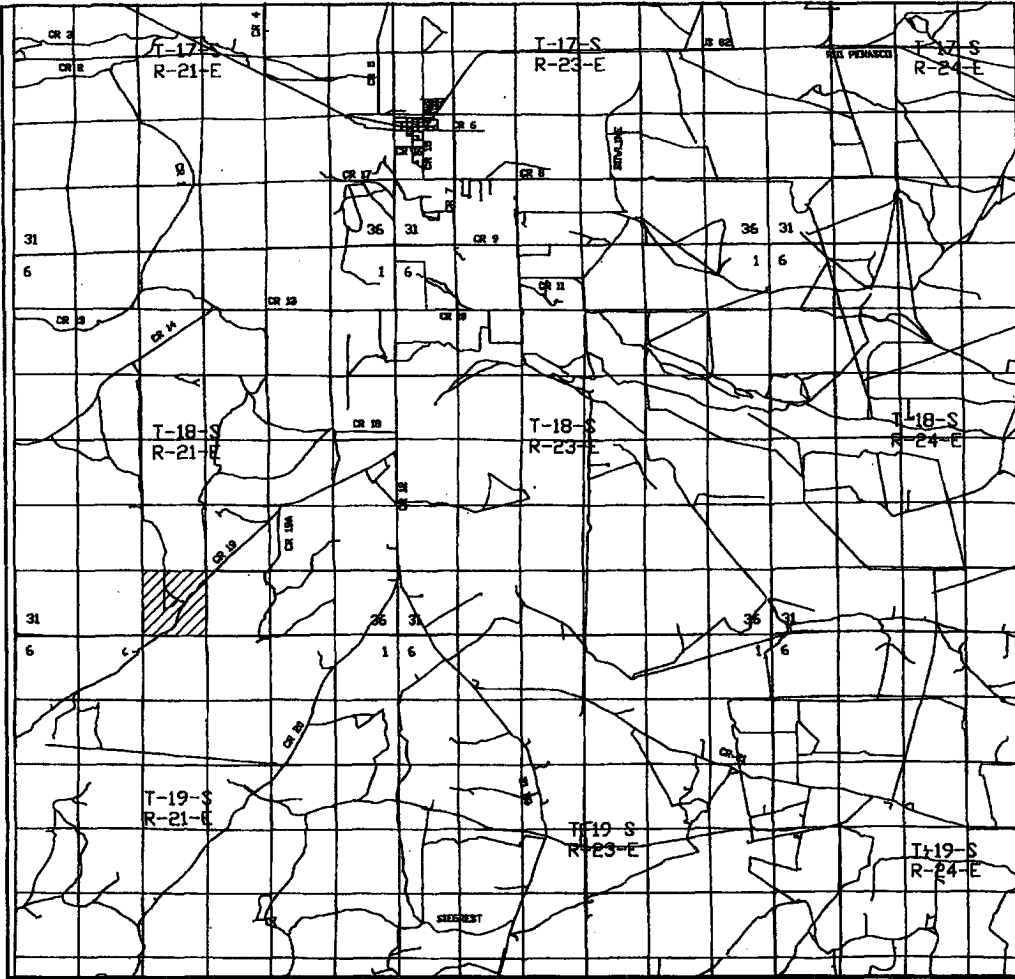
Survey Date: 07-13-2006

Scale: 1" = 2000'

Date: 07-17-2006

BOLD ENERGY

EXHIBIT "C"



HANNAH "33" FEDERAL #4
 Located at 660' FNL and 660' FEL
 Section 33, Township 18 South, Range 21 East,
 N.M.P.M., EDDY County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1788
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basin-surveys.com

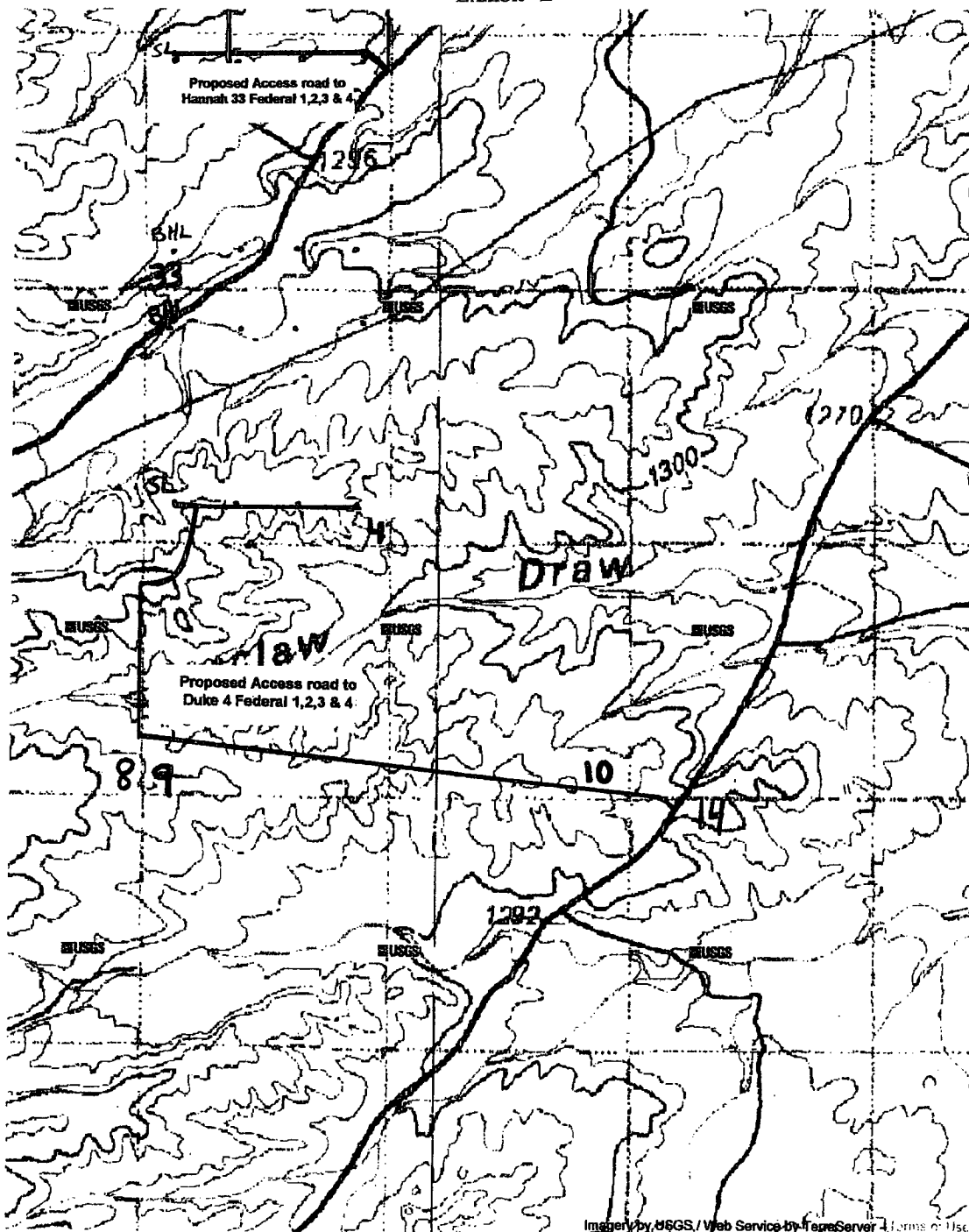
W.O. Number: 6788T

Survey Date: 07-13-2006

Scale: 1" = 2 MILES

Date: 07-17-2006

BOLD ENERGY



Imagery by USGS / Web Service by TerraServer Terms of Use

RIG 144

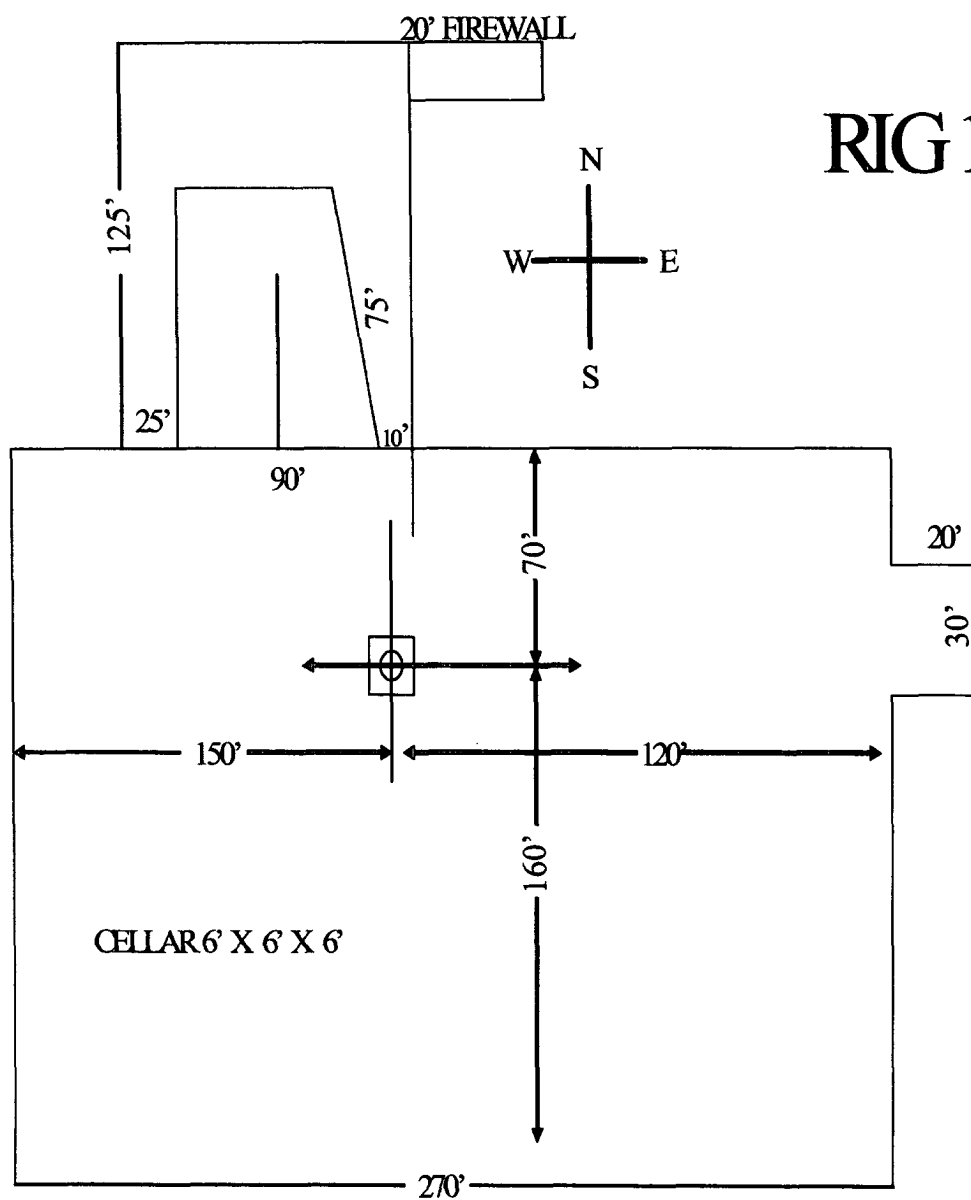
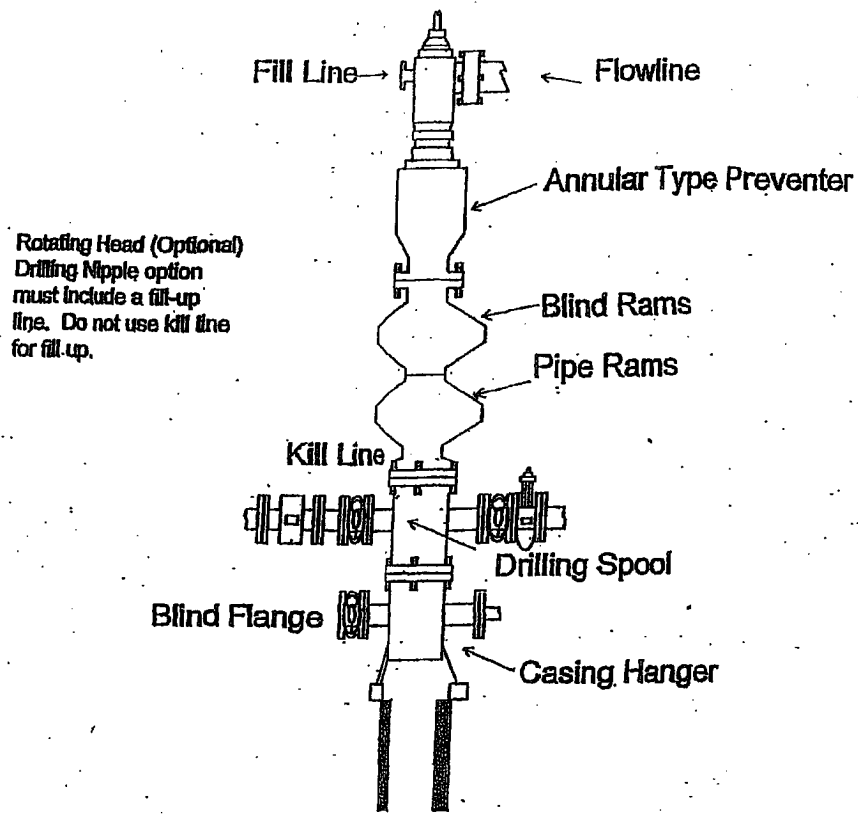


EXHIBIT "F"

BOPE SCHEMATIC

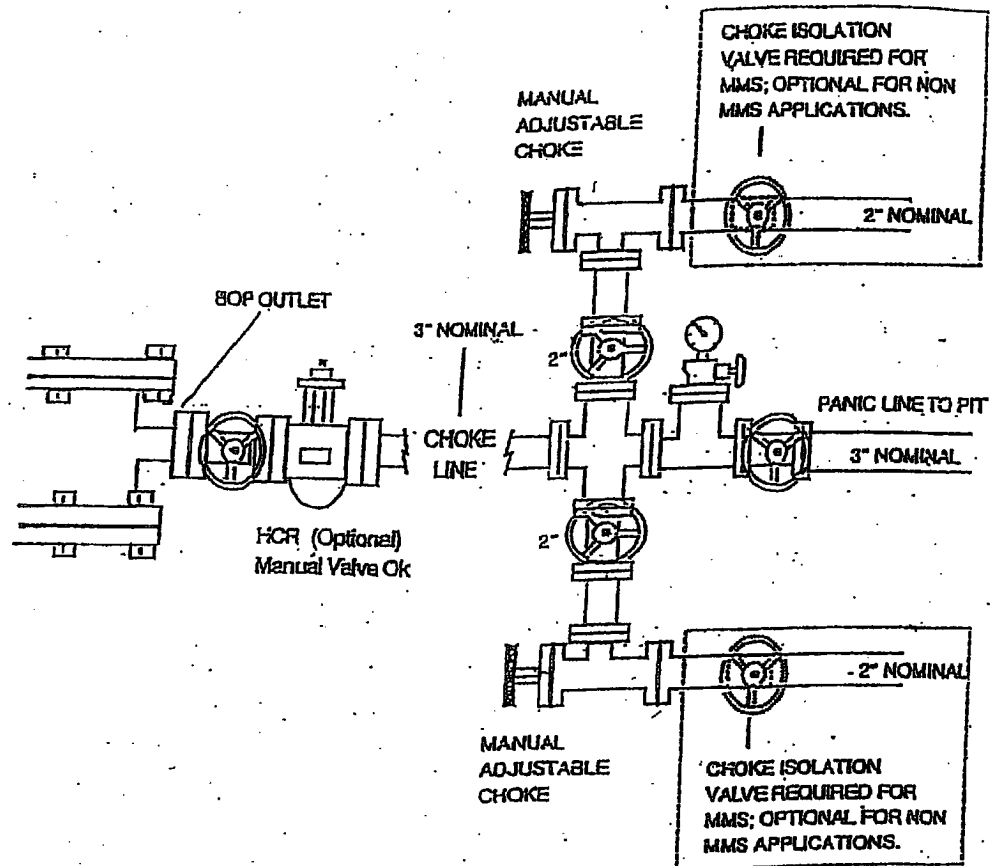


900 SERIES

EXHIBIT "F-1"

CHOKE MANIFOLD

3M SERVICE



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	3950.00	0.00	0.00	3950.00	0.00	0.00	0.00	0.00	0.00	0.00
3	4656.99	90.00	270.00	4400.08	0.00	-450.08	12.73	0.00	450.08	PBHL
4	8166.91	90.00	270.00	4400.00	0.00	-3960.00	0.00	0.00	3960.00	PBHL

SITE DETAILS
Wildcat : Wolfcamp
Ground Level: 4264.00
Positional Uncertainty: 0.00
Convergence: -0.25

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
PBHL	4400.00	0.00	3960.00	Point

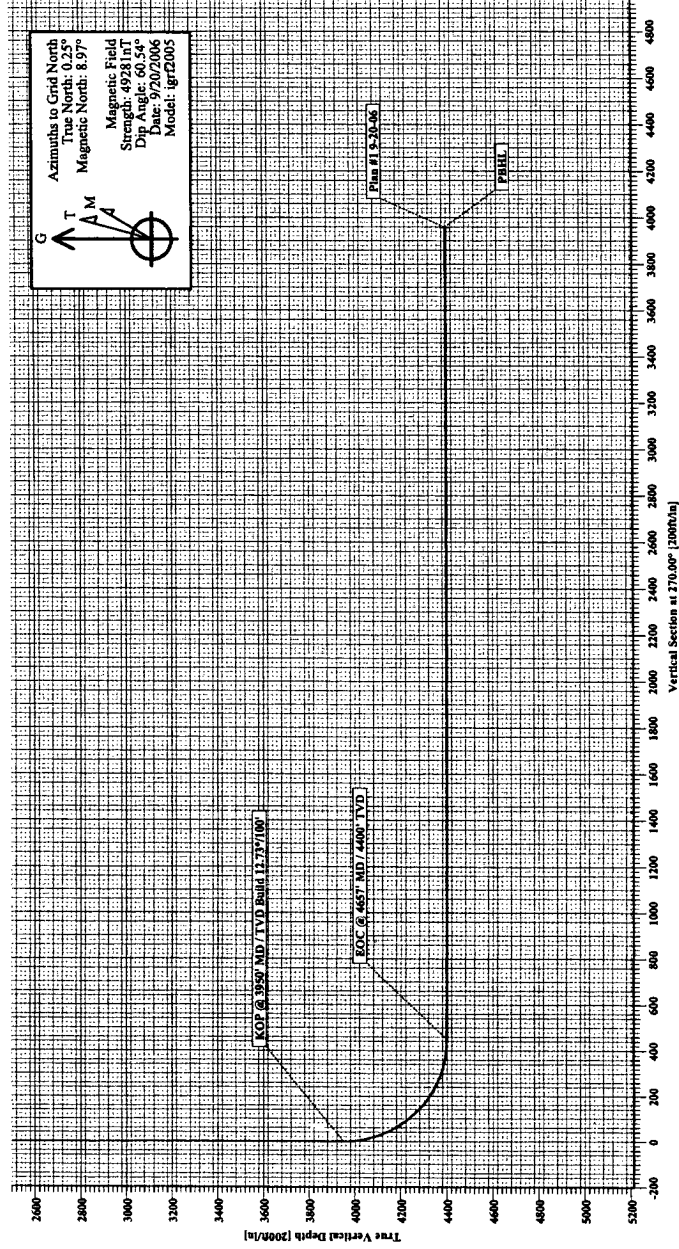
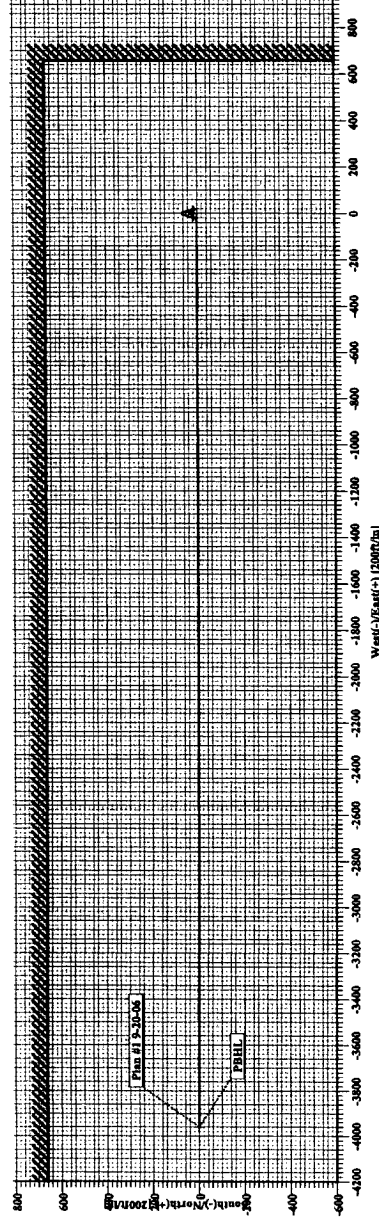
WELLPATH DETAILS

OH

Rig:	SITE	4264.00ft
Ref. Datum:		
V Section Angle	Origin +N/-S	0.00
Starting From	From TVD	4400.00

ANNOTATIONS

No.	TVD	MD	Annotation
1	3950.00	3950.00	KOP @ 3950' MD / TVD Build 12.73°/100'
2	4400.08	4656.99	EOC @ 4657' MD / 4400' TVD



Azimuths to Grid North
True North: 0.25°
Magnetic North: 8.97°
Magnetic Field
Serial: 49281m
Dip Angle: 60.54°
Date: 9/20/2006
Model: lgr2005

Pathfinder Energy

Planning Report

Company: Parallel Petroleum Corp.		Date: 9/20/2006	Time: 15:17:13	Page: 1
Field: Eddy County, NM NAD-83		Co-ordinate(NE) Reference: Well: Hannah 33 Fed #4, Grid North		
Site: Wildcat ; Wolfcamp		Vertical (TVD) Reference: SITE 4264.0		
Well: Hannah 33 Fed #4		Section (VS) Reference: Well (0.00N,0.00E,270.00Azi)		
Wellpath: OH		Plan: Plan #1 9-20-06		

Field: Eddy County, NM NAD-83	
Map System: US State Plane Coordinate System 1983	Map Zone: New Mexico, Eastern Zone
Geo Datum: GRS 1980	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: igrf2005

Site: Wildcat ; Wolfcamp	
Site Position:	Northing: ft
From: Lease Line	Easting: ft
Position Uncertainty: 0.00 ft	Latitude:
Ground Level: 4264.00 ft	Longitude:
	North Reference: Grid
	Grid Convergence: -0.25 deg

Well: Hannah 33 Fed #4		Slot Name:	
Well Position: +N/-S 0.00 ft	Northing: 622175.34 ft	Latitude: 32 42 34.400 N	
+E/-W 0.00 ft	Easting: 399971.82 ft	Longitude: 104 47 34.600 W	
Position Uncertainty: 0.00 ft			

Wellpath: OH		Drilled From: Surface	
Current Datum: SITE	Height: 4264.00 ft	Tie-on Depth: 0.00 ft	
Magnetic Data: 9/20/2006		Above System Datum: Mean Sea Level	
Field Strength: 49281 nT		Declination: 8.72 deg	
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 60.54 deg	
ft	ft	+E/-W	Direction
		ft	deg
4400.00	0.00	0.00	270.00

Plan: Plan #1 9-20-06	Date Composed: 9/20/2006
Principal: Yes	Version: 1
	Tied-to: From Surface

Plan Section Information										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3950.00	0.00	0.00	3950.00	0.00	0.00	0.00	0.00	0.00	0.00	
4656.99	90.00	270.00	4400.08	0.00	-450.08	12.73	12.73	0.00	0.00	PBHL
8166.91	90.00	270.00	4400.00	0.00	-3960.00	0.00	0.00	0.00	0.00	PBHL

Survey										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3950.00	0.00	0.00	3950.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP @ 3950' MD / TVD Bu
4656.99	90.00	270.00	4400.08	0.00	-450.08	450.08	12.73	12.73	0.00	PBHL
5872.05	90.00	270.00	4400.07	0.00	-1665.14	1665.14	0.00	0.00	0.00	
8166.91	90.00	270.00	4400.00	0.00	-3960.00	3960.00	0.00	0.00	0.00	PBHL

Targets													
Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude --->			<--- Longitude --->		
PBHL			4400.00	0.00	-3960.00	622175.34	396011.82	32	42	34.228 N	104	48	20.948 W

Pathfinder Energy

Planning Report

Company: Parallel Petroleum Corp.
Field: Eddy County, NM NAD-83
Site: Wildcat ; Wolfcamp
Well: Hannah 33 Fed #4
Wellpath: OH

Date: 9/20/2006 Time: 15:17:13 Page: 2
Co-ordinate(NE) Reference: Hannah 33 Fed #4, Grid North
Vertical (TVD) Reference: SITE 4264.0
Section (VS) Reference: Well (0.00N,0.00E,270.00Azi)
Plan: Plan #1 9-20-06

Annotation

MD ft	TVD ft	
3950.00	3950.00	KOP @ 3950' MD / TVD Build 12.73°/100'
4656.99	4400.08	EOC @ 4657' MD / 4400' TVD