

Form 100-3
(April 2004)



N.M. Oil Cons. DIV-Dist. 2
1301 W. 1st Avenue
Artesia, NM 88210

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

5. Lease Serial No.
NM NM 112258
6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

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

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. **36705**
ALYDAR 1426-34 FED COM #1

2. Name of Operator
Parallel Petroleum Corporation

9. API Well No.
30 005 - 63866

3a. Address **1004 North Big Spring, Suite 400**
Midland, Texas

3b. Phone No. (include area code)
432/684-3727

10. Field and Pool, or Exploratory
Wildcat Wolfcamp GAS

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface **1880' FSL AND 300' FEL**

At proposed prod. zone **1880' FSL AND 660' FWL**

11. Sec., T. R. M. or Blk. and Survey or Area

34, T14S, R26E

14. Distance in miles and direction from nearest town or post office*
4 miles South of Hagerman, New Mexico

12. County or Parish

Chaves

13. State

NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) **300'**

16. No. of acres in lease
120.00

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. **NONE**

19. Proposed Depth
5500'

20. BLM/BIA Bond No. on file
NMB000265

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
GL 3437'

22. Approximate date work will start*
10/15/2006

23. Estimated duration
30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form.

ROSWELL CONTROLLED WATER BASIN

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

- Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Name (Printed/Typed)

Deane Durham

Date

08/25/2006

Title

Engineer, Parallel Petroleum Corporation

Approved by (Signature)

/s/ Larry D. Bray

Name (Printed/Typed)

/s/ Larry D. Bray
ROSWELL FIELD OFFICE

Date

OCT 16 2006

Title

Assistant Field Manager,

Application approved by the Bureau of Land Management. Applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVED FOR 1 YEAR

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)

DECLARED WATER BASIN
CEMENT BEHIND THE **95"**
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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 97489	Pool Name WILDCAT Wolfcamp GAS
Property Code	Property Name ALYDAR 1426-34 FED. COM.	Well Number 1
OGRID No.	Operator Name PARALLEL PETROLEUM CORPORATION	Elevation 3437'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	34	14 S	26 E		1880	SOUTH	300	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
L	34	14 S	26 E		1880	SOUTH	660	WEST	CHAVES
Dedicated Acres 320	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

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.

Project Area

Producing Area

Description	Plane Coordinate
Alydar 1426-34 Fed Com #1	X = 504,398.9
Surface Location	Y = 748,324.7
Alydar 1426-34 Fed Com #1	X = 500,059.4
Bottom Hole Location	Y = 748,313.4

OPERATOR CERTIFICATION

I hereby certify 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.

Deane Durham 8-25-06
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 8, 2006
Date of Survey
Signature & Seal of Professional Surveyor
[Signature]
W.O. Num. 2006-0832
Certificate No. MACON McDONALD 12185

ATTACHMENT TO FORM 3160-3
ALYDAR 1426-34 FED COM #1
Surface Hole Location
1880 FSL AND 300 FEL, SEC 34, 14S, 26E
Bottom Hole Location
1880 FSL AND 660 FWL, SEC 34, 14S, 26E
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 2600'(+837')
Tubb 3610'(-173')
Abo Shale 4360' (-923')
Wolfcamp 5285' (-1848')
Wolfcamp Shale 5460'(-2023')

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

Fresh water 80'
Oil and Gas Wolfcamp 5285' (-1848') - 5460'(-2023')
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'			
9 5/8"	0' - 1,400'	36#	J-55	LTC
5 1/2"	0' - 9,424'	17#	N-80	LTC

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

ALYDAR 1426-34 FED COM #1

Page 2

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

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. Top of Cement should be tied-back to surface casing.

Drilling Procedure

- a. Set 20" conductor pipe as deep as possible up to 120' with a rathole unit.
- b. Drill 12 1/4" surface hole to an approximate depth of 1400', 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).
- c. Set slips on 9 5/8" CSG. Cut 9 5/8" CSG and NU & test BOP.
- d. Drill 8-3/4" production hole to 5500', using cut brine to an approximate depth of 4300' and a starch mud system to TD.
- e. Plug lower portion of the hole, per OCD/BLM specifications.
- f. Set kick-off cement plug to cover Wolfcamp zone +200'.
- g. Dress CMT to kick off point at approximately 4863'.
- h. Build angle at 13.6 degrees per 100' to 90 degrees and hold.
- i. Drill 7-7/8" horizontal drain hole to a terminus of 660' FWL.
- j. Run 5 1/2" 17# N-80 long-string, cement with 500 sx 50:50 Poz, 500 sx Class C acid soluble cement.
- k. 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 fresh water gel spud mud for surface string.
- b. The intermediate section from 0' to 1,400' will be 8.3 ppg Fresh Water system and viscous sweeps for hole cleaning.
- c. The production section from 1,400' to 4,300' will utilize a cut brine mud system.
- d. The remaining production section from 4,300' 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 third quarter of 2006 with drilling and completion operation lasting about 30 days.

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 112258

Legal Description of Land: Alydar 1426-34 Fed. Com #1
SHL: 1880' FSL and 300' FEL, Sec. 34, T14S, R26E
BHL: 1880' FSL and 660' FWL, Sec. 34, T14S, R26E
Chaves County, New Mexico

Formation(s) (if applicable: Wolfcamp

Bond Coverage: \$25,000 statewide bond of Parallel Petroleum Corporation

BLM Bond File No: NMB000265

8-25-06

Date



Name: Deane Durham

Title: Engineer

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

**PARALLEL PETROLEUM CORPORATION
ALYDAR 1426-34 FED. COM. #1
SHL: 1880' FSL AND 300' FEL, SEC 34, T14S, R26E
CHAVES COUNTY, NEW MEXICO**

LOCATED:

4 miles South of Hagerman, New Mexico

OIL & GAS LEASE:

NM NM 112258

RECORD LESSEE:

Doug J. Schultz
P.O. Box 973
Santa Fe, New Mexico 87504

BOND COVERAGE:

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

ACRES IN LEASE:

120.00

FEE SURFACE OWNER:

Lois Stephens
P.O. Box 91
Hagerman, New Mexico 88232

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. EXISTING ROADS

- 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

At the intersection of Highway 2 and County Road 92 (4.2 mile south of Hagerman, NM) go east on CR 92 2.1 miles. Then turn north on improved caliche road 1320 feet to an existing gate. New access road will be constructed from this point. Go north from this gate 600 feet to location. The caliche road from the County Road to the gate and then on to the location will be surfaced with 4 to 6 inches of caliche and will be 16' to 24' wide with a total length of approximately .4 mile.

B. Surface Material

Caliche from a commercial source.

C. Maximum Grade

Less than five percent.

D. Turnouts

At least one turnouts will be constructed.

E. Drainage Design

No Change.

F. Culverts

None necessary.

G. Gates and Cattle Guards

A cattle guard will be constructed were there currently is a gate, .25 mile north of the County Road.

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 drilled on property near the drill site belonging to Parallel Petroleum will be utilized for drilling and completion operations. A permit for drilling the well will be secured from the New Mexico Office of State Engineers prior to the start of drilling operations.

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.

- 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. ANCILLARY FACILITIES

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 and the site will be clean.

10. OTHER INFORMATION

A. Topography

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

D. Ponds and Streams

Prichard Lake and several unnamed playa lakes are located .5 miles northeast of the site and an unnamed playa is located .4 mile north of the site. Drainage from the site will be to the north and east, toward the playa. No streams or creeks are located in the immediate vicinity of the wellsite.

E. Residences and Other Structures

Occupied mobile home is located .25 mile west of the well site.

F. Archaeological, Historical, and Cultural Sites

See archaeological report # SNMAS-06NM-2355

submitted by: Southern New Mexico Archaeological Services, Inc.,
P.O. Box 1
Bent, New Mexico 88314 Phone 505-671-4797

G. Land Use

Undeveloped

H. Surface Ownership

Surface is owned by Lois Stevens, Hagerman, NM

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.

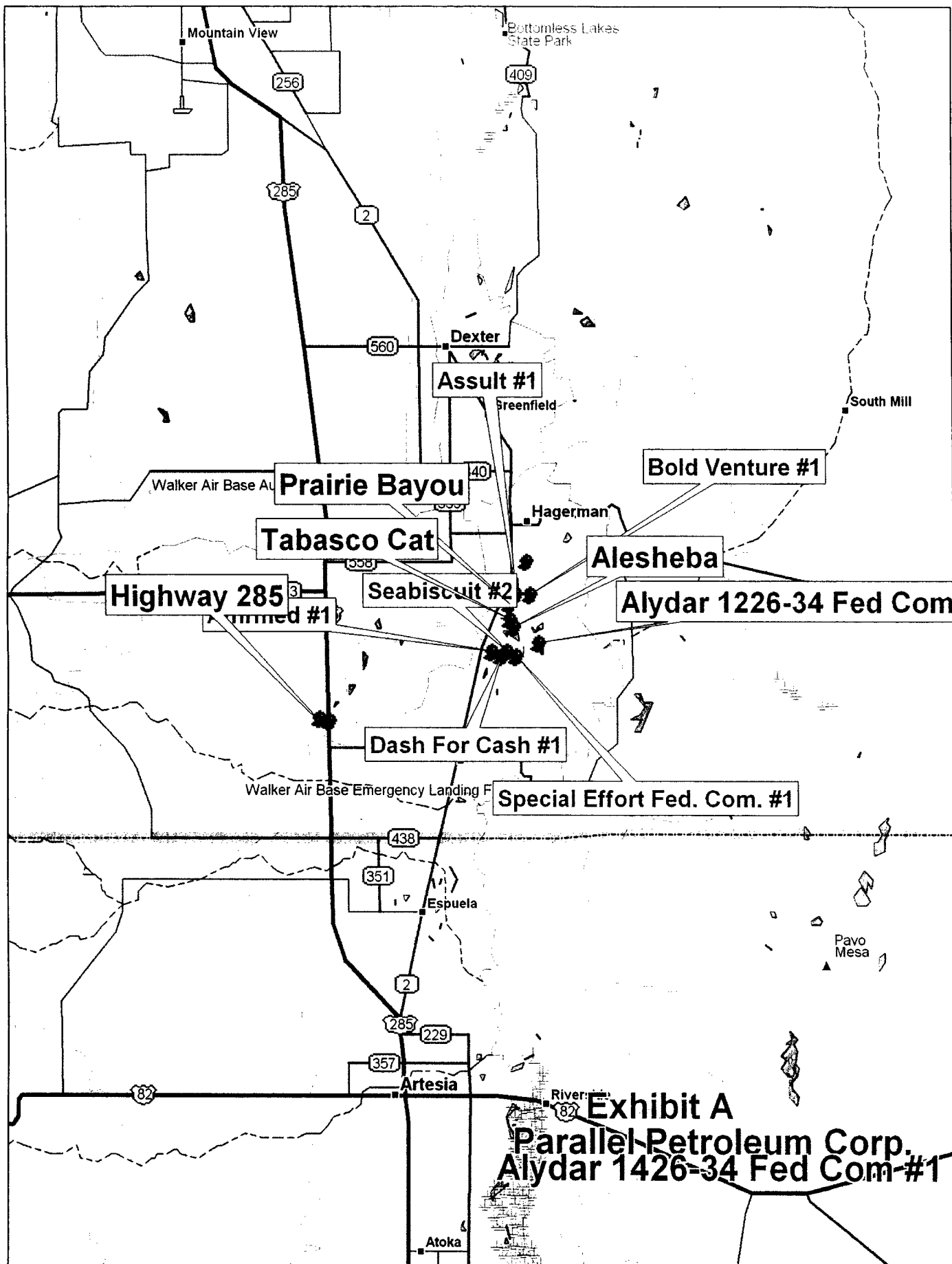
8-25-06

Date

Deane Durham

Name: Deane Durham

Title: Engineer



DeLORME

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www.delorme.com

Scale 1 : 275,000
1" = 4.34 mi



DOUBLE HORSESHOE RESERVE PIT

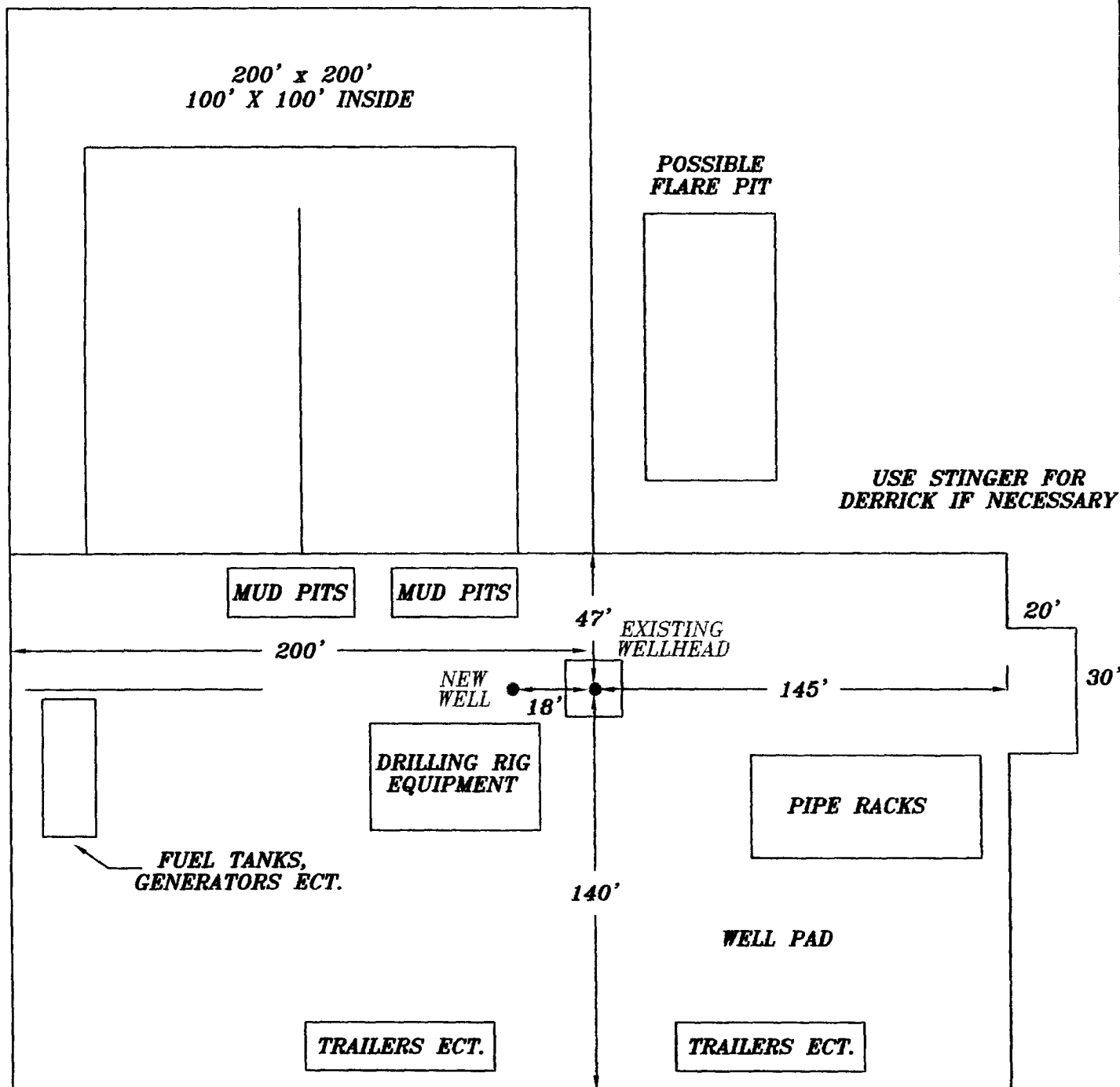
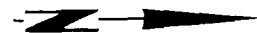


EXHIBIT B

**PARALLEL PETROLEUM
DRILLING RIG LAYOUT
DUAL WELL LOCATIONS**

**HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS**

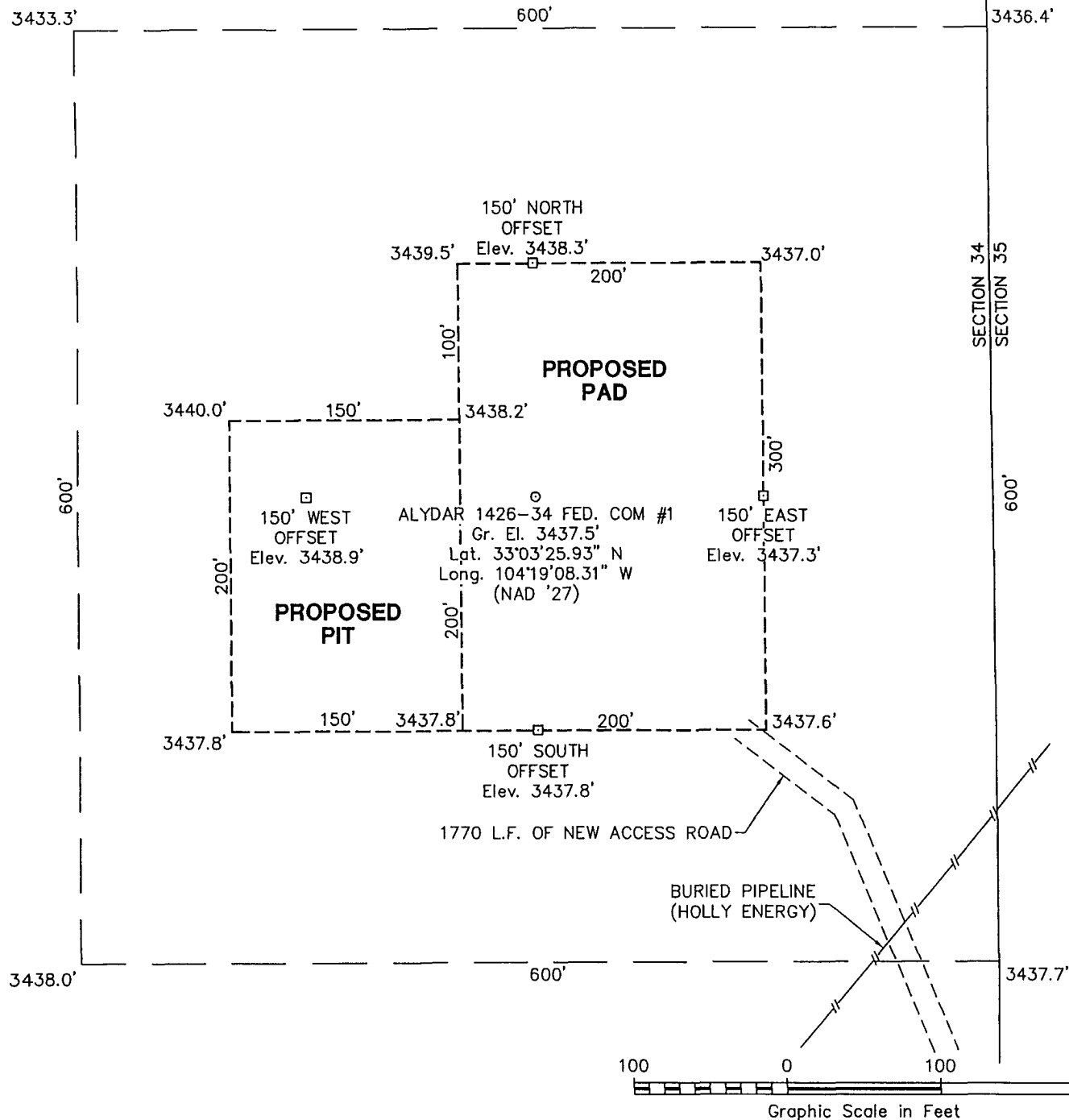
DATE:
4/28/06
DRAWN BY:
JJ
FILE:
C:\PROGRAMS\HENV\HENV\HENV.DWG

NOT TO SCALE

SECTION 34, TOWNSHIP 14 SOUTH, RANGE 26 EAST, N.M.P.M.

CHAVES COUNTY

NEW MEXICO



DRIVING DIRECTIONS

FROM THE INTERSECTION OF STATE HIGHWAY 339 AND STATE HIGHWAY 2 IN HAGERMAN, NM GO SOUTH AND SOUTHWEST ON SAID STATE HIGHWAY 2, 4.2 MILES TO COUNTY ROAD 92, THEN GO EAST ON SAID COUNTY ROAD 92 2.1 MILES TO A POINT WHERE A PROPOSED ROAD WHICH RUNS NORTH BEGINS, THENCE NORTH ALONG SAID PROPOSED ROAD 0.3 MILE TO THE PROPOSED WELL PAD.

PARALLEL PETROLEUM CORPORATION

ALYDAR 1426-34 FED. COM. #1

Located 1880' FSL & 300' FEL, Section 34
Township 14 South, Range 26 East, N.M.P.M.
Chaves County, New Mexico

Drawn By: LVA	Date: August 11, 2006
Scale: 1"=100'	Field Book: 348 / 7-8
Revision Date: 8-23-2006	Quadrangle: Hagerman
W.O. No: 2006-0832-1	Dwg. No.: L-2006-0832-A

WEST
COMPANY
of Midland, Inc.

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

Exhibit C

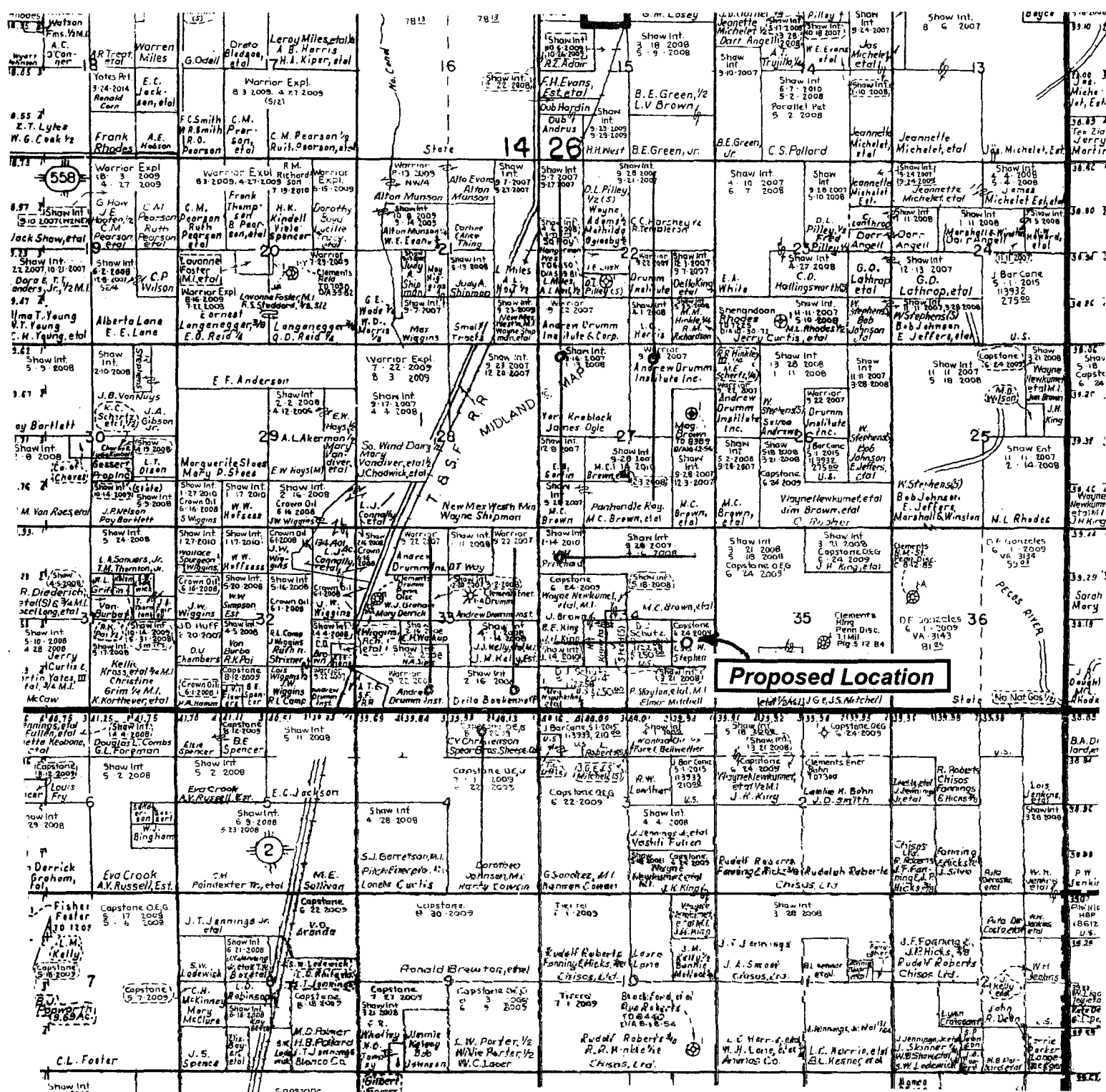


Exhibit "E"

AREA PRODUCTION MAP

PARALLEL PETROLEUM CORPORATION

ALYDAR 1426-34 FED. COM. #1

SHL: 1880' FSL AND 300' FEL, SEC 34, T14S, R26E

CHAVES COUNTY, NEW MEXICO

CONTOUR INTERVAL:
HAGERMAN - 10'

U.S.G.S. TOPOGRAPHIC MAP
HAGERMAN, N.M.



Exhibit F



**WEST
COMPANY**
of Midland, Inc.

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

MINIMUM BOP SCHEMATIC

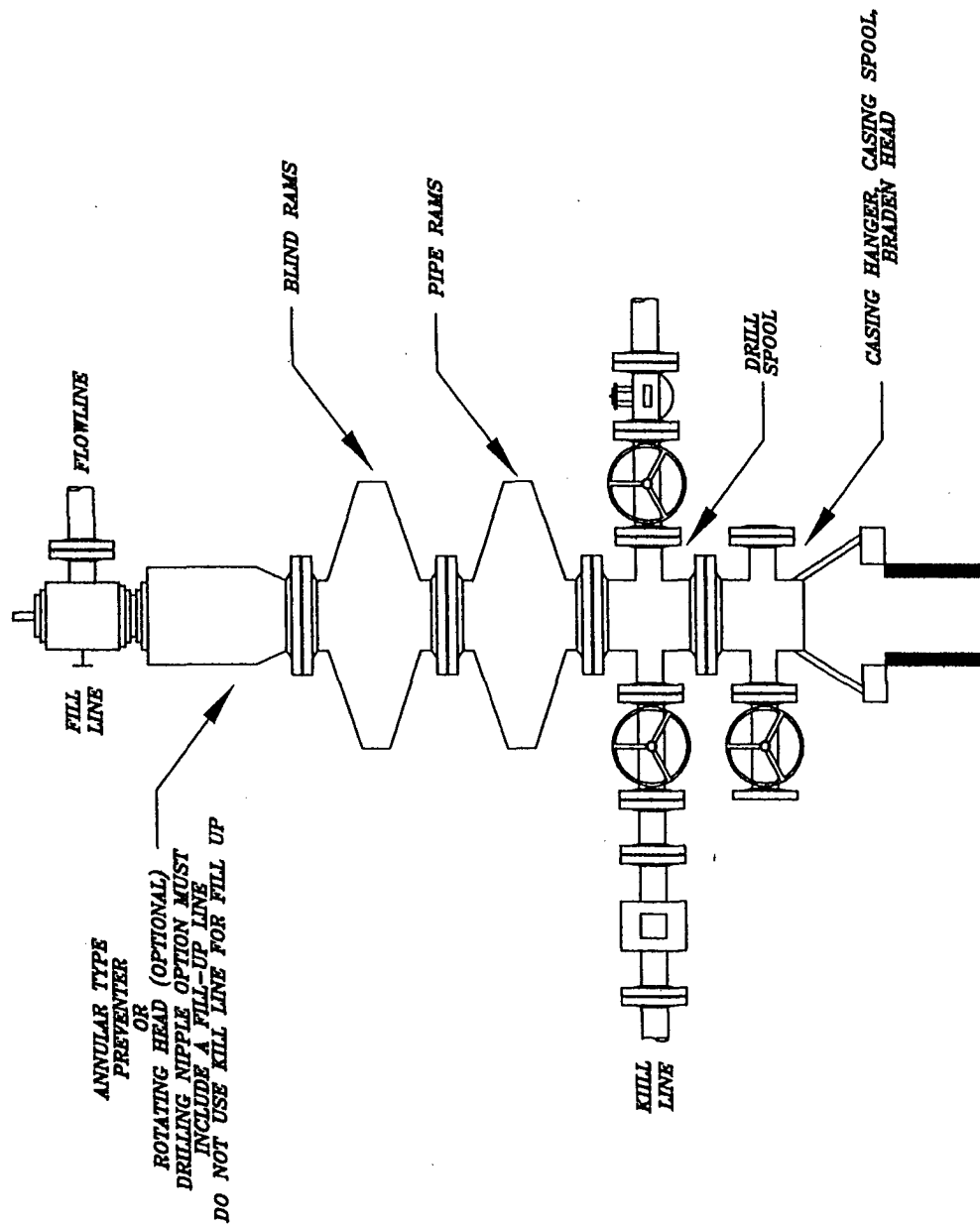


EXHIBIT I

PARALLEL PETROLEUM
BOP SCHEMATIC

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE: 7/26/05
DWN. BY: JJ
FILE: C:\PAPERS\BOP SCHEMATIC

NOT TO SCALE

CHOKE MANIFOLD 5M SERVICE

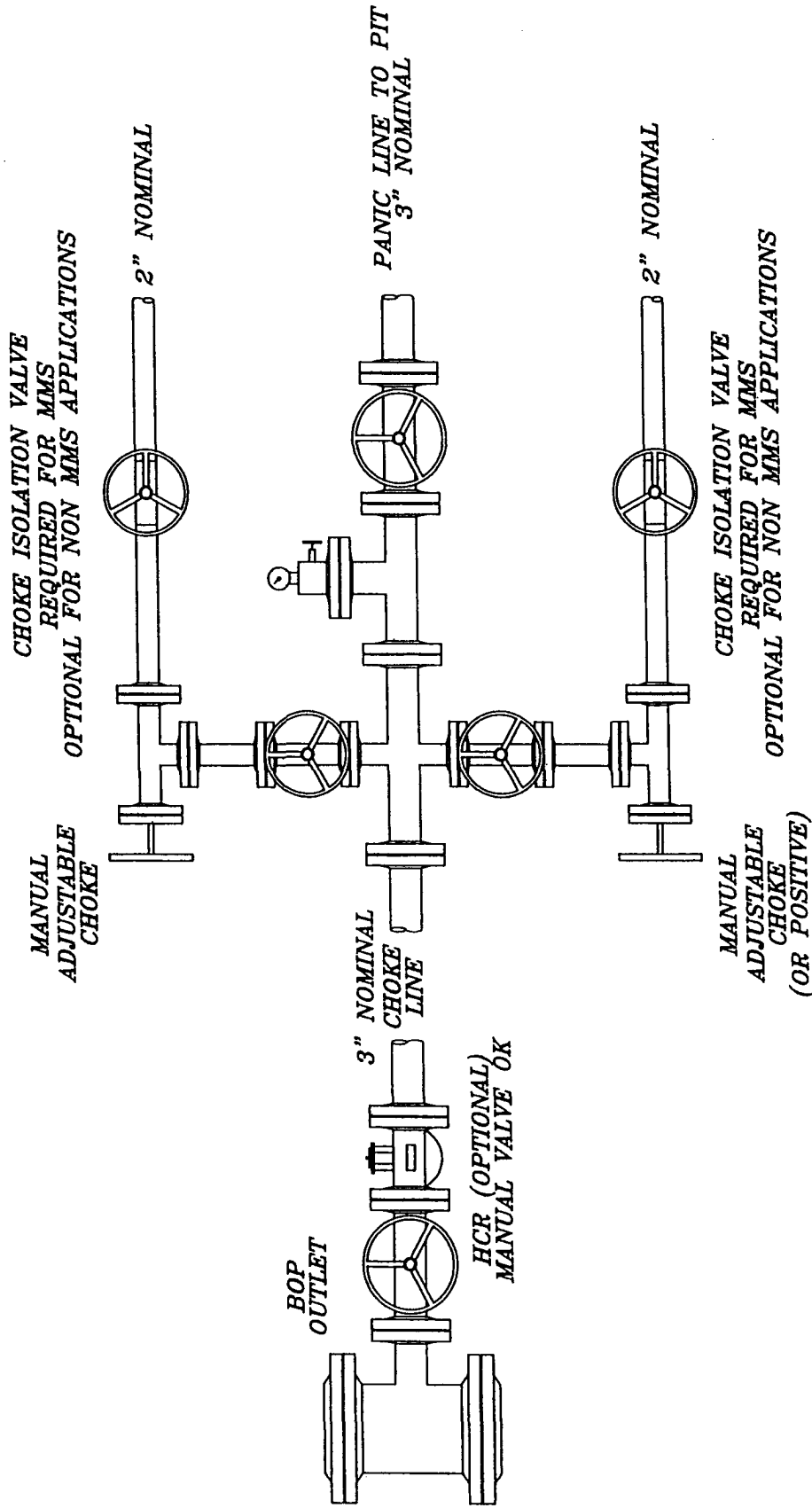


EXHIBIT J

DATE 8/17/05	PARALLEL PETROLEUM CHOKE MANIFOLD
DWN. BY JL	
FILE SYNTHESIS/CHOKE MANIFOLD	HIGHLANDER ENVIRONMENTAL CORP. MIDLAND, TEXAS

NOT TO SCALE

PARALLEL SURVEY CALCULATION PROGRAM PETROLEUM CORPORATION

OPERATOR:	Parallel Petroleum Corporation		Supervisors:	
WELL:	Alydar 1426-34 FED COM #1			
LOCATION:	Sec. 34 T-14-S R-26-E			
API NUMBER:				
COMMENTS:				
			MAG DEC. (-/+)	
			GRID CORR. (-/+)	
			TOTAL CORR. (-/+)	0.0

DATE: 08/21/06 TIME: 11:01 AM TRUE TO GRID ☐

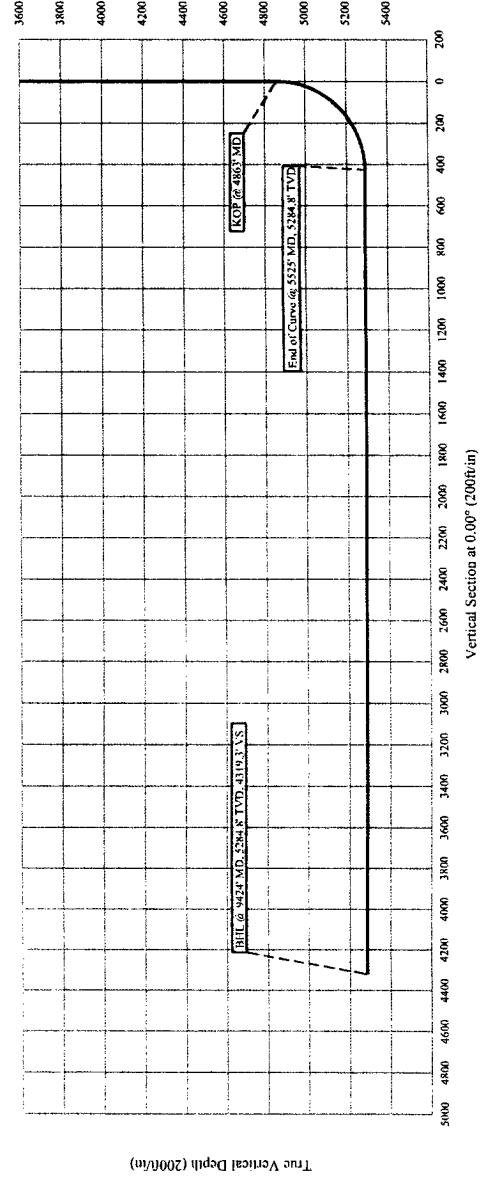
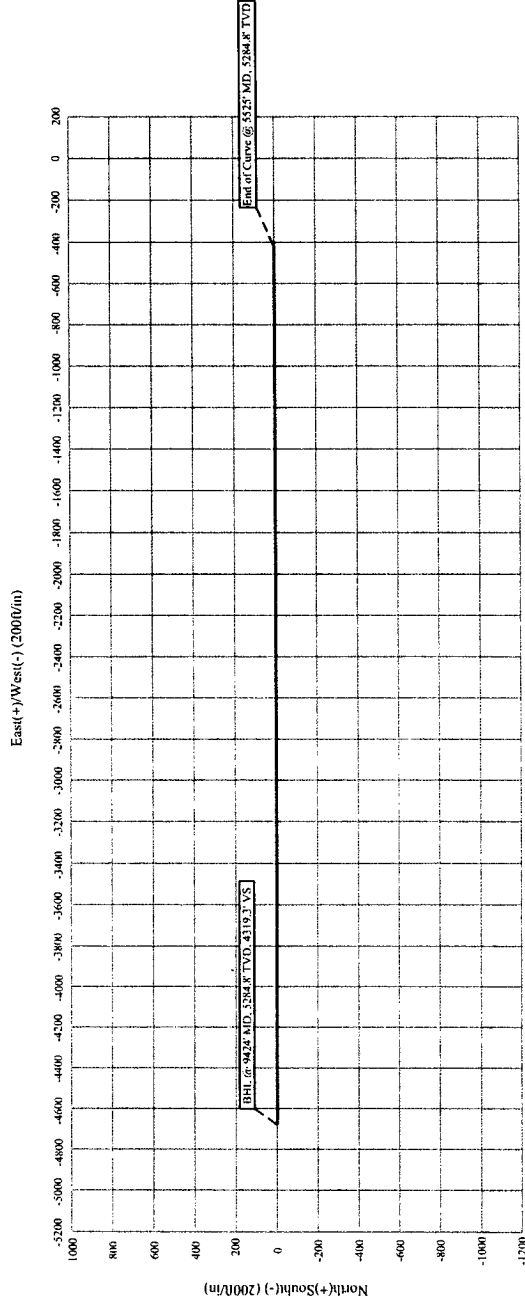
MINIMUM CURVATURE CALCULATIONS(SPE-3362)									PROPOSED DIRECTION 270.0		TARGET TRACKING TO CENTER	
SVY	MD	INC	GRID	VERT					DLS/		ABOVE(+)	RIGHT(+)
NUM			AZM	TVD	SECT	N-S	E-W		100		BELOW(-)	LEFT(-)
TIE	0	0.0	0.0	0.0	0.0	0.0	0.0					
1	4863	0.0	0.0	4863.0	0.0	0.0	0.0	0.0	422.0	0.0		
2	4873	1.3	270.0	4873.0	0.1	0.0	-0.1	13.0	412.0	0.0		
3	4883	2.6	270.0	4883.0	0.5	0.0	-0.5	13.0	402.0	0.0		
4	5525	90.0	270.0	5284.8	420.9	0.0	-420.9	13.6	0.2	0.0		
5	9424	90.0	270.0	5284.8	4319.9	0.0	-4319.9	0.0	0.2	0.0		

KOP @ 4863' MD
 BUR = 13.6 DEG per 100 FT
 End Curve @ 5525' MD, 5284.8' TVD
 BHL @ 9424' MD, 5284.8' TVD, 4319.9' VS

Parallel Petroleum Corp.

Alydar 1426-34 Fed. Com. #1
Sec.34, T-14-S, R-26-E
Chaves 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: 432-685-6580

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 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. 260728-01
Date Run 07/28/2006
Date Sampled 07/27/2006

Analysis for: PARALLEL PETROLEUM CORPORATION

GPANGL.L62

Well Name: DASH FOR CASH #1

Field:

Sta. Number:

Purpose: SPOT

Sampling Temp: 60 DEG F

Volume/day:

Pressure on Cylinder: 733 PSIG

Producer: PARALLEL PETROLEUM CORP.

County: CHAVES

State: NM

Sampled By: DON NORMAN

Atmos Temp: 91 DEG F

Formation:

Line Pressure: 746.2 PSIA

GAS COMPONENT ANALYSIS

Pressure Base: 14.7300

	Mol %	GPM
Carbon Dioxide CO2	5.6514	
Nitrogen N2	1.8667	
Hydrogen Sulfide H2S	0.0000	
Methane C1	80.6277	
Ethane C2	6.7430	1.8023
Propane C3	3.0262	0.8332
Iso-Butane IC4	0.4434	0.1450
Nor-Butane NC4	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

Real BTU Dry: 1092.27
Real BTU Wet: 1073.26
Real Calc. Specific Gravity: 0.7159
Field Specific Gravity: 0.0000

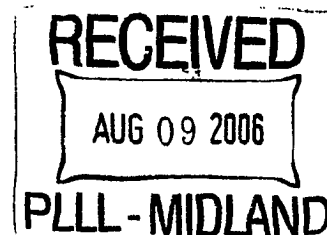
Standard Pressure: 14.6960
BTU Dry: 1086.59
BTU Wet: 1067.68

Z Factor: 0.9971
N Value: 1.2913
Avg Mol Weight: 20.6848
Avg CuPt/Gal: 56.8397
26 Lb Product: 0.4422
Methane+ GPM: 17.0215
Ethane+ GPM: 3.3555
Propane+ GPM: 1.5531
Butane+ GPM: 0.7199
Pentane+ GPM: 0.2953

REMARKS:
H2S IN GAS STREAM: NONE DETECTED

Approved by: DON NORMAN

Fri Jul 28 15:04:04 2006



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

GPANGL.L62

Well Name: SEABISCUIT #2

Field:

Sta. Number:

Purpose: SPOT

Sampling Temp: 60 DEG F

Volume/day:

Pressure on Cylinder: 576 PSIG

Producer: PARALLEL PETROLEUM CORP.

County: CHAVES

State: NM

Sampled By: DON NORMAN

Atmos Temp: 90 DEG F

Formation:

Line Pressure: 589.2 PSIA

GAS COMPONENT ANALYSIS

Pressure Base: 14.7300

		Mol %	GPM
Carbon Dioxide	CO2	3.8765	
Nitrogen	N2	1.1954	
Hydrogen Sulfide	H2S	0.0000	
Methane	C1	84.4558	
Ethane	C2	6.1856	1.6534
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

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 Factor: 0.9973
N Value: 1.2930
Avg Mol Weight: 19.7705
Avg CuFt/Gal: 56.9423
26 Lb Product: 0.4521
Methane+ GPM: 17.2860
Ethane+ GPM: 2.9711
Propane+ GPM: 1.3178
Butane+ GPM: 0.6328
Pentane+ GPM: 0.2944

REMARKS:
H2S IN GAS STREAM: NONE DETECTED

Approved by: DON NORMAN

Fri Jul 28 15:04:04 2006





Legals:

Alydar 1426-34 Fed Com

Well #1

1880' FSL & 300' FEL

Section 34

Township 14 South, Range 26 East, N.M.Y.M. Survey

Chaves County, New Mexico

H2S

“Contingency Plan”

CALLAWAY SAFETY EQUIPMENT CO. INC.
1020 W. Hwy. 80 East 3229 Industrial Drive
Odessa, Texas 79765 Hobbs, New Mexico 88240
(432) 561-5049 (877) 422-6345 (505) 392-2973

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H₂S CONTINGENCY PLAN SECTION

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, or following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H₂S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H₂S into the atmosphere.

Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

Discussion of Plan:

Suspected Problem Zones:

Implementation: This plan, with all details, is to be fully implemented 1000' before drilling into the first sour zone.

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to 1000' before drilling into the first sour zone.

Emergency call lists: Included are the telephone numbers of all persons that would need to be contacted, should an H₂S emergency occur.

Briefing: This section deals with the briefing of all persons involved with the drilling of this well.

Public Safety: Public Safety Personnel will be made aware of the drilling of this well.

Check Lists: Status check lists and procedural check lists have been included to ensure adherence to the plan.

General Information: A general information section has been included to supply support information.

EMERGENCY PROCEDURES SECTION

- I. In the event of any evidence of H₂S level above 10 ppm, take the following steps immediately:
 - A. Secure breathing apparatus.
 - B. Order non-essential personnel out of the danger zone.
 - C. Take steps to determine if the H₂S level can be corrected or suppressed, and if so, proceed with normal operations.
- II. If uncontrollable conditions occur, proceed with the following:
 - A. Take steps to protect and/or remove any public downwind of the rig, including partial evacuation or isolation. Notify necessary public safety personnel and the New Mexico Oil Conservation Division.
 - B. Remove all personnel to the Safe Briefing Area.
 - C. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.
 - D. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety measures.
- III. Responsibility:
 - A. The Company Approved Supervisor shall be responsible for the total implementation of the plan.
 - B. The Company Approved Supervisor shall be in complete command during any emergency.
 - C. The Company Approved Supervisor shall designate a back up Supervisor in the event that he/she is not available.

EMERGENCY PROCEDURE IMPLEMENTATION

I. Drilling or Tripping

A. All Personnel

1. When alarm sounds, don escape unit and report to upwind Safe Briefing Area.
2. Check status of other personnel (buddy system).
3. Secure breathing apparatus.
4. Wait for orders from supervisor.

B. Drilling Foreman

1. Report to the upwind Safe Briefing Area.
2. Don Breathing Apparatus and return to the point of release with the Tool Pusher or Driller (buddy system).
3. Determine the concentration of H₂S.
4. Assess the situation and take appropriate control measures.

C. Tool Pusher

1. Report to the upwind Safe Briefing Area.
2. Don breathing apparatus and return to the point of release with the Drilling Foreman or the Driller (buddy system).
3. Determine the concentration.
4. Assess the situation and take appropriate control measures.

D. Driller

1. Check the status of other personnel (in a rescue attempt, always use the buddy system).
2. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.

3. Assume the responsibility of the Drilling Foreman and the Tool Pusher until they arrive, in the event of their absence.

E. Derrick Man and Floor Hands

1. Remain in the upwind Safe Briefing Area until otherwise instructed by a supervisor.

F. Mud Engineer

1. Report to the upwind Safe Briefing Area.
2. When instructed, begin check of mud for pH level and H₂S level.

G. Safety Personnel

1. Don Breathing Apparatus.
2. Check status of all personnel.
3. Wait for instructions from Drilling Foreman or Tool Pusher.

II. Taking a Kick

- A. All personnel report to the upwind Safe Briefing Area.
- B. Follow standard BOP procedures.

III. Open Hole Logging

- A. All unnecessary personnel should leave the rig floor.
- B. Drilling Foreman and Safety Personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging

- A. Follow "Drilling or Tripping" procedures.
- B. Assure that all personnel have access to protective equipment.

SIMULATED BLOWOUT CONTROL DRILLS

All drills will be initiated by activating alarm devices (air horn). One long blast, on the air horn, for ACTUAL and SIMULATED Blowout Control Drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

Drill # 1 Bottom Drilling

Drill # 2 Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire pit drill assignment. The times must be recorded on the IADC Driller's Log as "Blowout Control Drill".

Drill No.:

Reaction Time to Shut-In: minutes, seconds.

Total Time to Complete Assignment: minutes, seconds.

I. Drill Overviews

A. Drill No. 1- Bottom Drilling

1. Sound the alarm immediately.
2. Stop the rotary and hoist kelly joint above the rotary table.
3. Stop the circulatory pump.
4. Close the drill pipe rams.
5. Record casing and drill pipe shut-in pressures and pit volume increases.

B. Drill No. 2 – Tripping Drill Pipe

1. Sound the alarm immediately.
2. Position the upper tool joint just above the rotary table and set the slips.

3. Install a full opening valve or inside blowout preventor tool in order to close the drill pipe.
4. Close the drill pipe rams.
5. Record the shut-in annular pressure.

II. Crew Assignments

A. Drill No. 1 – Bottom Drilling

1. Driller

- a) Stop the rotary and hoist kelly joint above the rotary table.
- b) Stop the circulatory pump.
- c) Check flow.
- d) If flowing, sound the alarm immediately.
- e) Record the shut-in drill pipe pressure.
- f) Determine the mud weight increase needed or other courses of action.

2. Derrickman

- a) Open choke line valve at BOP.
- b) Signal Floor Man # 1 at accumulator that choke line is open.
- c) Close choke and upstream valve after pipe rams have been closed.
- d) Read the shut-in annular pressure and report readings to Driller.

3. Floor Man # 1

- a) Close the pipe rams after receiving the signal from the Derrickman.
- b) Report to Driller for further instructions.

4. Floor Man # 2

- a) Notify the Tool Pusher and Operator Representative of the H₂S alarms.
- b) Check for open fires and, if safe to do so, extinguish them.
- c) Stop all welding operations.
- d) Turn-off all non-explosion proof lights and instruments.
- e) Report to Driller for further instructions.

5. Tool Pusher

- a) Report to the rig floor.
- b) Have a meeting with all crews.
- c) Compile and summarize all information.
- d) Calculate the proper kill weight.
- e) Ensure that proper well procedures are put into action.

6. Operator Representative

- a) Notify the Drilling Superintendent.
- b) Determine if an emergency exists and if so, activate the contingency plan.

B. Drill No. 2 – Tripping Pipe

1. Driller

- a) Sound the alarm immediately when mud volume increase has been detected.
- b) Position the upper tool joint just above the rotary table and set slips.
- c) Install a full opening valve or inside blowout preventor tool to close the drill pipe.
- d) Check flow.
- e) Record all data reported by the crew.

f) Determine the course of action.

2. Derrickman

- a) Come down out of derrick.
- b) Notify Tool Pusher and Operator Representative.
- c) Check for open fires and, if safe to do so, extinguish them.
- d) Stop all welding operations.
- e) Report to Driller for further instructions.

3. Floor Man # 1

- a) Pick up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 2).
- b) Tighten valve with back-up tongs.
- c) Close pipe rams after signal from Floor Man # 2.
- d) Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.
- e) Report to Driller for further instructions.

4. Floor Man # 2

- a) Pick-up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 1).
- b) Position back-up tongs on drill pipe.
- c) Open choke line valve at BOP.
- d) Signal Floor Man # 1 at accumulator that choke line is open.
- e) Close choke and upstream valve after pipe rams have been closed.
- f) Check for leaks on BOP stack and choke manifold.
- g) Read annular pressure.

h) Report readings to the Driller.

5. Tool Pusher

a) Report to the rig floor.

b) Have a meeting with all of the crews.

c) Compile and summarize all information.

d) See that proper well kill procedures are put into action.

6. Operator Representative

a) Notify Drilling Superintendent

b) Determine if an emergency exists, and if so, activate the contingency plan.

IGNITION PROCEDURES

Responsibility:

The decision to ignite the well is the responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. In the event the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

1. Human life and property are endangered.
2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well:

1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and must use a full body harness and attach a retrievable safety line to the D-Ring in the back. One man must monitor the atmosphere for explosive gases with the LEL monitor, while the Drilling Foreman is responsible for igniting the well.
2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.
3. Ignite from upwind and do not approach any closer than is warranted.
4. Select the ignition site best suited for protection and which offers an easy escape route.
5. Before igniting, check for the presence of combustible gases.
6. After igniting, continue emergency actions and procedures as before.
7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

TRAINING PROGRAM

When working in an area where Hydrogen Sulfide (H_2S) might be encountered, definite training requirements must be carried out. The Company Supervisor will ensure that all personnel, at the well site, have had adequate training in the following:

1. Hazards and Characteristics of Hydrogen Sulfide.
2. Physicals effects of Hydrogen Sulfide on the human body.
3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
4. H_2S detection, emergency alarm and sensor location.
5. Emergency rescue.
6. Resuscitators.
7. First aid and artificial resuscitation.
8. The effects of Hydrogen Sulfide on metals.
9. Location safety.

Service company personnel and visiting personnel must be notified if the zone contains H_2S , and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

EMERGENCY EQUIPMENT REQUIREMENTS

Lease Entrance Sign:

Should be located at the lease entrance with the following information:

CAUTION-POTENTIAL POISON GAS
HYDROGEN SULFIDE
NO ADMITTANCE WITHOUT AUTHORIZATION

Respiratory Equipment:

- Fresh air breathing equipment should be placed at the safe briefing areas and should include the following:
- Two SCBA's at each briefing area.
- Enough air line units to operate safely, anytime the H₂S concentration reaches the IDLH level (100 PPM).
- Cascade system with enough breathing air hose and manifolds to reach the rig floor, the derrickman and the other operation areas.

Windsocks or Wind Streamers:

- A minimum of two 10" windsocks located at strategic locations so that they may be seen from any point on location.
- Wind streamers (if preferred) should be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location).

Hydrogen Sulfide Detector and Alarms:

- 1-Four channel H₂S monitor with alarms.
- Four (4) sensors located as follows: # 1 – Rig Floor, # 2 – Bell Nipple, # 3 – Shale Shaker, # 4 – Mud Pits.
- Gastec or Draeger pump with tubes.
- Sensor test gas.

Well Condition Sign and Flags:

The Well Condition Sign w/flags should be placed a minimum of 150' before you enter the location. It should have three (3) color coded flags (green, yellow and red) that will be used to denote the following location conditions:

GREEN – Normal Operating Conditions
YELLOW – Potential Danger
RED – Danger, H₂S Gas Present

Auxiliary Rescue Equipment:

- Stretcher
- 2 – 100' Rescue lines
- First Aid Kit properly stocked.

Mud Inspection Equipment:

Garret Gas Train or Hach Tester for inspection of Hydrogen Sulfide in the drilling mud system.

Fire Extinguishers:

Adequate fire extinguishers shall be located at strategic locations.

Blowout Preventor:

- The well shall have hydraulic BOP equipment for the anticipated BHP.
- The BOP should be tested upon installation.
- BOP, Choke Line and Kill Line will be tested as specified by Operator.

Confined Space Monitor:

There should be a portable multi-gas monitor with at least 3 sensors (O₂, LEL & H₂S). This instrument should be used to test the atmosphere of any confined space before entering. It should also be used for atmospheric testing for LEL gas before beginning any type of Hot Work. Proper calibration documentation will need to be provided.

Communication Equipment:

- Proper communication equipment such as cell phones or 2 – way radios should be available at the rig.

- Radio communication shall be available for communication between the company man's trailer, rig floor and the tool pusher's trailer.
- Communication equipment shall be available on the vehicles.

Special Control Equipment:

- Hydraulic BOP equipment with remote control on the ground.
- Rotating head at the surface casing point.

Evacuation Plan:

- Evacuation routes should be established prior to spudding the well.
- Should be discussed with all rig personnel.

Designated Areas:

Parking and Visitor area:

- All vehicles are to be parked at a pre-determined safe distance from the wellhead.
- Designated smoking area.

Safe Briefing Areas:

- Two Safe Briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
- Personal protective equipment should be stored at both briefing areas or if a moveable cascade trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both briefing areas should be accessible.

NOTE:

- Additional equipment will be available at the nearest Callaway Safety Office.
- Additional personal H₂S monitors are available for all employees on location.

- Automatic Flare Igniters are recommended for installation on the rig.

CHECK LISTS

Status Check List

Note: Date each item as they are implemented.

1. Sign at location entrance. _____
2. Two (2) wind socks (in required locations). _____
3. Wind Streamers (if required). _____
4. SCBA's on location for all rig personnel and mud loggers. _____
5. Air packs, inspected and ready for use. _____
6. Spare bottles for each air pack (if required). _____
7. Cascade system for refilling air bottles. _____
8. Cascade system and hose line hook up. _____
9. Choke manifold hooked-up and tested.
(Before drilling out surface casing.) _____
10. Remote Hydraulic BOP control (hooked-up and
tested before drilling out surface casing). _____
11. BOP tested (before drilling out surface casing). _____
12. Mud engineer on location with equipment to test
mud for H₂S. _____
13. Safe Briefing Areas set-up. _____
14. Well Condition sign and flags on location and ready. _____
15. Hydrogen Sulfide detection system hooked-up & tested. _____
16. Hydrogen Sulfide alarm system hooked-up & tested. _____
17. Stretcher on location at Safe Briefing Area. _____
18. 2-100' Life Lines on location. _____

- 19. 1-20# Fire Extinguisher in safety trailer. _____
- 20. Confined Space Monitor on location and tested. _____
- 21. All rig crews and supervisor trained (as required). _____
- 22. Access restricted for unauthorized personnel. _____
- 23. Drills on H₂S and well control procedures. _____
- 24. All outside service contractors advised of potential H₂S on the well. _____
- 25. NO SMOKING sign posted. _____
- 26. H₂S Detector Pump w/tubes on location. _____
- 27. 25mm Flare Gun on location w/flares. _____
- 28. Automatic Flare Ignitor installed on rig. _____

Procedural Check List

Perform the following on each tour:

1. Check fire extinguishers to see that they have the proper charge.
2. Check Breathing equipment to insure that they have not been tampered with.
3. Check pressure on the supply air bottles to make sure they are capable of recharging.
4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

1. Check each piece of breathing equipment to make sure that they are fully charged and operational. This requires that the air cylinder be opened and the mask assembly be put on and tested to make sure that the regulators and masks are properly working. Negative and Positive pressure should be conducted on all masks.
2. BOP skills.
3. Check supply pressure on BOP accumulator stand-by source.
4. Check all breathing air mask assemblies to see that straps are loosened and turned back, ready to use.
5. Check pressure on cascade air cylinders to make sure they are fully charged and ready to use for refill purposes if necessary.
6. Check all cascade system regulators to make sure they work properly.
7. Perform breathing drills with on-site personnel.
8. Check the following supplies for availability:
 - Stretcher
 - Safety Belts and ropes.
 - Spare air bottles.
 - Spare oxygen bottles (if resuscitator required).
 - Gas Detector Pump and tubes.
 - Emergency telephone lists.

9. Test the Confined Space Monitor to verify the batteries are good.

BRIEFING PROCEDURES

The following scheduled briefings will be held to ensure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well.

Attendance: Drilling Supervisor

Drilling Engineer

Drilling Foreman

Rig Tool Pushers

Rig Drillers

Mud Engineer

All Safety Personnel

Key Service Company Personnel

Purpose: Review and discuss the well program, step-by-step, to insure complete understanding of assignments and responsibilities.

EVACUATION PLAN

General Plan

The direct lines of action prepared by CALLAWAY SAFETY EQUIPMENT CO., INC., to protect the public from hazardous gas situations are as follows:

1. When the company approved supervisor (Drilling Foremen, Tool Pusher or Driller) determine that Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area Map.
2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation need to be implemented.
3. Company approved safety personnel that have been trained in the use of the proper emergency equipment will be utilized.
4. Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

See Emergency Action Plan

Emergency Assistance Telephone List

PUBLIC SAFETY:

Chavez Co. Sheriff	911 or (505) 624-6770
Fire Department	(505) 624-6800
Hospital/Roswell, N.M.	(505) 622-8170

Life Flight:

Southwest Air-Med E Vac.	(800) 242-6199
--------------------------	----------------

Lat: 33°01'17.73"N.

Long: 104°26'42.18" W.

New Mexico D.O.T.	(505) 827-5100
Bureau of Land Management	(505) 393-3612
U. S. Dept. of Labor	(505) 248-5302
New Mexico OCD	(505) 393-6161
New Mexico/After Hours	(505) 370-7106

Parallel Petroleum Corporation

Parallel Petroleum Corporation/Midland, TX	Office (432) 684-3727
--	-----------------------

Superintendent:

Donnie Hill	Office (432) 684-3727
	Cell (432) 934-7164

Drilling Engineer:

Deane Durham	Office (432) 684-3727
	Cell (432) 413-9701

Callaway Safety Equipment

Odessa	Office (432) 561-5049
Hobbs	Office (877) 422-6345

Affected Notification List

(within a _____' radius of exposure @100ppm)

The geologic zones that will be encountered during drilling are not known to contain hazardous quantities of H₂S. The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a hand delivered written notice describing the activities, potential hazards, conditions of evacuation, evacuation drill siren alarms and other precautionary measures.

Evacuee Description:

Residents: **THERE ARE NO RESIDENTS WITHIN 3000' ROE.**

Notification Process:

A continuous siren audible to all residence will be activated, signaling evacuation of previously notified and informed residents.

Evacuation Plan:

All evacuees will migrate lateral to the wind direction.

The Oil Company will identify all home bound or highly susceptible individuals and make special evacuation preparations, interfacing with the local and emergency medical service as necessary.

MAPS AND PLATS
(Maps & Plats Attached)

GENERAL INFORMATION

Toxic Effects of H₂S Poisoning

Hydrogen Sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 PPM, which is .001% by volume. Hydrogen Sulfide is heavier than air (specific gravity-1.192) and is colorless and transparent. Hydrogen Sulfide is almost as toxic as Hydrogen Cyanide and is 5-6 times more toxic than Carbon Monoxide. Occupational exposure limits for Hydrogen sulfide and other gasses are compared below in Table I. Toxicity table for H₂S and physical effects are shown in Table II.

Table 1
Permissible Exposure Limits of Various Gasses

Common Name	Symbol	Sp. Gravity	TLV	STEL	IDLH
Hydrogen Cyanide	HCN	.94	4.7 ppm	C	
Hydrogen Sulfide	H ₂ S	1.192	10 ppm	15 ppm	100 ppm
Sulfur Dioxide	SO ₂	2.21	2 ppm	5 ppm	
Chlorine	CL	2.45	.5 ppm	1 ppm	
Carbon Monoxide	CO	0.97	25 ppm	200 ppm	
Carbon Dioxide	CO ₂	1.52	5000 ppm	30,000 ppm	
Methane	CH ₄	0.55	4.7% LEL	14% UEL	

Definitions

- A. TLV – Threshold Limit Value is the concentration employees may be exposed to based on a TWA (time weighted average) for eight (8) hours in one day for 40 hours in one (1) week. This is set by ACGIH (American Conference of Governmental Hygienists and regulated by OSHA.
- B. STEL – Short Term Exposure Limit is the 15 minute average concentration an employee may be exposed to providing that the highest exposure never exceeds the OEL (Occupational Exposure Limit). The OEL for H₂S is 19 PPM.
- C. IDLH – Immediately Dangerous to Life and Health is the concentration that has been determined by the ACGIH to cause serious health problems or death if exposed to this level. The IDLH for H₂S is 100 PPM.

- D. TWA – Time Weighted Average is the average concentration of any chemical or gas for an eight (8) hour period. This is the concentration that any employee may be exposed to based on an TWA.

TABLE II
Toxicity Table of H₂S

Percent %	PPM	Physical Effects
.0001	1	Can smell less than 1 ppm.
.001	10	TLV for 8 hours of exposure
.0015	15	STEL for 15 minutes of exposure
.01	100	Immediately Dangerous to Life & Health. Kills sense of smell in 3 to 5 minutes.
.02	200	Kills sense of smell quickly, may burn eyes and throat.
.05	500	Dizziness, cessation of breathing begins in a few minutes.
.07	700	Unconscious quickly, death will result if not rescued promptly.
.10	1000	Death will result unless rescued promptly. Artificial resuscitation may be necessary.

PHYSICAL PROPERTIES OF H₂S

The properties of all gasses are usually described in the context of seven major categories:

COLOR
ODOR
VAPOR DENSITY
EXPLOSIVE LIMITS
FLAMMABILITY
SOLUBILITY (IN WATER)
BOILING POINT

Hydrogen Sulfide is no exception. Information from these categories should be considered in order to provide a fairly complete picture of the properties of the gas.

COLOR – TRANSPARENT

Hydrogen Sulfide is colorless so it is invisible. This fact simply means that you can't rely on your eyes to detect its presence. a fact that makes the gas extremely dangerous to be around.

ODOR – ROTTEN EGGS

Hydrogen Sulfide has a distinctive offensive smell, similar to "rotten eggs". For this reason it earned its common name "sour gas". However, H₂S, even in low concentrations, is so toxic that it attacks and quickly impairs a victim's sense of smell, so it could be fatal to rely on your nose as a detection device.

VAPOR DENSITY – SPECIFIC GRAVITY OF 1.192

Hydrogen Sulfide is heavier than air so it tends to settle in low-lying areas like pits, cellars or tanks. If you find yourself in a location where H₂S is known to exist, protect yourself. Whenever possible, work in an area upwind and keep to higher ground.

EXPLOSIVE LIMITS – 4.3% TO 46%

Mixed with the right proportion of air or oxygen, H₂S will ignite and burn or explode, producing another alarming element of danger besides poisoning.

FLAMMABILITY

Hydrogen Sulfide will burn readily with a distinctive clear blue flame, producing Sulfur Dioxide (SO₂), another hazardous gas that irritates the eyes and lungs.

SOLUBILITY – 4 TO 1 RATIO WITH WATER

Hydrogen Sulfide can be dissolved in liquids, which means that it can be present in any container or vessel used to carry or hold well fluids including oil, water, emulsion and sludge. The solubility of H₂S is dependent on temperature and pressure, but if conditions are right, simply agitating a fluid containing H₂S may release the gas into the air.

BOILING POINT – (-76 degrees Fahrenheit)

Liquefied Hydrogen Sulfide boils at a very low temperature, so it is usually found as a gas.

RESPIRATOR USE

The Occupational Safety and Health Administration (OSHA) regulates the use of respiratory protection to protect the health of employees. OSHA's requirements are written in the Code of Federal Regulations, Title 29, Part 1910, Section 134, Respiratory Protection. This regulation requires that all employees who might be required to wear respirators, shall complete a OSHA mandated medical evaluation questionnaire . The employee then should be fit tested prior to wearing any respirator while being exposed to hazardous gasses.

Written procedures shall be prepared covering safe use of respirators in dangerous atmospheric situations, which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.

Respirators shall be inspected prior to and after each use to make sure that the respirator has been properly cleaned, disinfected and that the respirator works properly. The unit should be fully charged prior to being used.

Anyone who may use respirators shall be properly trained in how to properly seal the face piece. They shall wear respirators in normal air and then in a test atmosphere. (Note: Such items as facial hair (beard or sideburns) and eyeglass temple pieces will not allow a proper seal.) Anyone that may be expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses. Contact lenses should not be allowed.

Respirators shall be worn during the following conditions:

- A. Any employee who works near the top or on the top of any tank unless tests reveal less than 20 ppm of H₂S.
- B. When breaking out any line where H₂S can reasonably be expected.
- C. When sampling air in areas where H₂S may be present.
- D. When working in areas where the concentration of H₂S exceeds the Threshold Limit Value for H₂S (10 ppm).
- E. At any time where there is a doubt as to the H₂S level in the area to be entered.

EMERGENCY RESCUE PROCEDURES

DO NOT PANIC!!!

Remain Calm - THINK

1. Before attempting any rescue you must first get out of the hazardous area yourself. Go to a safe briefing area.
2. Sound an alarm and activate the 911 system.
3. Put on breathing apparatus. At least two persons should do this, when available use the buddy system.
4. Rescue the victim and return them to a safe briefing area.
5. Perform an initial assessment and begin proper First Aid/CPR procedures.
6. Keep the victim lying down with a blanket or coat, etc..., under the shoulders to keep airway open. Conserve body heat and do not leave unattended.
7. If the eyes are affected by H₂S, wash them thoroughly with potable water. For slight irritation, cold compresses are helpful.
8. In case a person has only minor exposure and does not lose consciousness totally, it's best if he doesn't return to work until the following day.
9. Any personnel overcome by H₂S should always be examined by medical personnel. They should always be transported to a hospital or doctor.

EXHIBIT A

OPERATORS NAME: Parallel Petroleum Corporation LEASE NO.: NM-112258

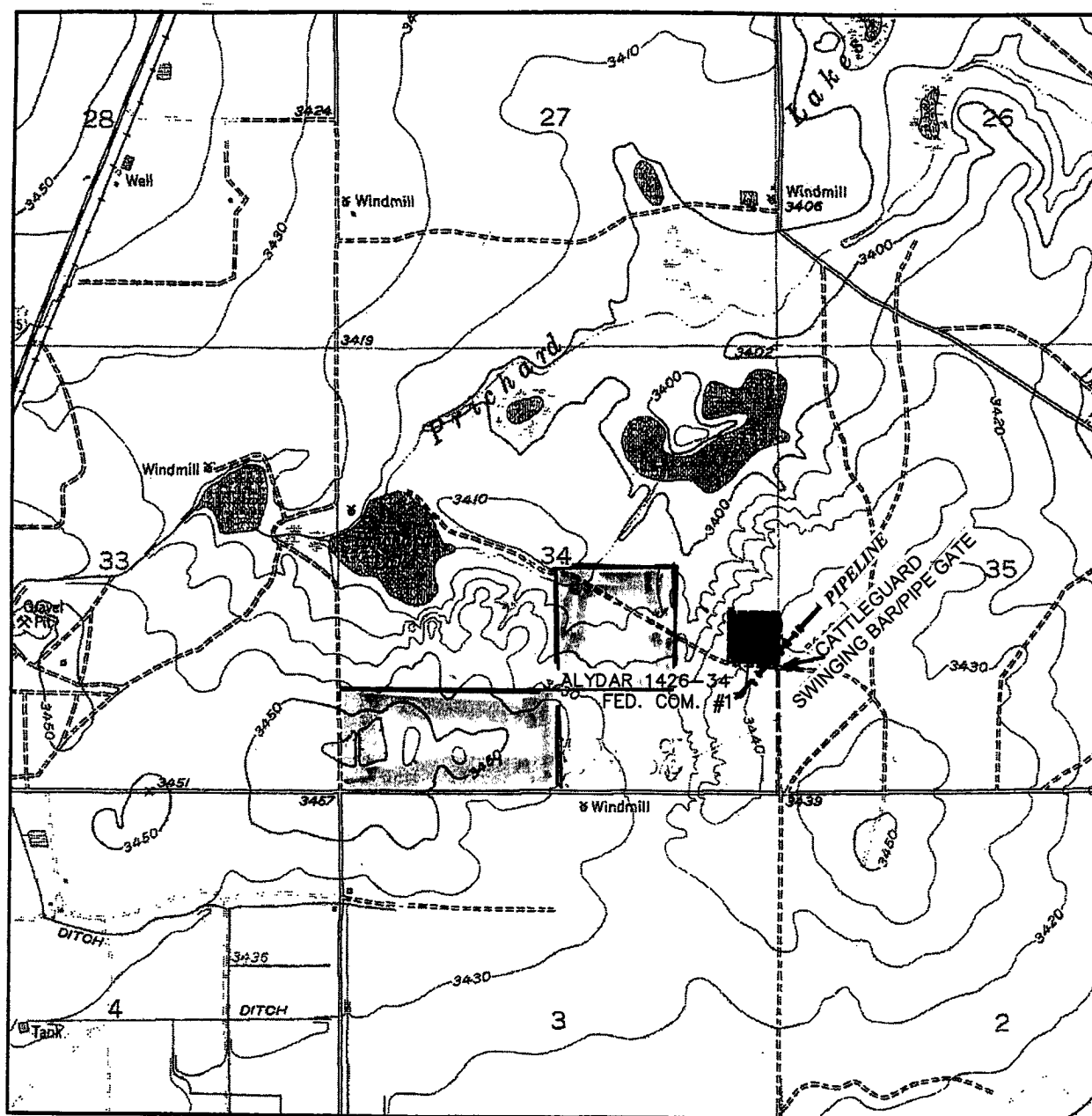
WELL NAME & NO: Alydar 1426-34 Federal Com. #1

QUARTER/QUARTER & FOOTAGE: Surface Location; NE $\frac{1}{4}$ SE $\frac{1}{4}$ - 1880' FSL & 300' FEL

Bottom Hole Location; NW $\frac{1}{4}$ SW $\frac{1}{4}$ - 1880' FSL & 660' FWL

LOCATION: Section 34, T. 14 S., R. 26 E., NMPM

COUNTY: Chaves County, New Mexico





United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

EXHIBIT B

WELL DRILLING REQUIREMENTS

1 of 5 pages

OPERATORS NAME: Parallel Petroleum Corporation LEASE NO.: NM-112258
WELL NAME & NO: Alydar 1426-34 Federal Com. #1
QUARTER/QUARTER & FOOTAGE: Surface Location; NE $\frac{1}{4}$ SE $\frac{1}{4}$ - 1880' FSL & 300' FEL
Bottom Hole Location; NW $\frac{1}{4}$ SW $\frac{1}{4}$ - 1880' FSL & 660' FWL
LOCATION: Section 34, T. 14 S., R. 26 E., NMPM
COUNTY: Chaves County, New Mexico

I. GENERAL PROVISIONS:

- A. The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).
- B. The operator shall hereafter be identified as the holder in these requirements. The Authorized Officer is the person who approves the Well Drilling Requirements.

II. WELL PAD CONSTRUCTION REQUIREMENTS:

- A. The BLM shall administer compliance and monitor construction of the access road and well pad. Notify Richard G. Hill at least 3 working days (72 Hours) prior to commencing construction of the access road and/or well pad. Roswell Field Office number (505) 627-0247.
- B. Prior to commencing construction of the access road, well pad, or other associated developments, the holder shall provide the dirt contractor with a copy of the approved APD signature page, a copy of the location map (EXHIBIT A), a copy of pages 1 & 2 from the Well Drilling Requirements (EXHIBIT B), and a copy of the Permanent Resource Road Requirements (EXHIBIT D).
- C. The holder shall stockpile the topsoil from the surface of the well pad. The topsoil on the Alydar 1426-34 Federal Com. #1 well pad is approximate 6 inches in depth. Approximately 800 cubic yards of topsoil shall be stockpiled on the Northeast corner of the well pad, opposite the reserve pit.
- D. **Reserve Pit Requirements:**
 - 1. The reserve pit shall be constructed 150' X 200' on the **southwest** corner of the well pad.
 - 2. The reserve pit shall be constructed to a minimum depth of four (4) feet below ground level. The reserve pit shall be constructed, so that the cuttings in the reserve pit can be buried a minimum depth of three (3) feet below ground level. See Exhibit F – Surface Reclamation/Restoration Requirements.

3. A synthetic or fabricated liner 12 mil in thickness shall be used to line the reserve pit. The liner shall meet ASTM standards that are designed to be resistant to the reserve pit contents.
4. The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.
5. The reserve pit shall be constructed so as not to leak, break, or allow discharge of drilling muds. Under no circumstances will the reserve pit be cut to drain drilling muds on the well location.
6. The reserve pit shall not be located in any natural drainage.
7. The reserve pit shall be equipped to deter entry by birds, bats, other wildlife, and livestock, if the reserve pit contains any oil and/or toxic fluids.
8. Drilling muds shall be properly disposed of before the reserve pit is reclaimed. Drilling muds can be allowed to evaporate in the reserve pit or be removed and transported to an authorized disposal site. The reserve pit shall be backfilled when dry.
9. Dumping of junk or trash into the reserve pit is not allowed. Junk or trash shall be removed from within the reserve pit before the reserve pit is reclaimed. **Junk or trash shall not be buried in the reserve pit.**

E. Federal Mineral Materials Pit Requirements:

1. Caliche, gravel, or other related materials from new or existing pits on Federal mineral estate shall not be taken without prior approval from the authorized officer. Contact Jerry Dutchover at (505) 627 -0236.
2. Payment for any Federal mineral materials that will be used to surface the access road and the well pad is required prior to removal of the mineral materials.

F. Well Pad Surfacing Requirement:

The well pad shall be surfaced with 6 inches of compacted caliche, gravel, or other approved surfacing material. The well pad shall be surfaced prior to drilling operations. See **Permanent Resource Road Requirements - EXHIBIT D - requirement #4, for road surfacing.**

G. Cave Requirements:

1. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities shall immediately cease. Contact Bill Murry at (505) 627-0220.
2. The BLM Authorized Officer will, within 24 hours of notification in "A" above, conduct an on-the-ground field inspection for karst. At the field inspection the authorized field inspector will authorize or suggest mitigating measures to lessen the damage to the karst environment. A verbal order to proceed or stop the operation will be issued at that time.

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: 9-5/8 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.

B. CASING:

1. 9-5/8 inch surface casing should be set at approximately 1400 feet, 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 5-1/2 inch production casing is sufficient to tie back 500 feet above the uppermost perforation in the pay zone.

C. PRESSURE CONTROL:

1. Before drilling below the 9-5/8 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 9-5/8 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. mud returns from the well.