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

RECEIVED
FEB 22 2006
OCD-ARTESIA

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NM NM 103570

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER 35469

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. **Jack in the Box Federal #1**

2. Name of Operator **Parallel Petroleum Corporation** 230387

9. API Well No. 30-015-34652

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

3b. Phone No. *(include area code)* **432/684-3727** 96070

10. Field and Pool, or Exploratory Wildcat; Morrow GAS

SUBJECT TO LIKE APPROVAL BY STATE

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

At surface **660' FSL AND 760' FEL - Morrow**

At proposed prod. zone **Alternate Wolfcamp Terminus 1880' FEL and 660' FNL** 760 W

11. Sec., T. R. M. or Blk. and Survey or Area **14, T19S, R21E**

14. Distance in miles and direction from nearest town or post office* **9 miles south of Hope, New Mexico**

12. County or Parish **Eddy**

13. State **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
	2,560.00	**320**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
	7700'	**NMB000265**
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
GL 4200'	**02/01/2006**	**30 days**

24. Attachments Roswell Controlled Water Basin

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature Deane Durham	Name *(Printed/Typed)* **Deane Durham**	Date **11/17/2005**

Title **Engineer, Parallel Petroleum Corporation**

Approved by *(Signature)* **/s/ Joe G. Lara**	Name *(Printed/Typed)* **/s/ Joe G. Lara**	Date FEB 21 2006
Title ACTING FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval 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.
Conditions of approval, if any, are attached. APPROVAL 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)

WITNESS: 13 3/8" CMT SOB

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	96076	Wildcat; Morrow GAS

Property Code	Property Name	Well Number
	JACK IN THE BOX FEDERAL	1

OGRID No.	Operator Name	Elevation
	PARALLEL PETROLEUM CORPORATION	4200'

Surface Location

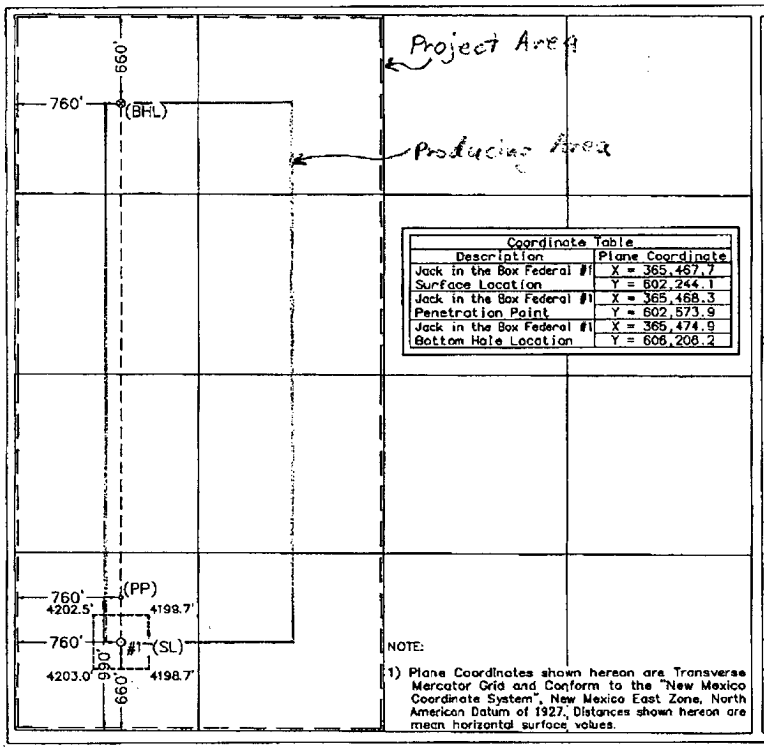
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	14	19 S	21 E		660	SOUTH	760	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	14	19 S	21 E		660	NORTH	760	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



Coordinate Table	
Description	Plane Coordinate
Jack in the Box Federal #1 Surface Location	X = 365,467.7 Y = 602,244.1
Jack in the Box Federal #1 Penetration Point	X = 365,468.3 Y = 602,573.9
Jack in the Box Federal #1 Bottom Hole Location	X = 365,474.9 Y = 606,208.2

NOTE:

1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.

OPERATOR CERTIFICATION

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

Deane Durham
Signature

Deane Durham
Printed Name

Engineer
Title

11/17/2005
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief.

October 25, 2005
Date Surveyed

LVA
Signature & Seal of Professional Surveyor

W.O. Num. 2005-0968

Certificate No. MACON McDONALD 12185

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No **X**
Type of action: Registration of a pit or below-grade tank **X** Closure of a pit or below-grade tank ☐

Operator: **Parallel Petroleum Corporation** Telephone: **432-684-3905** e-mail address: **gmiller@hec-enviro.com**
Address: **1004 N. Big Spring Street, Suite 400, Midland, Texas 79701**
Facility or well name: **Jack in the Box Federal #1** API #: _____ U/L or Qtr/Qtr **SW/4 of the SW/4** Sec **14** T **19S** R **21E**
County: **Eddy** Latitude **32° 39' 17.67" N** Longitude **104° 46' 13.62" W** NAD: 1927 **X** 1983 ☐
Surface Owner: Federal ☐ State ☐ Private **X** Indian ☐

Pit
Type: Drilling **X** Production ☐ Disposal ☐
Workover ☐ Emergency ☐
Lined **X** Unlined ☐
Liner type: Synthetic **X** Thickness **12** mil Clay ☐
Pit Volume **10,000** bbl

Below-grade tank
Volume: _____bbl Type of fluid: _____
Construction material: _____
Double-walled, with leak detection? Yes ☐ If not, explain why not.
_____

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Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) **750'**	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)	**0**
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points)	**0**
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)	**10**
	Ranking Score (Total Points)		**10**

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

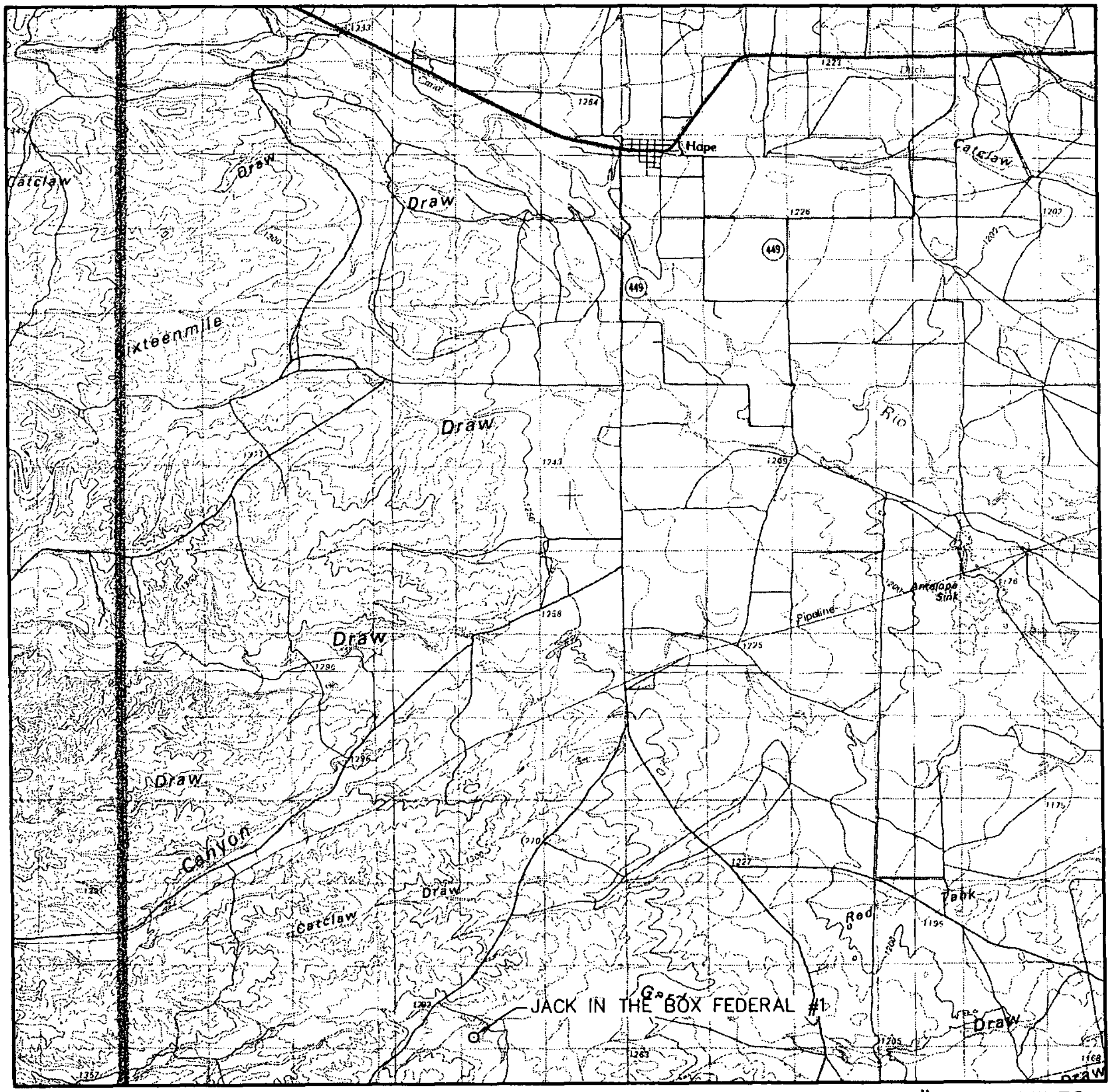
I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: **11-16-05**
Printed Name/Title **Gary Miller, Agent Phone 432/682/4559** Signature _____

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title Mike Bratcher Asst. Signature _____ Date: 11/22/05

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 14 TWP. 19-S RGE. 21-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 760' FWL

ELEVATION 4200'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE JACK IN THE BOX FEDERAL

Exhibit "D"

WEST COMPANY of Midland, Inc.

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

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 103570

Legal Description of Land: SHL: 660' FSL AND 760' FEL, SEC 14, T19S, R21E
Eddy County, New Mexico

Formation(s) (if applicable:

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

BLM Bond File No: **NMB000265**

17 NOV 2005
Date

Deane Durham
Name: Deane Durham
Title: Engineer

ATTACHMENT TO FORM 3160-3
JACK IN THE BOX FEDERAL #1
Surface Hole Location
660 FSL AND 760 FWL, SEC 14, 19S, 21E
Alternate Bottom Hole Location
660 FNL AND 760 FEL, SEC 14, 19S, 21E
EDDY COUNTY, NEW MEXICO

DRILLING PROGRAM

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

1. GEOLOGIC NAME OF SURFACE FORMATION

San Andres

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Glorieta 1650'(+ 2550')
Tubb 2660'(+1540')
Abo Shale 3300' (+900')
Abo Carbonate 3420' (+780')
Wolfcamp 4225' (-25')
Wolfcamp Shale 4415'(-215')
Penn Cisco 5885' (-1685')
Canyon 6350' (-2150')
Strawn 6765' (-2565')
Atoka 7150' (-2950')
Morrow 7275' (-3075')
Miss. Chester 7525'(-3325')

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

Fresh water	790'
Oil and Gas	Morrow 7275' (-3075') to 7525'(-3325')
Alternate Horizontal Completion	
Oil and Gas	Wolfcamp 4225' (-25')

No H_2S gas should be encountered

4. CASING AND CEMENTING PROGRAM

Casing Size	From To	Weight	Grade	Joint
20" conductor	0'-40'			
13 3/8"	0' - 300'	48#	H-40	STC
9 5/8"	300' – 1300'	36#	J-55	LTC
7"	1,300' – 7,700'	23#	J-55	LTC
Horizontal casing program for Production String				
7"	1300' – 4400'	23#	J-55	LTC
4 1/2" Liner	3600' – 8020'	11.6#	N-80	LTC

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

Primary Drilling Procedure

a. Set 20" conductor pipe at 40' with a rathole unit.
b. Drill 17 1/2" surface hole with rotary equipment to an approximate depth of 300', using a fresh water gel spud mud. Set 13 3/8", 48# H-40 casing with 440 sx Class C cement (circulate to surface, 1" if necessary).
c. Drill 12 ¼" intermediate hole to an approximate depth of 1300', using fresh water and viscous sweeps for hole cleaning. Set 9 5/8", 36# J-55 casing with 460 sx, Class C cement (lead will be 50/50 Poz, circulate to surface, 1" if necessary).
d. Set slips on 9 5/8. Cut 13 3/8 at bottom cellar. Seal with concrete on cellar floor.
e. Cut 9 5/8 and NU WH & BOP.
f. Drill 8 3/4" production hole to 7700', using cut brine to an approximate depth of 3400' and a starch mud system to TD. Set 7" 23# J-55 casing at TD with 1070 sx Class C cement with the estimated top of cement at 3300' (lead 50/50 Poz).

Alternate Drilling Procedure (if Morrow is Non-Productive)

a. Plug lower portion of the hole, per OCD/BLM specifications.
b. Set 7" 23# J-55 casing at the top of the Wolfcamp zone of interest at an approximate depth of 3750' with 600 sx, Class C.
c. Dress CMT to kick off point at approximately 3843', oriented at 0 degree (grid) azimuth.
d. Build angle at 15 degrees per 100' to 90 degrees and hold.
e. Drill 6 1/8" horizontal drain hole to a terminus of 660' FNL (8020' MD).
f. Run 4 ½" 11.6# N-80 liner from TD back to 3600', cement with 500 sx Class C Rig Down Rotary Tools

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

The BOP stack will consist of a 3,000 psi working pressure, dual ram type preventer and annular.

A BOP sketch is attached.

6. TYPES AND CHARACTERS OF THE PROPOSED MUD SYSTEM

a. Spud and drill to 300' with fresh water gel spud mud for surface string.
b. The intermediate section from 300' to 1,300' will be 8.3 ppg Fresh Water system and viscous sweeps for hole cleaning.
c. The production section from 1,300' to 3,300' will utilize a cut brine mud system.
d. The remaining production section from 3,300' 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 first quarter of 2006 with drilling and completion operation lasting about 30 days.

SURFACE AND OPERATIONS PLAN FOR
DRILLING, COMPLETION, AND PRODUCING

PARALLEL PETROLEUM CORPORATION
JACK IN THE BOX FEDERAL #1
SHL: 660' FSL AND 760' FEL, SEC 14, T19S, R21E
EDDY COUNTY, NEW MEXICO

LOCATED:

12 miles South of Hope, New Mexico

OIL & GAS LEASE:

NM NM 103570

RECORD LESSEE:

Echo Production, Inc.
P.O. Box 1210
Graham, Texas 76450

BOND COVERAGE:

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

ACRES IN LEASE:

2,560.00

SURFACE OWNER:

Federal

POOL:

Primary Objective - Morrow (Gas)
Contingency Objective – Wolfcamp (Camp)

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 (Original forwarded to NMOCD)
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
The access road will be built as shown on Exhibit D. The new access road will come off County Road 20 and go east 4630' to the wellsite and will be 16' to 24' wide. A 75' wide turn in will be constructed onto the access road at County Road 20.

B. Surface Material
Caliche from a commercial source.

C. Maximum Grade
Less than five percent.

D. Turnouts
Two turnouts will be constructed on the access road.

E. Drainage Design
A low water crossing will be constructed on an unnamed creek that feeds into Gardner Draw. The bank of the creek will be cut back to allow truck traffic to cross.

F. Culverts
It is not anticipated that any culverts will be needed on the access road at this time. If any drainage areas are crossed other than the low water crossing site mentioned above, a culvert will be used so water is not backed up by the road bed.

G. Gates and Cattle Guards
A cattle guard will be installed in the ranch fence located at the midpoint of the new access road. The cattle guard may be replaced with a gate when drilling and completion operations are have been completed.

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 well located north west of the well site that is operated by the Runyon Ranch may be available or water may be trucked in from a commercial source. A poly flow line will be used to deliver the water to the site if the Runyon well is utilized.

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. This will include leaving the drill cuttings in place in the pit, allowing them to dry, and covering the pit with at least 3' of backfill while not disturbing the pit liner.

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 relatively level valley or draw surrounded by rolling native grass land 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 located in a draw that is in an area sparsely covered with mesquite and range grasses.

D. Ponds and Streams
Gardner Draw, an intermittent stream which flows west to east, is located 900' north of the site. Small drainages are located 1300' east and west of the wellsite with flow going north and east into Gardner Draw. There are no other rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures
There are no residences with several miles of the project site.

F. Archaeological, Historical, and Cultural Sites
See archaeological report # SNMAS-05NM-1951
submitted by: Southern New Mexico Archaeological Services, Inc.,
P.O. Box 1
Bent, New Mexico 88314 Phone 505-67-4797

G. Land Use
Grazing

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

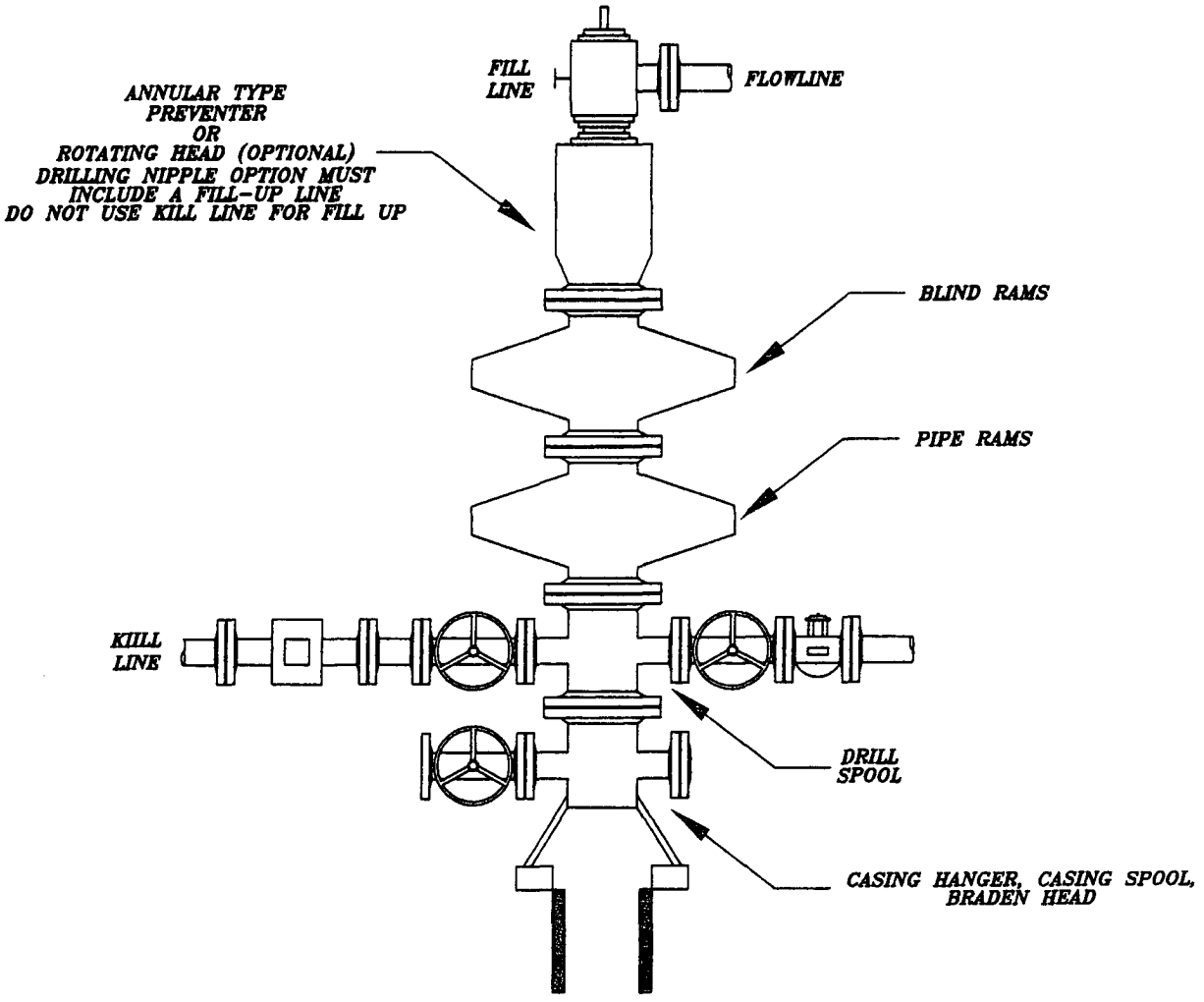
12. CERTIFICATION

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.

17 NOV 2005
Date

Deane Durham
Name: Deane Durham
Title: Engineer

MINIMUM BOP SCHEMATIC

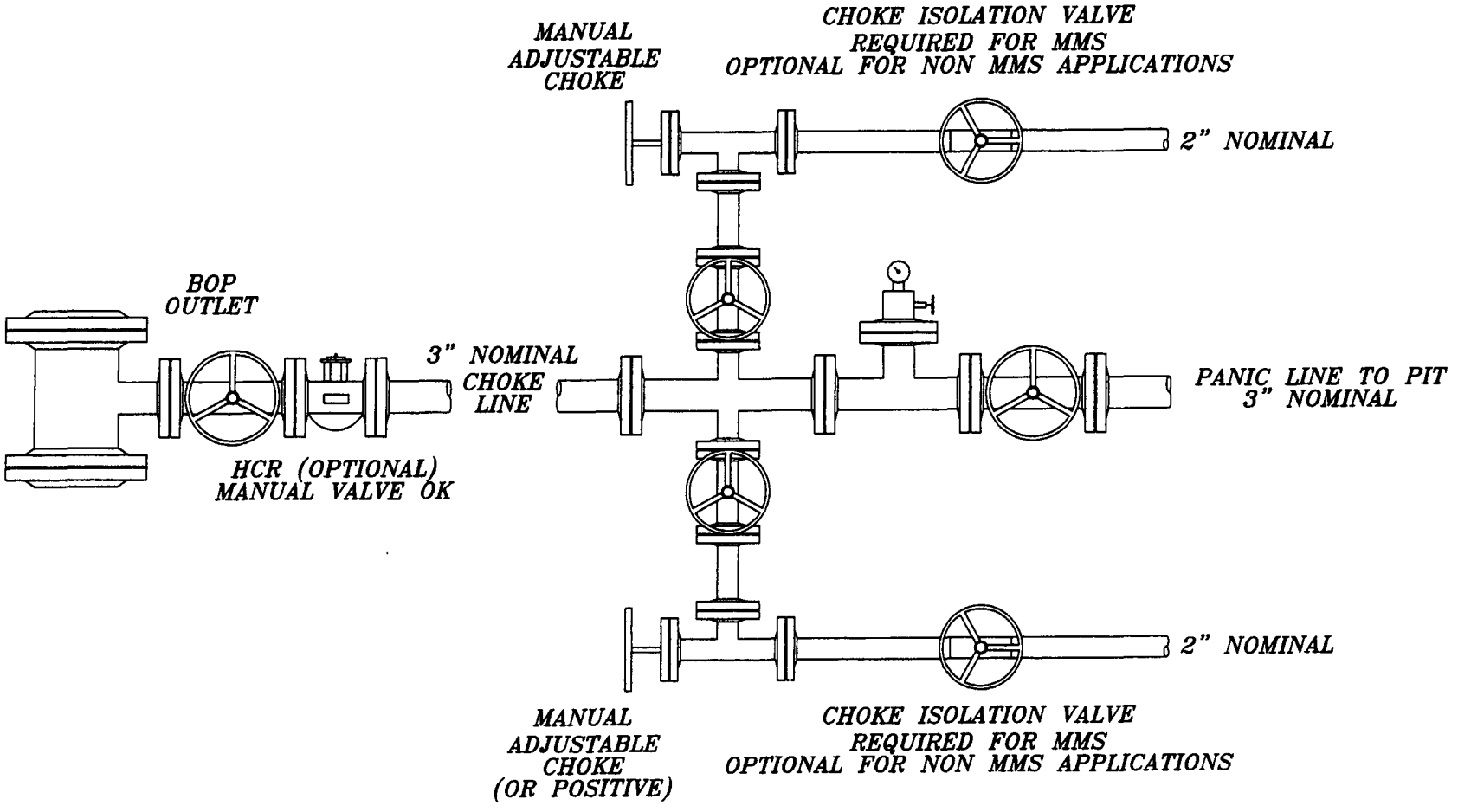


NOT TO SCALE

EXHIBIT I

DATE: 7/26/05	PARALLEL PETROLEUM BOP SCHEMATIC
DWN. BY: JJ	
FILE: C:\PARALLEL\2429\ BOP SCHEMATIC	HIGHLANDER ENVIRONMENTAL CORP. MIDLAND, TEXAS

CHOKE MANIFOLD
5M SERVICE



NOT TO SCALE

EXHIBIT J

DATE: 8/17/05	PARALLEL PETROLEUM CHOKE MANIFOLD
DWN. BY: JJ	
FILE: C:\PARALLEL\3429\ CHOKE MANIFOLD	HIGHLANDER ENVIRONMENTAL CORP. MIDLAND, TEXAS

PARALLEL PETROLEUM CORPORATION

SURVEY CALCULATION PROGRAM

OPERATOR:	Parallel Petroleum Corporation	Supervisors:	
WELL:	Jack In The Box Federal #1		
LOCATION:	Sec. 14 T-19-S R-21-E		
API NUMBER:			
COMMENTS:			
		MAG DEC.(-/+)	
		GRID CORR.(-/+)	
		TOTAL CORR.(-/+)	0.0
DATE: 11/15/05	TIME: 1:34 PM	TRUE TO GRID	

MINIMUM CURVATURE CALCULATIONS(SPE-3362) PROPOSED DIRECTION 0.0

SVY NUM	MD	INC	GRID AZM	TVD	VERT SECT	N-S	E-W	DLS/ 100	TARGET TRACKING TO CENTER ABOVE(+) BELOW(-)	RIGHT(+) LEFT(-)
TIE	0	0.0	0.0	0.0	0.0	0.0	0.0			
1	3843	0.0	0.0	3843.0	0.0	0.0	0.0	0.0	382.0	0.0
2	3853	1.5	0.0	3853.0	0.1	0.1	0.0	15.0	372.0	0.0
3	3863	3.0	0.0	3863.0	0.5	0.5	0.0	15.0	362.0	0.0
4	4442	90.0	0.0	4224.3	381.3	381.3	0.0	15.0	0.7	0.0
5	8020	90.0	0.0	4224.3	3959.3	3959.3	0.0	0.0	0.7	0.0

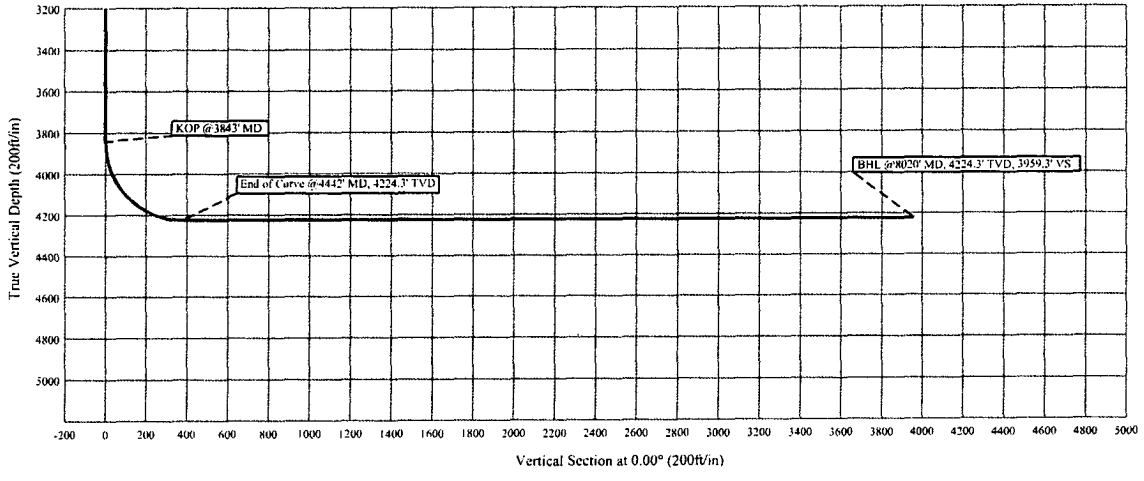
KOP @ 3843' MD
BUR = 15 DEG per 100 FT
End Curve @ 4442' MD, 4224.3' TVD
BHL @ 8020' MD, 4224.3' TVD, 3959.3' VS

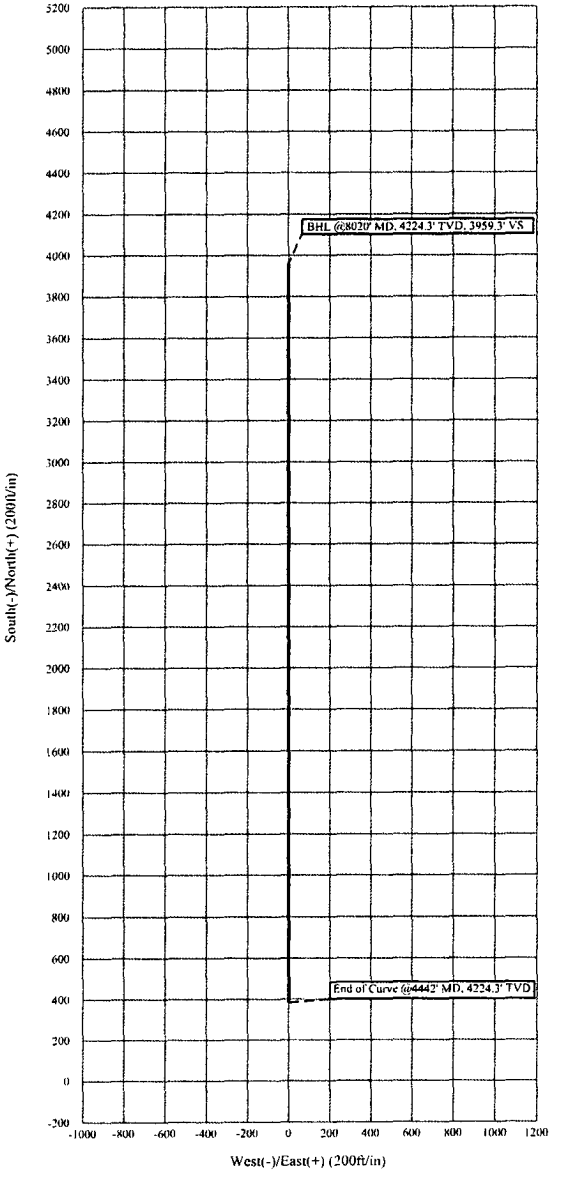
Parallel Petroleum Corp.

Jack In The Box Federal #1
Section 14, T 19-S, R 21-E
Eddy County, New Mexico

COMPANY DETAILS

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





PARALLEL
Petroleum Corporation
1004 North Big Spring, Suite 400 • Midland, TX 79701 • Ph: 432-684-3727 • Fax: 432-684-3905

November 9, 2005

Mr. Bryan Arrant
State Of New Mexico,
Oil Conservation Division
1301 W. Grand Ave.
Artesia, New Mexico 88210

Re: Hydrogen Sulfide Potential
Parallel Petroleum Corporation, Box Area wells,
T-19-S, R-21-E
Eddy County, New Mexico

Dear Mr. Arrant;

The Box Top Federal 19 21-1 #1 site which is being drilled seven miles south of Hope, New Mexico was reviewed for its potential for hydrogen sulfide. Mr. John Simitz, Geologist for the Bureau of Land Management, Roswell, New Mexico reviewed the site and stated that no potential for gas was found a Morrow test in this area. Based on this information we believe the potential H_2S at well locations in this area are negligible.

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

Sincerely,

Deane Durham

Deane Durham
Engineer

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: PARALLEL PETROLEUM CORPORATION
Well Name & No. 1 – JACK IN THE BOX FEDERAL
Location: 660' FSL & 760' FWL – SEC 14 – T19S – R21E – EDDY COUNTY SHL
Lease: NM-103570
Location 660' FNL & 760' FWL, Sec. 14, T.19S., R.21E BHL

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: **13-3/8** inch **9-5/8** inch **7** inch

C. BOP tests

2. **No H2S in measurable amounts has been reported in Sec 14 – T19S – R21E.**

3 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.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The **13-3/8** inch surface casing shall be set at **300 feet**, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified 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. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is **circulate cement to the surface. Note: The intermediate hole must be drilled with fresh water or fresh water mud.**

3. The minimum required fill of cement behind the **5-1/2** inch production casing is **cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.**

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **13-3/8** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be **2000** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **9-5/8** inch casing shall be **3000** psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- 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.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the **Wolfcamp** Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.