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

DEC – 3 2008
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 112251

6 If Indian, Allotee 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.
Alsab 1525-21 Federal #2H

2 Name of Operator
Parallel Petroleum Corporation 230387

9 API Well No
30-005-64081

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 CREEK
-Wolfcamp Gas (97631)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **SHL 1880' FNL AND 226' FWL Sec 21, T-15S-R25E**
At proposed prod zone **BHL 1920' FNL AND 660' FEL Sec 21, T-15-S-R25E**

11 Sec, T R M or Blk. and Survey or Area
21, T15S, R25E

14 Distance in miles and direction from nearest town or post office*
5 miles North of Artesia, 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)	16 No of acres in lease	17 Spacing Unit dedicated to this well
660'	**480**	**320 total**
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
1200'	**5500'**	**NMB000265**
21 Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23 Estimated duration
GL 3495'	**10/15/2008**	**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	Name *(Printed/Typed)*	Date
Deane Durham	**Deane Durham**	8-7-08

Title
Engineer, Parallel Petroleum Corporation

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Jerry Dutchover	/s/ Jerry Dutchover	01 DEC 2008

Title	Office	
Acting Assistant Field Manager, Lands And Minerals	ROSWELL FIELD OFFICE	APPROVED FOR 2 YEARS

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.

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 8 5/8" CASING MUST BE CIRCULATED

WITNESS

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

ENTERED 12-11-08

ENTERED 12-11-08

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	Pool Name
30-005-64081	97631	WILDCAT; WALNUT CREEK (GAS)

Property Code	Property Name	Well Number
36517	ALSAB 1525-21 FEDERAL	2H

OGRID No.	Operator Name	Elevation
230387	PARALLEL PETROLEUM CORPORATION	3495'

Surface Location

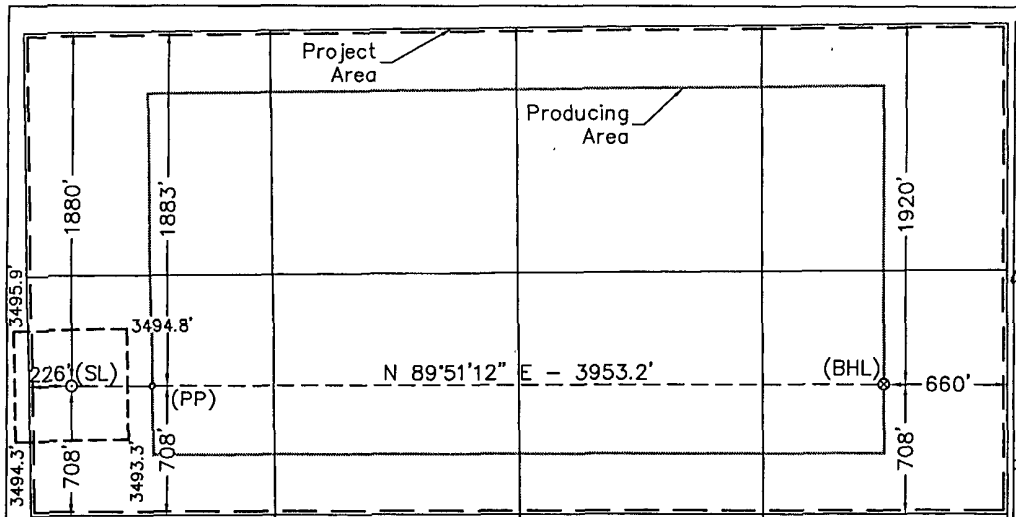
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	21	15 S	25 E		1880	NORTH	226	WEST	CHAVES

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	21	15 S	25 E		1920	NORTH	660	EAST	CHAVES

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



Surface Location
Plane Coordinate
X = 462,630.5
Y = 728,512.0
Geodetic Coordinate
Lat. 33°00'09.67" N
Long. 104°27'18.82" W
(NAD '27)

Penetration Point
Plane Coordinate
X = 463,064.4
Y = 728,513.1
Geodetic Coordinate
Lat. 33°00'09.69" N
Long. 104°27'13.72" W
(NAD '27)

Bottom Hole Location
Plane Coordinate
X = 467,016.6
Y = 728,523.3
Geodetic Coordinate
Lat. 33°00'09.83" N
Long. 104°26'27.31" W
(NAD '27)

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 hereon is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interestin the land including the proposed bottom hole locaton 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 8-7-08
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 supervison and that the same is true and correct to the best of my belief.

June 26, 2008
Date of Survey

LVA
Signature & Seal of Professional Surveyor

W.O. Num.: 2008-0731

Certificate No. MACON McDONALD 12185

SURFACE USE AND OPERATING PLAN

1. Existing & Proposed Access Roads

A. The well site survey and elevation plat for the proposed well is shown in Exhibit #1. It was staked by West Company of Midland, Inc., Midland, Texas.

B. All roads to the location are shown on the topographic map (Exhibit #2). The existing lease roads are illustrated and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling the well will be done where necessary.

C. Directions to Location: From the intersection of U.S. Highway 380 and 285 in Roswell, New Mexico go south on 285 27 miles to a lease road and cattle guard on the right or east side of the road. Go west on the lease road 1 mile, then turn left and go south 1.25 mile to the location. See Vicinity Map, Exhibit #3

D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

Exhibit #4 shows that less than 50' of new road will be required for this location. Any road that is required it will be constructed as follows:

A. The maximum width of the running surface will be 14'. The road will be crowned, ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.

B. The average grade will be less than 1%.

C. No turnouts are planned.

D. No culverts will be used but a fence will be cut and a cattleguard will be installed in the fence line between Sections 15 and 16 and a low water crossings will be placed in the north/south section of the road.

E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM approved caliche pit or reserve pit area.

3. Location of Existing Wells:

Exhibit #5 shows all existing wells within a one-mile radius of this well. As shown on this plat there are several wells in this area operated by Parallel Petroleum Corporation (Parallel).

4. Location of Existing and/or Proposed Facilities:

A. Parallel currently operates a well and production facility on this lease, however, a separate production facility will be required for this location. Additionally, this will be a dual well site and there will be two wells and production facilities on this location.

B. If the well is productive, contemplated facilities will be as follows:

1) Production will be sent to an onsite tank battery.

2) The tank battery and facilities including any piping will be installed according to API specifications.

3) Any additional caliche will be obtained from a BLM approved caliche pit or from a private source. Any additional construction materials will be purchased from contractors.

4) No flow lines will be needed as this is a gas well. The gas pipeline will be permitted and constructed by the gas purchaser.

5) No electric power will be require on this well location.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #2. If a commercial fresh water source is nearby, fast line may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and proposed new access road (approximately 5,000 cubic yards) will be obtained from a BLM approved caliche pit or from a private source.

7. Methods of Handling Water Disposal:

A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in rolloff style mud boxes and taken to an NMOCD approved disposal site and no drying pad will be utilized.

B. Drilling fluids will be contained in steel mud pits.

C. Water produced from the well during completion will be held temporally in steel tanks and then taken to an NMOCD approved commercial disposal facility.

D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. No toxic waste or hazardous chemicals will be produced by this operation.

E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole, only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

9. Well Site Layout:

A. The drill pad layout, with elevations staked by West Company of Midland, Inc., is shown in Exhibit #4. Dimensions of the pad are shown on Exhibit #6. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level, no major cuts will be required.

B. Exhibit #6 also shows the proposed orientation of closed loop mud system, and access road. No permanent living facilities are planned; however, a temporary foreman/toolpusher and crew quarters trailers will be on location during the drilling operations.

10. Plans for Restoration of the Surface:

A. If the well is found to be non-commercial upon completion of the drilling and/or completion operations, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations in the area. The road will be reclaimed as directed by the BLM.

The original top soil will be returned to the pad and contoured, as close as possible to the original topography, and reseeded as per BLM specifications.

10. Surface Ownership:

A. The surface and minerals at this location are Federal and are managed by the Bureau of Land Management, Roswell District. The surface tenant is Mr. Coleman Jackson, 72 West Jackson Rd., Lake Arthur, New Mexico 88253, 505-627-2342. The surface has multiple uses which are primarily grazing of livestock and the production of oil and gas.

B. The proposed road routes and surface location will be restored as directed by the BLM.

11. Other Information:

A. The area around the well site is grassland and the topsoil is sandy. The vegetation is moderately sparse with native prairie grasses, some mesquite and shinnery oak. No wildlife was observed but it is likely that mule deer, rabbits, coyotes and rodents traverse the area.

B. Walnut Creek is located .5 mile north of this site. There is no other permanent or live water in the immediate area.

C. There are two dwellings within 1 1/4 mile of this location and both belong to Mr. Jackson.

D. A Cultural Resources Examination is being prepared by Southern New Mexico Archaeological Services, Inc., P.O. Box 1, Bent, New Mexico 88314 Phone 505-671-4797, and the results will be forwarded to your office in the near future.

13. Bond Coverage:

Bond Coverage is Nationwide Bond # NMB000265.

14. Lessee's and Operator's Representative:

The Parallel Petroleum Corporation representative responsible for assuring compliance with the surface use plan is as follows:

Deane Durham, Engineer, Parallel Petroleum Corporation
Office: (432) 684-3727 Cell: (432) 413-9701

15. Operator's Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Parallel Petroleum Corporation, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 15th day of May, 2008.

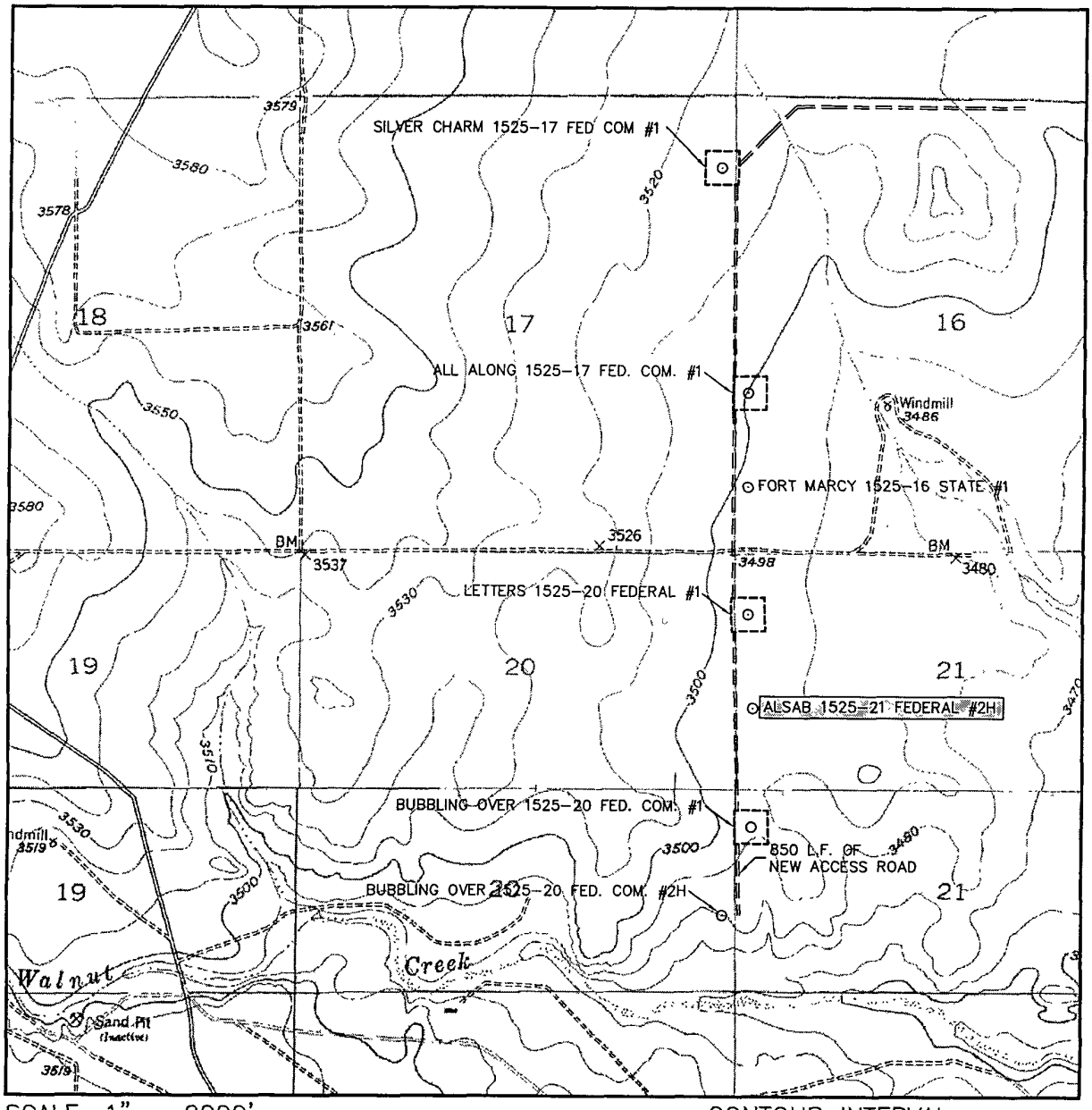
Signed: 

Printed Name: Deane Durham
Position: Drilling Engineer
Address: 1004 North Big Spring Street, Suite 400
Midland, Texas 79701
Telephone: (432) 684-3727
Field Representative (if not above signatory): Not yet determined
E-mail: ddurham@plll.com

Exhibits:

Exhibit #1	**Wellsite and Elevation Plat** **Form C-102 Well location and acreage dedication plat**
Exhibit #2	**Topographic Map (West)**
Exhibit #3	**Vicinity Map and area roads (West)**
Exhibit #4	**Elevation Plat (West)**
Exhibit #5	**Ownership map showing well location and other wells in the area.**
Exhibit #6	**Pad Layout and orientation**
Exhibit #7	**BOP and Choke diagrams**
Exhibit #9	**Form C-144 NMOCD pit permit application**

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
HAGERMAN SW – 10'

SEC. 21 TWP. 15-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY CHAVES

DESCRIPTION 1880' FNL & 226' FWL

ELEVATION 3495'

OPERATOR PARALLEL PETROLEUM CORPORATION

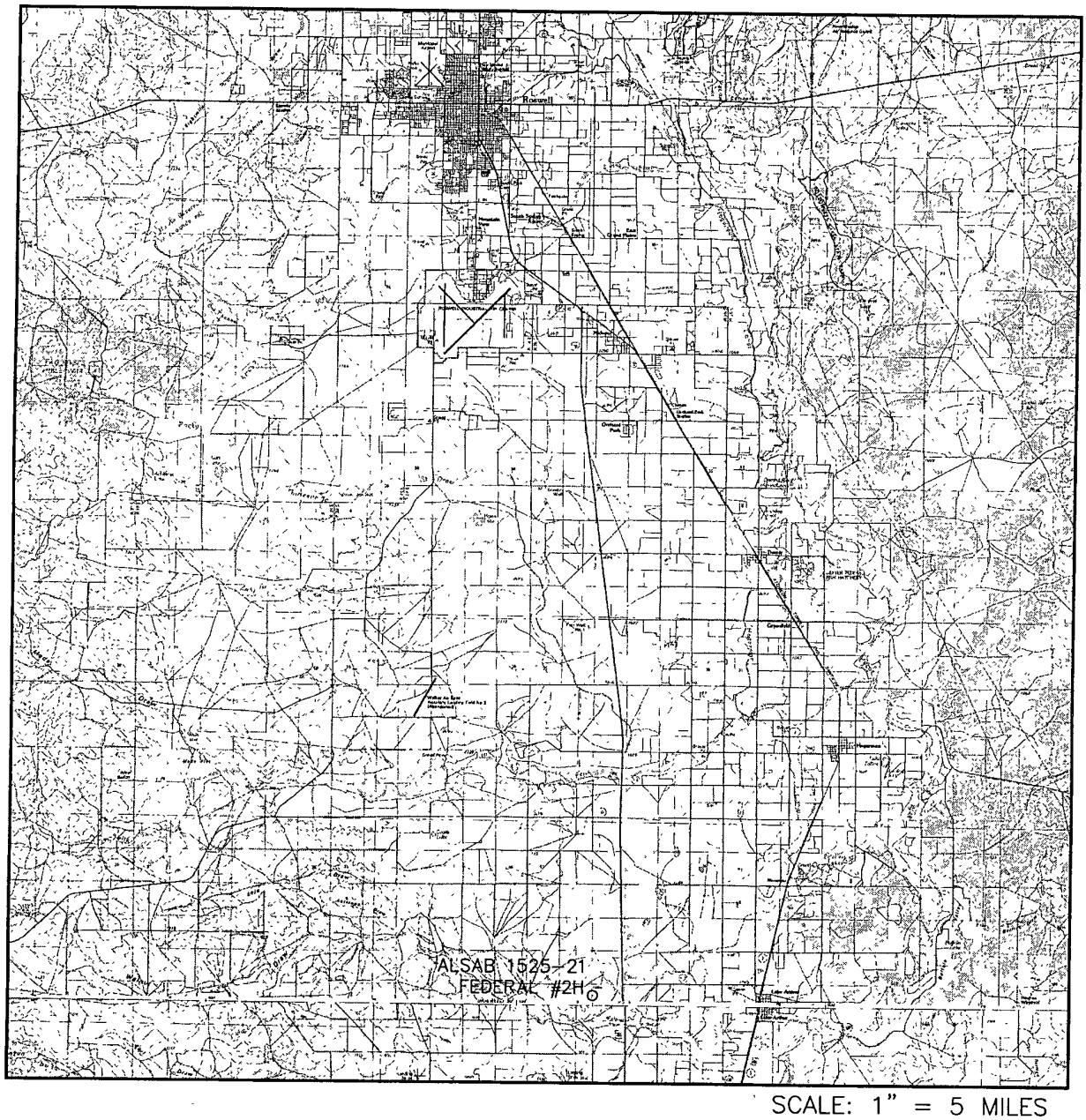
LEASE ALSAB 1525-21 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
HAGERMAN SW

WEST COMPANY of Midland, Inc.

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

VICINITY MAP



SCALE: 1" = 5 MILES

SEC. 21 TWP. 15-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY CHAVES

DESCRIPTION 1880' FNL & 226' FWL

ELEVATION 3495'

OPERATOR PARALLEL PETROLEUM CORPORATION

LEASE ALSAB 1525-21 FEDERAL

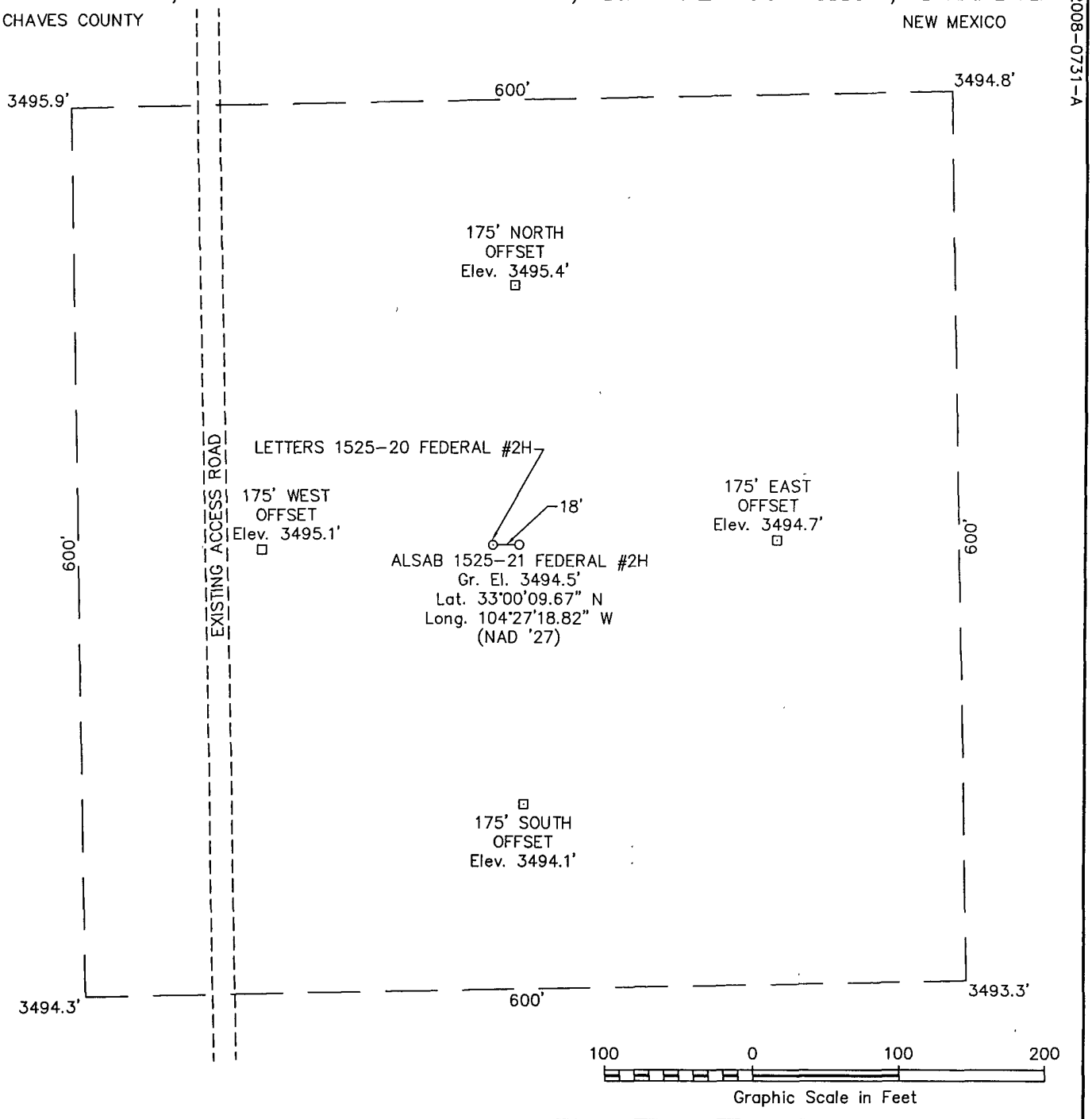
WEST COMPANY of Midland, Inc.

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

SECTION 21, TOWNSHIP 15 SOUTH, RANGE 25 EAST, N.M.P.M.

CHAVES COUNTY NEW MEXICO

L-2008-0731-A



DRIVING DIRECTIONS

FROM THE INTERSECTION OF U.S. HIGHWAY 380 and 285 IN ROSWELL, NM GO SOUTH ON SAID U. S. HIGHWAY 285 ABOUT 27 MILES TO A POINT WHERE AN ACCESS ROAD BEGINS ON THE WEST (RIGHT) SIDE OF SAID HIGHWAY 285, THEN GO WEST ON SAID ACCESS ROAD 0.3 MILES TO A POINT, THEN SOUTH 242 FEET TO AN ACCESS ROAD ON WEST (RIGHT) SIDE OF ROAD, THEN GO WEST AND SOUTHWEST ON SAID ACCESS ROAD 0.7 MILE TO A POINT WHERE ROAD TURNS SOUTH, THEN GO SOUTH ON SAID ACCESS ROAD 1.0 MILE TO WELL PAD FOR THE LETTERS 1525-20 FEDERAL #1 AND ALSAB 1525-21 #1 WELLS, THEN CONTINUE SOUTH 0.25 MILE TO THE PROPOSED LOCATION.

WEST COMPANY of Midland, Inc.

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

PARALLEL PETROLEUM CORPORATION

ALSAB 1525-21 FEDERAL #2H

Located 1880' FNL & 226' FWL, Section 21
Township 15 South, Range 25 East, N.M.P.M.
Chaves County, New Mexico

Drawn By: LVA	Date: August 3, 2008
Scale: 1"=100'	Field Book: 365 / 61-69
Revision Date:	Quadrangle: Hagerman SW
W.O. No: 2008-0731	Dwg. No.: L-2008-0731-A

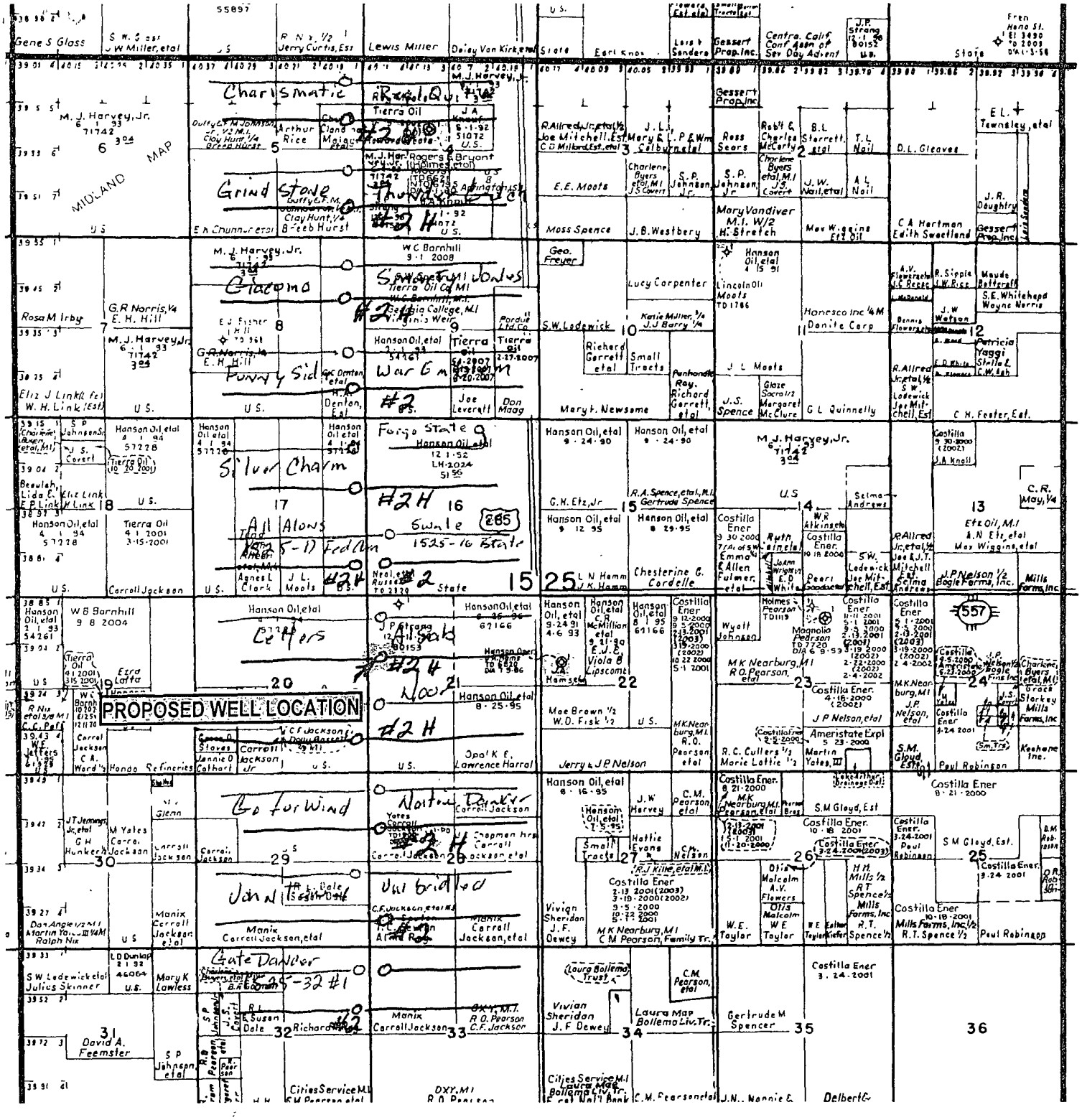
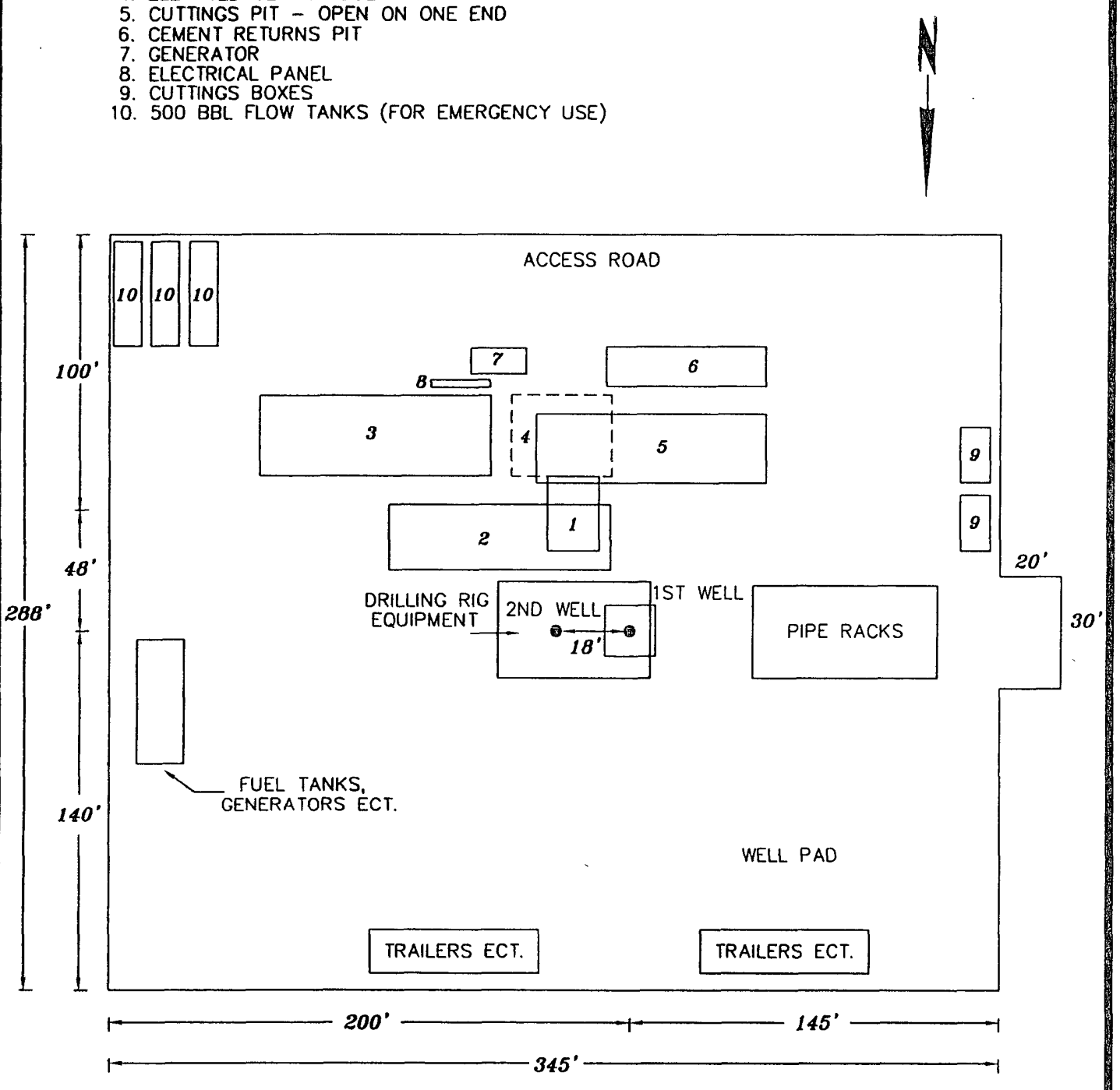


Exhibit "5"
AREA PRODUCTION MAP
PARALLEL PETROLEUM CORPORATION
Alsab 1525-21 Fed Com #2H &
Letters 1525-20 Federal #2H
SHL: 1880' FNL AND 226' FWL, SEC 21, T15S, 25E
CHAVES COUNTY, NEW MEXICO

CLOSED MUD SYSTEM LAYOUT & EQUIPMENT

1. RIG SHAKER
2. RIG MUD PIT
3. AUGER PIT
4. ELEVATED CENTRAFUGE -2
5. CUTTINGS PIT - OPEN ON ONE END
6. CEMENT RETURNS PIT
7. GENERATOR
8. ELECTRICAL PANEL
9. CUTTINGS BOXES
10. 500 BBL FLOW TANKS (FOR EMERGENCY USE)

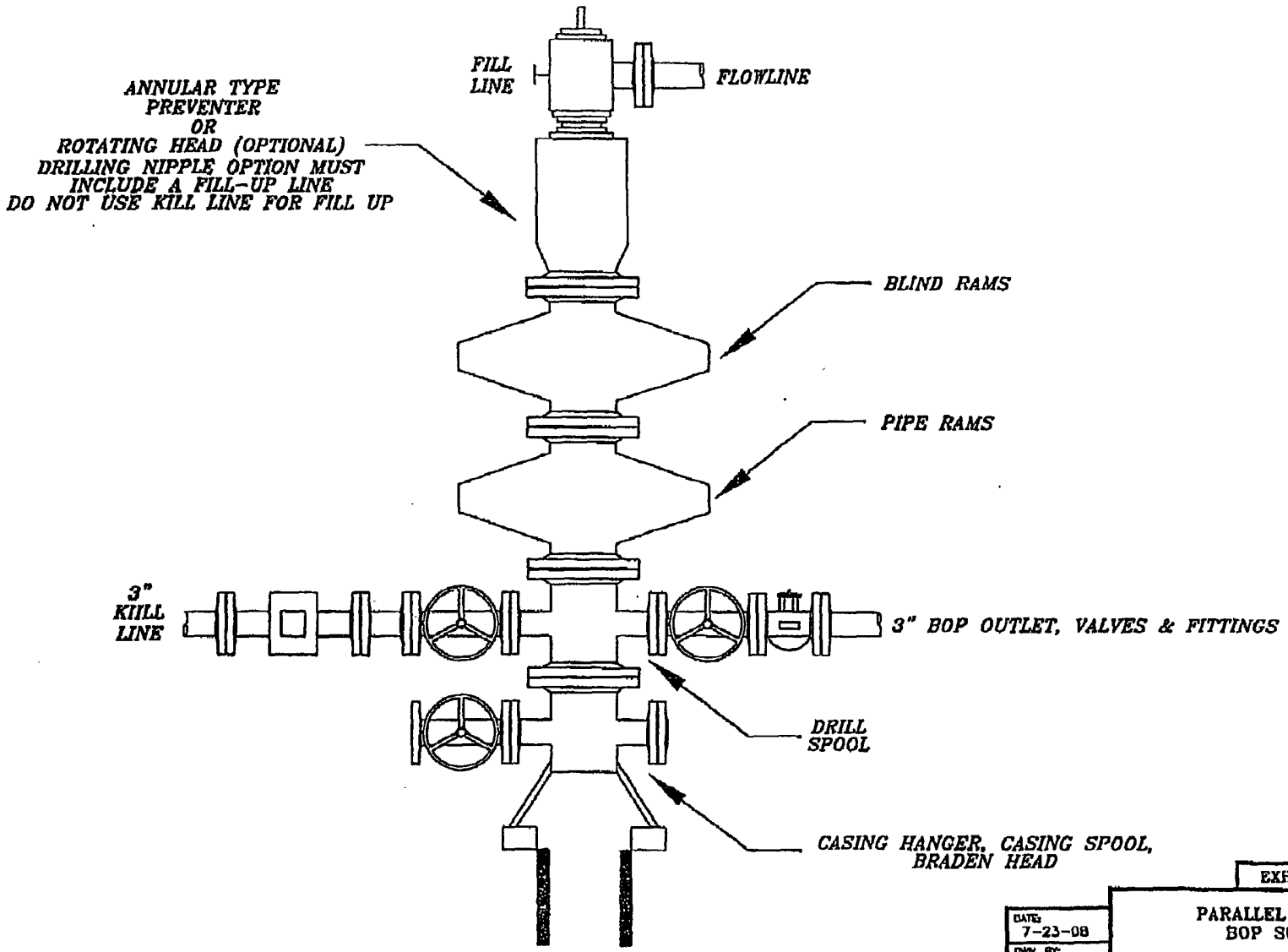


NOT TO SCALE

EXHIBIT 6

DATE: 7/21/08	PARALLEL PETROLEUM DRILLING RIG LAYOUT DUAL WELL LOCATIONS
DWN. BY: RC	
FILE: C:\PARALLEL\2518\ DRILLING RIG LAYOUT-2	TETRA TECH MIDLAND, TEXAS

MINIMUM BOP SCHEMATIC
3M SERVICE MINIMUM

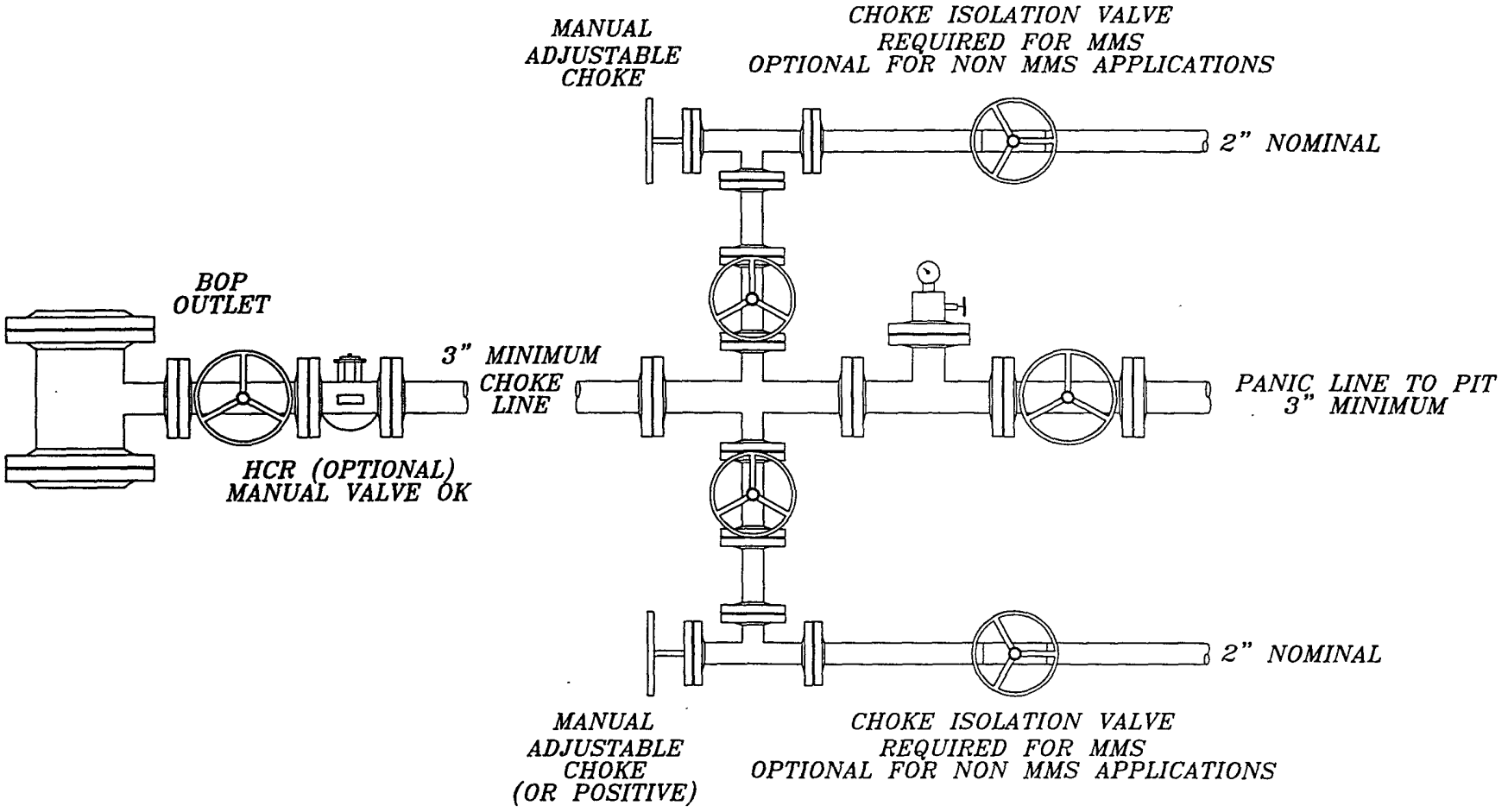


NOT TO SCALE

EXHIBIT 7

DATE: 7-23-08	PARALLEL PETROLEUM BOP SCHEMATIC
DWN. BY: RC	
FILE: C:\PARALLEL\2M2M\ BOP SCHEMATIC	TETRA TECH MIDLAND, TEXAS

CHOKE MANIFOLD
3M SERVICE MINIMUM



NOT TO SCALE

EXHIBIT 7A

DATE: 7-23-08	PARALLEL PETROLEUM CHOKE MANIFOLD
DWN. BY: RC	
FILE: C:\PARALLEL\2429\ CHOKE MANIFOLD	TETRA TECH MIDLAND, TEXAS

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

August 7, 2007

New Mexico Oil conservation Division
1301 W. Grand Ave.
Artesia, New Mexico 88210

Re: Hydrogen Sulfide Potential
Wolfcamp Horizontal Program
Chaves County, New Mexico

Gentlemen:

Parallel Petroleum Corporation operates the Forego State Com 1525-16 #1, All Along 1525-17 Fed Com #1, Gate Dancer 1525-32 #1Y and the Personally 1525-33 #1 wells located in T-15-S, R-25-E and the War Cloud State Com 1425-36 #1 in T-14-S, R-25-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

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. 261213-02
Date Run 12/13/2006
Date Sampled 12/09/2006

Analysis for: PARALLEL PETROLEUM CORPORATION
Well Name: FORESO 1525-16 STATE "B" #1
Field:
Sta. Number:
Purpose: SPOT
Sampling Temp: 22.0 DEG F
Volume/day: 1925 MCF/DAY
Pressure on Cylinder: 60.0 PSIG

GPANGL.L62

Producer: PARALLEL PETROLEUM CORP.
County: CHAVES State: NM
Sampled By: A.J.G.
Atmos Temp: DEG F
Formation:
Line Pressure: 73.2 PSIA

GAS COMPONENT ANALYSIS

		Mol %	GPM
Carbon Dioxide	CO2	4.3235	
Nitrogen	N2	0.6738	
Methane	C1	85.9676	
Ethane	C2	5.6524	1.5108
Propane	C3	1.9299	0.5314
Iso-Butane	IC4	0.2812	0.0920
Nor-Butane	NC4	0.4872	0.1536
Iso-Pentane	IC5	0.1606	0.0588
Nor-Pentane	NC5	0.1404	0.0508
Hexanes Plus	C6+	0.3834	0.1673
TOTAL		100.0000	2.5647

Pressure Base: 14.7300
Real BTU Dry: 1078.92
Real BTU Wet: 1060.14
Real Calc. Specific Gravity: 0.6732
Field Specific Gravity: 0.0000

Standard Pressure: 14.6960
BTU Dry: 1073.62
BTU Wet: 1054.94

Z Factor: 0.9974
N Value: 1.2948
Avg Mol Weight: 19.4551
Avg CuFt/Gal: 57.1122
26 Lb Product: 0.4332
Methane+ GPM: 17.1358
Ethane+ GPM: 2.5647
Propane+ GPM: 1.0538
Butane+ GPM: 0.5225
Pentane+ GPM: 0.2769

REMARKS:

Approved by: DON NORMAN

Wed Dec 13 10:13:35 2006

PARALLEL PETROLEUM CORPORATION

SURVEY CALCULATION PROGRAM

OPERATOR:	Parallel Petroleum Corporation	Supervisors:	
WELL:	Alsab 1525-21 Federal #2H		
LOCATION:	N/2 Sec. 21 T-15-S R-25-E		
API NUMBER:			
COMMENTS:			
		MAG DEC.(-/+)	
		GRID CORR.(-/+)	
		TOTAL CORR.(-/+)	0.0

DATE: 07/11/08 TIME: 8:36 AM TRUE TO GRID

MINIMUM CURVATURE CALCULATIONS(SPE-3362) PROPOSED DIRECTION 90.0

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	4314	0.0	0.0	4314.0	0.0	0.0	0.0	0.0	436.0	0.0
2	4324	1.3	90.0	4324.0	0.1	0.0	0.1	13.1	426.0	0.0
3	4334	2.6	90.0	4334.0	0.5	0.0	0.5	13.1	416.0	0.0
4	4999	90.0	90.0	4750.0	436.0	0.0	436.0	13.1	0.0	0.0
5	8950	90.0	90.0	4750.0	4387.1	0.0	4387.1	0.0	0.0	0.0

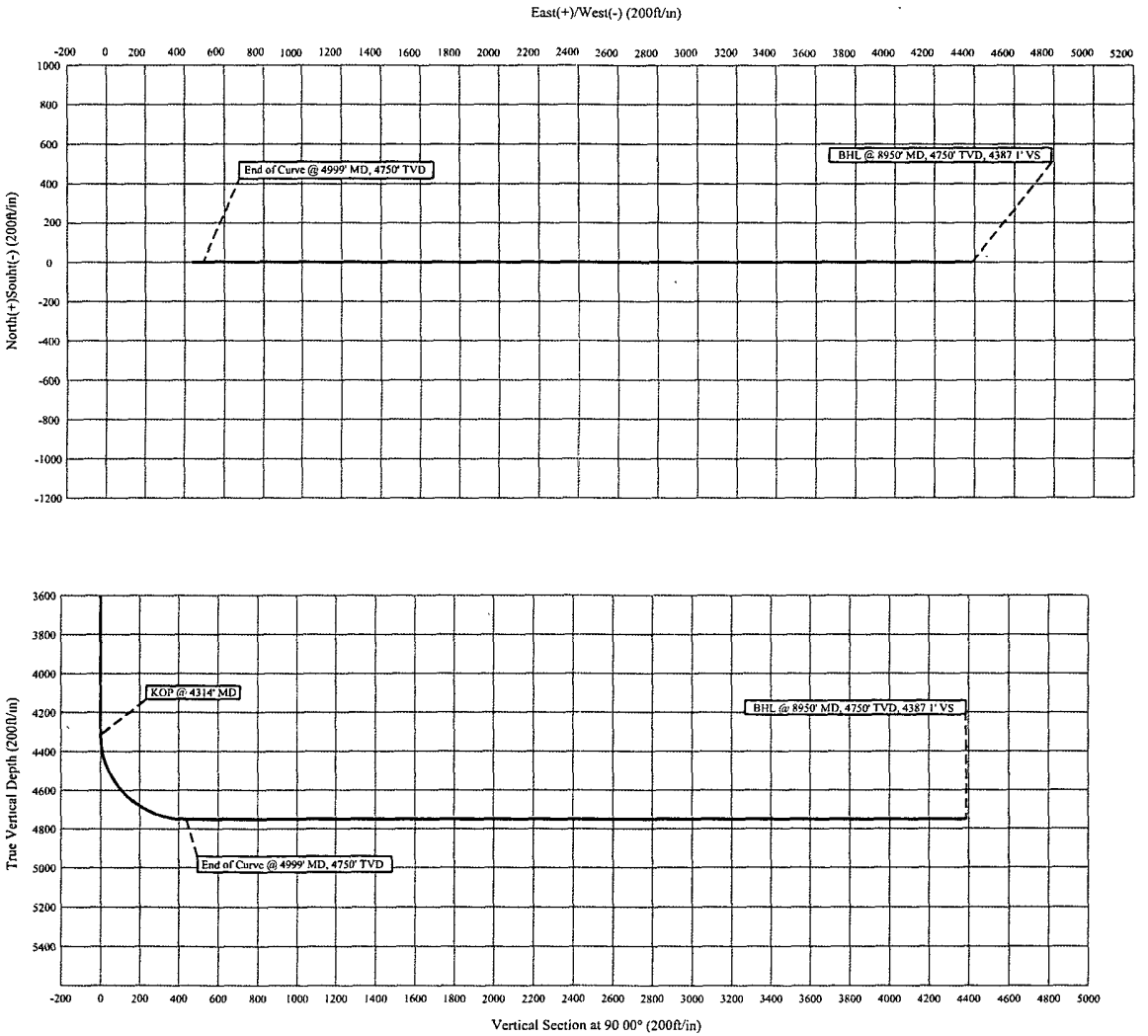
KOP @ 4314' MD
BUR = 13.1 DEG per 100 FT
End Curve @ 4999' MD, 4750' TVD
BHL @ 8950' MD, 4750' TVD, 4387.1' VS

Parallel Petroleum Corp.

Alsab 1525-21 Federal #2H
N/2 Sec. 21, T-15-S, R-25-E
Chaves County, New Mexico

COMPANY DETAILS

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



CLOSED-LOOP SYSTEM DETAILS

Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

Personnel:

The drilling contractor will utilize a 5-man crew with the 5th man dedicated to working the shaker and pit area. The solids control company will provide a solids control technical specialist to work and maintain all closed-loop equipment (see inventory). These 2 individuals will work regular tours and coordinate with the mud engineer and tour derrick man to insure all fluid flow and solids handling is done as designed.

General procedures and flow path:

Rig pumps, shakers and pits will be used with added equipment for the extraction and disposal of solids while maintaining designed clean mud system for the drilling of the well. Flow from flow-line to shaker then sand trap as normal. The drilling fluids with remaining solids are routed to the auger pit where weir plates and the auger trap separates remaining solids. A transfer pump carries the solids slurry from the auger pit to the centrifuge level, and last remaining solids are removed. Dry solids are collected in the 3-sided tank and loaded into cuttings bins for delivery to approved disposal facility. Clear fluids are routed back to the rig working tanks for circulation. In addition, a 250 BBL open-top ½ tank will be used to take cement returns and any other disposal liquids, and 4 additional frac tanks will be used for volume control during all operations.

Addition equipment inventory for Closed-loop system:

Mud / Auger Tank (drop solids out and pump to centrifuge level)
Shale Bin (3-sided bin to catch dry cuttings)
Flygt 2" Trash Pump complete with hoses (system pump)
Flygt 4" Trash Pump complete with hoses (system pump)
Komatsu 250pt loader complete with Pipe Grapple /forks/Bucket (to load cuttings into transport bins and other rig funtions)
Alfa Laval Decanter Lynx 20W pump and stand (centrifuge pump)
Alfa Laval Decanter Lynx 40W pump with stand (centrifuge pump)
Full open-top bins and rails (for hauling cuttings to disposal)
½ tank (for cement returns)
4 Additional Frac tanks (for additional fluid capacity)

See attached drawing.

Closure Procedure: The wells are all located on Federal Surface and the reclamation of the site as well as the re-vegetation will be performed to BLM and NMOCD regulations and guidelines.

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DRILLING PROGRAM

1. Geologic Name of Surface Formation

San Andres

2. Estimated Tops of Important Geologic Markers:

Glorieta	2565'
Tubb	3575'
Abo Shale	3925'
Wolfcamp	4750'
Wolfcamp Shale	4925'

3. Estimated Depths of Anticipated Fresh Water, Oil and Gas

Water Sand	95'	Fresh Water
Wolfcamp	4750'	Oil/Gas

No other formations are expected to yield oil, gas or fresh water in measurable quantities. Setting 8-5/8" casing to 1400' and circulating cement to surface will protect the fresh water sand. There is no salt section in the area. The 5-1/2" casing production string will be planned to circulate back to surface and at a minimum, tie back to the surface casing.

4. Casing Program

Hole Size	Interval	OD Casing	Weight	Grade	Jt., Condition	Jt.	burst/collapse/tension
11"	0-1400'	8 5/8"	24#	J-55	New	ST&C	1.5/1.85/6.8
7 7/8"	1400'-TD	5 1/2"	17#	N-80	New	LT&C	1.4/2.6/2.27

5. Cement Program

8 5/8" Surface Casing:	600 sx "C", yield 1.32, circulate
5 1/2" Production Casing:	1200 sx "C" Acid-Soluble, yield 2.62, circulate or tie back to surface casing

6. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #7 will consist of a double ram-type (3000 psi WP) preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on the bottom. The BOP will be nippled up on the 8 5/8" surface casing and tested to 3000 psi by a third party and used continuously until total depth is reached. All BOP's and accessory equipment will be tested to 3000 psi before drilling out of the surface casing. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve, choke lines and a choke manifold (Exhibit #11) with a 2000 psi WP rating.

7. Types and Characteristics of the Proposed Mud System

The well will be drilled to TD with a combination of cut brine and polymer muds using a closed-loop system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-300'	Fresh Water	8.5	28	N.C.
300-1400'	Fresh Water	8.5	34-36	N.C.
1400'-TD	Cut Brine	9.2	30-34	10-20

Sufficient mud materials will be kept at the well site to maintain mud properties and meet minimum lost circulation and weight increase requirements at all times.

8. Auxiliary Well Control and Monitoring Equipment

A. Kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9. Logging, Testing and Coring Program

A. The electric logging program will consist of CNL, Spectral Density – Litho Density – Spectral GR and will be run from TD to 8 5/8" casing shoe. Optional logs include a Combinable Magnetic Resonance Log over select intervals. No MWD GR log will be run.

B. Drill Stem test is not anticipated.

C. No conventional coring is anticipated. Rotary sidewall cores may be taken if logging is inconclusive.

D. Further testing procedures will be determined after the 5 ½" production casing has been cemented at TD, based on drill shows and log evaluation.

10. Abnormal Conditions, Pressure, Temperatures and Potential Hazards

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 110 degrees and the estimated maximum bottom hold pressure is 1900 psig. No H_2S is anticipated to be present during drilling operations. A Hydrogen Sulfide Drilling Operation Plan is attached to this program. Loss of circulation zones are anticipated in the surface hole section in this well.

11. Anticipated Starting Date and Duration of Operations

Road and location work will not begin until approval has been received from the BLM. Please refer to the Form 3160-3 for the anticipated start date. Once commenced, drilling operations should be finished in approximately 12-16 days. If the well is productive, an additional 7-14 days will be required for completion and testing before a decision is made to install permanent facilities.

EXHIBIT A – General Location Map

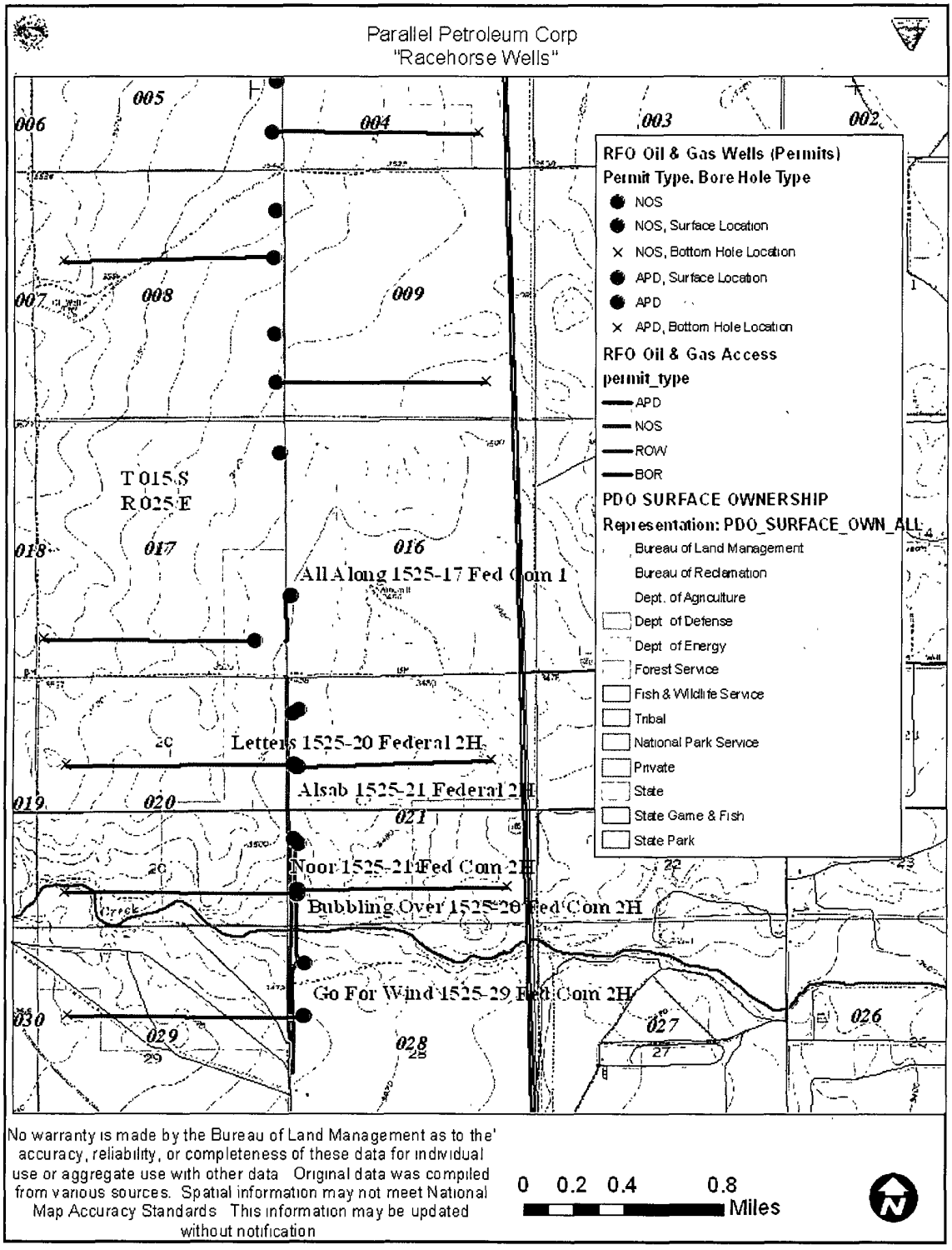


EXHIBIT B
PECOS DISTRICT - RFO
CONDITIONS OF APPROVAL

December 1, 2008

Alsab 1525-21 Federal #2H
SHL: 1880' FNL & 226' FWL, Sec. 21 T15S-R25E
BHL: 1920' FNL & 660' FEL, Sec. 21, T15S-R25E
Chaves County, New Mexico NMPM
Lease/Serial/Case File No.: NM-112251
Parallel Petroleum Corporation

GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

I. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD (Filing of a Sundry Notice is required for this 60 day extension).

II. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

IV. CONSTRUCTION

A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL:

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The operator shall stockpile the stripped topsoil on the side of the well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad.

C. CLOSED SYSTEMS OR STEEL TANKS: **No reserve pit will be used.**

Steel tanks are required for drilling operations: No Pits Allowed.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Roswell Field Office at (505) 627-0236.

E. WELL PAD SURFACING:

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational need.

F. ON LEASE ACCESS ROADS:

Road Egress and Ingress

The on-lease access road shall be constructed to access the corner of the well pad.

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

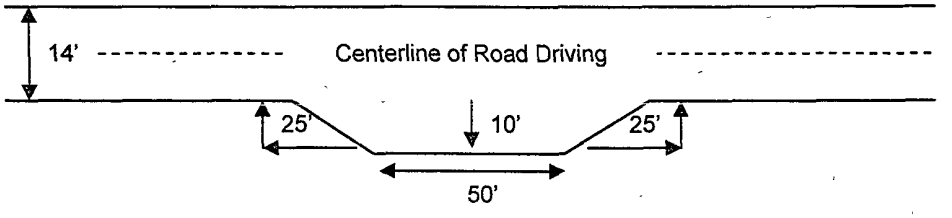
Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

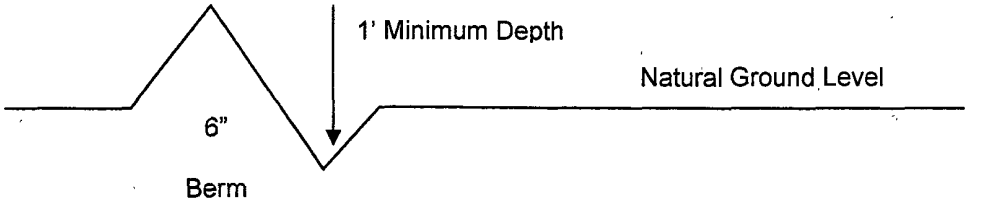


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section Of Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula For Spacing Interval Of Lead-off Ditches

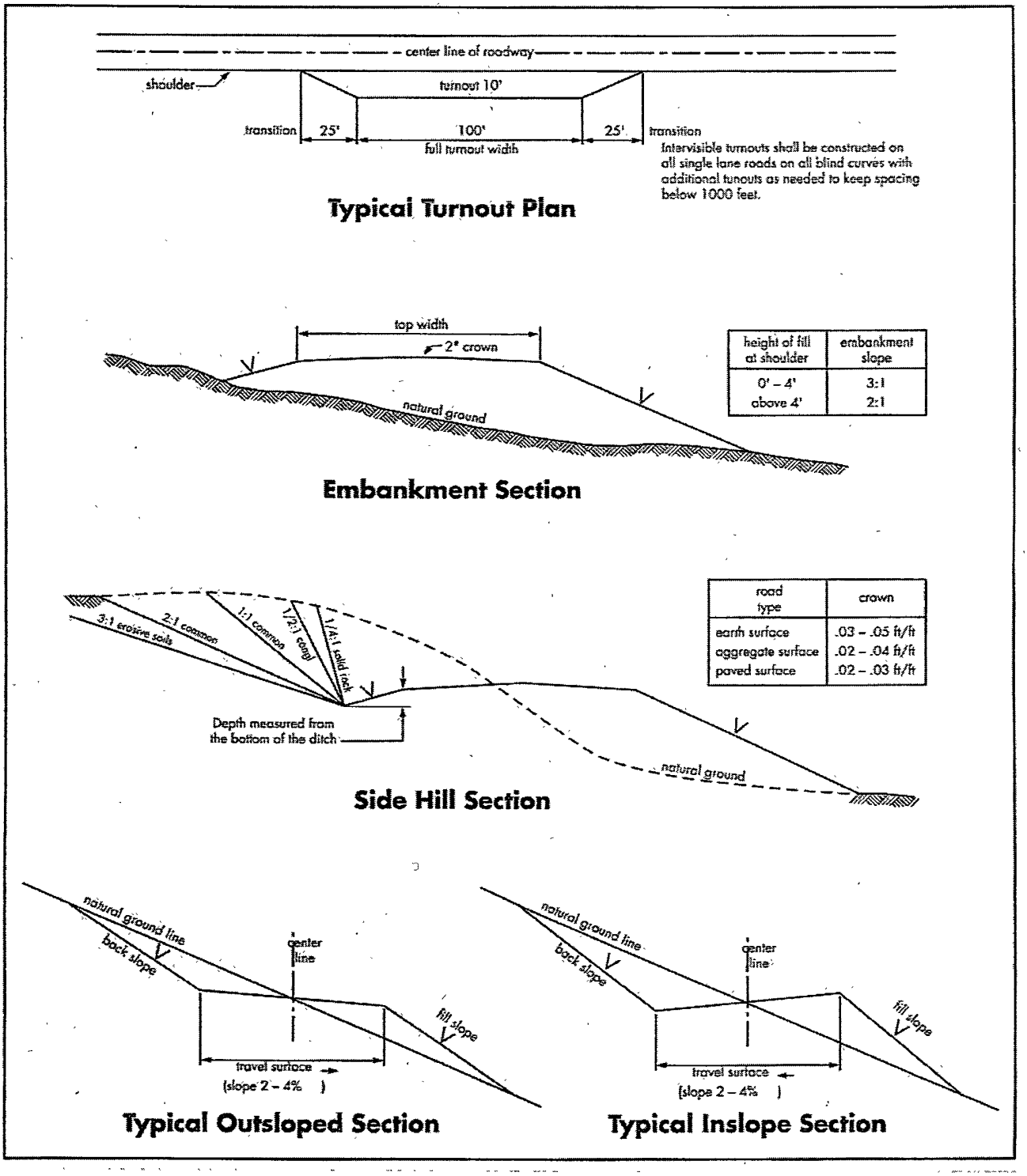
Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.

2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:

    a. Spudding well

    b. Setting and/or Cementing of all casing strings

3. The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

    a. BOPE Tests

4. 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.

5. Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.

6. The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion

7. Air, air-mist or fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s). Any polymers used will be water based and non-toxic.

B. CASING

1. The 8 5/8 inch usable water protection casing string shall be set at approximately 1400 ft. in competent bedrock.

If not, the operator is required to set usable water protecting casing in the next thick competent bedding (i.e. 15 to 25 ft or greater) encountered and cemented to the surface.

a. If cement does not circulate to the surface, the Roswell Field Office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

2. The 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. If cement does not circulate, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. Before drilling below the 8-5/8 inch surface casing shoe, 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. Before drilling below the 8-5/8 inch surface casing shoe, 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 8-5/8 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 BLM Roswell Field office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

b. The tests shall be done by an independent service company.

c. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.

e. 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.

f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

VI. PRODUCTION

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, Juniper Green (Standard Environmental Color Chart June 2008).

VRM Facility Requirement

Low-profile tanks not greater than eight-feet-high shall be used.

VII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

The following seed mix may represent these ecological sites:

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Blue grama, var. Lovington	(*Bouteloua gracilis)*	4.00 lbs.
Sideoats grama, var. Vaughn or El Reno	(*Bouteloua curtipendula)*	1.00 lb.
Sand dropseed	(*Sporobolus cryptandrus)*	0.50 lb.
Vine mesquite	(*Panicum obtusum)*	1.00 lb.
Plains bristlegrass	(*Setaria macrostachya)*	1.00 lb.
Indian blanketflower	(*Gaillardia aristata)*	0.50 lb.
Desert or Scarlet Globemallow	(*Sphaeralcea ambigua*) or (*S. coccinea)*	1.00 lb.
Annual sunflower	*(Helianthus annuus)*	0.75 lb.
TOTAL POUNDS PURE LIVE SEED PER ACRE		9.75 lbs.

Certified Weed Free Seed.
If one species is not available increase all others proportionately.
Use no less than 4 species, including 1 forb.
No less than 8.5 pounds lbs per acre shall be applied.

VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

A. Upon abandonment of the well and/or when the access road is no longer in service, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.

B. On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the Private Surface Land Owner agreements and a copy of the release is to be submitted upon abandonment.

C. Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). A 4-inch pipe, 10 feet in length, shall

be installed 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

D. Surface Reclamation must be completed within 6 months of well plugging. If the operator proposes to modify the plans for surface reclamation approved on the APD, the operator must attach these modifications to the Subsequent Report of Plug and Abandon using Sundry Notices and Reports on Wells, Form 3160-5.

IX. PIPELINE PROTECTION REQUIREMENT

Precautionary measures shall be taken by the operator during construction of the access road to protect existing pipelines that the access road will cross over. An earthen berm; 2 feet high by 3 feet wide and 14 feet across the access road travelway (2' X 3' X 14'), shall be constructed over existing pipelines. The operator shall be held responsible for any damage to existing pipelines. If the pipeline is ruptured and/or damaged the operator shall immediately cease construction operations and repair the pipeline. The operator shall be held liable for any unsafe construction operations that threaten human life and/or cause the destruction of equipment.