Amended 02/10/11 3/4
ATS-11-287

OCD-ARTESIA

Form 3160-3
(August 2007)

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Split Estate

BHL

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM 117544 & NM 116565

6. If Indian, Allotee or Tribe Name: N/A

1a. Type of work: ☑ DRILL ✓ ☐ REENTER

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

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

8. Lease Name and Well No.: Peacemaker 25 Fed Com 1H

2. Name of Operator: Marshall & Winston Inc. ✓

9. API Well No.: 30-015- 38987

3a. Address: POB 50880, Midland, TX 79710-0880

3b. Phone No. *(include area code)*: 1 (432) 684-6373

10. Field and Pool, or Exploratory: Glorieta/N.Seven Rivers-Yeso

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

At surface: SHL: 2490' FNL & 200' FWL BHL: 330'FSL & 330' FWL UNORTHODOX LOCATION

At proposed prod. zone: Perfs beginning 2310 ' FSL to 330 ' FSL U/L L to M

11. Sec., T. R. M. or Blk. and Survey or Area: Section 25, T. 19 S., R. 25 E

14. Distance in miles and direction from nearest town or post office*: Approx. 17 Miles N. of Carlsbad, NM

12. County or Parish: Eddy

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any): Wellbore within proration spacing re: NMOCD

16. No. of acres in lease: 40 + 120 = 160 acres

17. Spacing Unit dedicated to this well: 80 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: #2 APD parallel 1370' to the east.

19. Proposed Depth: TVD 2730' MD 5052' ✓ -No Pilot Hole

20. BLM/BIA Bond No. on file: # NMB 0887 BH

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3427' GL ✓

22. Approximate date work will start*: 2/15/2011

23. Estimated duration: 21-25 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 must 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 BLM.

25. Signature: Vernon D. Dyer — Name *(Printed/Typed)*: Vernon D. Dyer — Date: 02/10/2011

Title: Agent (Please contact Mr.Dyer(575)420-0355 or Mr.Gourley(575)623-5880 for any necessary requirements to complete this APD.

Approved by *(Signature)*: /s/ James A. Amos — Name *(Printed/Typed)*: /s/ James A. Amos — Date: APR 0 8 2011

Title: FOR 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 TWO YEARS

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.

(Continued on page 2)

*(Instructions on page 2)

RECEIVED
APR 13 2011
NMOCD ARTESIA

ROSWELL CONTROLLED WATER BASIN

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DRILLING PROGRAM
Marshall & Winston Inc.
Peacemaker Federal 25 1H
U/L E to M, Sec. 25 T-19-S, R-25-E

1. **Geologic Name of Surface Formation:**
   a. Permian Quaternary Alluvium Deposits

2. **Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:**

a.	Red Beds scattered	375' to 460'	
b.	Grayburg (Traces)	400' to 600'	No fresh water anticipated
c.	San Andres	930' to 1500'	No H-C anticipated
d.	Glorieta	2513'	No oil, water or gas *
e.	Yeso	2650'	Oil

No other formations are anticipated to yield oil, gas or fresh water in measureable volumes. The surface hole shall be drilled using fresh water spud mud and a 9 5/8" surface casing shall be set at 1000' into the top of the San Andres and circulated to surface with cement. There is no evidence that a significant anhydrite formation is present.

* There are no records to indicate that the Glorieta formation yields hydrocarbons, H2S, water at this location. A H2S contingency plan (attached) shall be incorporated prior to drilling below the surface casing shoe.

3. **Casing Program:**

Interval	Size (Inches)		Pipe Specs			Safety	Factors	
(Feet)	Hole	Casing	Wt(#/ft)	Grade	Type	Collapse	Burst	Tension
0-1000	12 1/2	9 5/8	40.0	N-80	LTC	6.02	4.29	22.9
1000-2139	8 3/4	5 1/2	17.0	J-55	LTC	2.6	5.7	5.18
2139-5052	7 7/8	5 1/2	17.0	J-55	LTC	2.6	5.7	5.18
Alternative Casing :								
1000-3067	8 3/4	7	26.0	J-55	LTC	3.31	5.42	4.71/3.64*
3067-5052	6 1/8	4 1/2	11.6	N-80	LTC	5.22	14.7	12.11

OL 2567

2/10/11

All casing will be new and API approved. The minimum safety factors for the casing strengths according to Onshore Orders are Collapse 1.125, Burst 1.0, Tension 1.8.

If wellbore problems are encountered during the directional drilling, an *alternative casing* design may be necessary. If so, it will consist of a 7.0 inch string in place of the 5 ½ inch and in addition will use a 4 ½ inch production string.

* The S.F. regarding tension on the 7.0 inch indicates weight with and w/o the 4 ½ inch liner in a vertical non buoyant environment.

4. Cement Program: See COA

Surface 9 5/8": The surface casing shall be cemented to surface (TOC at 0').
The lead mixture will be consist of 300 sacks of Class C cement + 2% bwoc Calcium Chloride+.025 lbs/sack Cello Flake+ 4% bwoc bentonite + 81.3% water. Weight of 13.0 ppg, Yield 1.75 cf/sk.
The Tail mixture shall consist of 150 sacks of Class C cement+2% bwoc Calcium Chloride+0.25lbs/sack Cello Flake + 56.2 % fresh water. Weight 14.8 ppg, Yield 1.35 cf/sk.
The surface displacement mixture shall be in 100% in excess of the calculated annulus volume.

Production 5 ½": The production string shall be cemented to surface (TOC at 0').
The lead mixture shall consist of 215 sacks of 50/50 Poz (Fly Ash) Class C cement +5% bwow Sodium Chloride +10% bwoc Bentonite +139.7% Fresh water. Weight of 11.80ppg, Yield ~~11.30~~ 2.44 cuft/sk.

See COA

The tail mixture will consist of 615 sacks of Class C cement +5% bwow Sodium Chloride +6%bwoc CD-32 +2% bwoc Bentonite +0.6% bwoc Sodium Metasilicate +0.4% bwoc FL-52A +58.4% fresh water. Weight of 14.22 ppg Yield 1.30 cuft/sk. The production displacement mixture shall be in
40% of excess of the calculated annulus volume.

4. a. Alternative Casing Cementing Program.

Intermediate 7.0": The 7.0 inch shall be cemented to the surface (TOC at 0'). The lead mixture shall consist of 285 sx of Class C cement +0.25 lbs/sk Cello Flake, +4% bwoc Bentonite +80.8% fresh water. Weight of 11.8 ppg, Yield 1.72 cuft/sk.

The tail mixture shall be pumped to approximately 2454'. It shall consist of 315 sacks of 50/50 POZ (FlyAsh) Class H cement +3% bwow Sodium Chloride +0.15% bwoc R-3 +0.2% bwoc CD-32+2% bwoc Bentonite+0.15% bwoc Sodium Metasilicate +0.5% bwoc FL-52A +61.1% fresh water. Weight 14.80 ppg, Yield 1.33 cuft/sk. The alternative intermediate displacement shall be 33% in excess of the calculated annulus volume.

Production 4 ½": Cement shall be pumped to the top of the liner estimated (at 2867'). The mixture shall consist of 315 sx of 50/50 Poz (FlyAsh) Class H cement +0.15% bwoc R-3 +0.2% bwoc CD-32+2% bwoc Bentonite +0.15% bwoc Sodium Metasilicate +0.5% bwoc FL-52A +3% bwoc Sodium Chloride + 61.1% fresh water. Weight 14.0 ppg, Yield 1.33 cuft/sk. The displacement shall be 95% in excess of the calculated annulus volume.

5. Pressure Control Equipment:

The blowout preventor equipment (BOPE) attached as Exhibit 8 will consist of a Schaffer 11"x 3M (3,000 psi) double ram type, (i.e. 4 ½ " closing ram on the bottom), and a 11"x 3,000 psi Hydril annular. The drilling head will be installed on the 9 5/8" surface casing through out the endurance of the hole.* A variance is requested to test the casing head to 1500 psi ~~is requested~~. A variance is requested to test the annular Hydril and the ram preventers individually to 1500 psi prior to drilling below the 9 5/8" casing shoe as described in Onshore Order 2.

See COA

2000

*Should the alternative 7.0 inch casing is used, then the BOPE will be refitted for the 7.0 inch casing and tested prior to commencement of drilling in accordance to the Conditions of Approval and as described in Onshore Order 2. (A variance is test BOPE to 1500 psi is requested).

See COA

Pipe rams shall be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functions tests will be documented on the daily driller's log. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having a rating 3M minimum rating.

6. Proposed Mud Circulation System:

Depth	Mud Wt. ppg	Visc	Fluid Loss	Type System
0'-1000'	8.4-8.9	29-31	NC	Fresh water Gel
1000-TD	8.7-9.3	30-36	<10cc	Cut Brine/Polymer

Gel Sweeps will be mixed as needed to help maintain a clean hole. A cut-brine water will be incorporated prior to drilling below the surface shoe. At 3067', brine/salt gel/polymer mixture shall be added to raise viscosity and lower fluid loss to 10 cc or less for the remainder of horizontal section.

7. **Auxiliary Well Control and Monitoring Equipment:**
   a. A Kelly Cock shall be run in place at all times while drilling this well bore.
   b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig at all times.
   c. The H2S contingency plan and associated equipment shall be in operation prior to drilling below the 9 5/8" shoe.

8. **Logging, Coring and Testing Program:** See COA
   a. Drill stem testing will depend on samples and shows.
   b. The open hole logs will be run from 1000' to TD and consist of CNL / LDT / CAL w GR, GR w/ DLL.
   c. No Coring is planned.
   d. No additional testing is anticipated.

9. **Potential Hazard:**

   No abnormal pressures or temperatures are anticipated. (BHP 1500 psi, BHT 98 deg). Loss of fluids may occur approximately in the 500' to 600', but not records have been found to suggest this possibility. The surface hole shall be drilled with fresh water mud and cased off at 1000'. No records have been found to suggest the Glorieta in this area contains entrained H2S gas/water or hydrocarbons. However, a H2S Contingency Plan attached.

   The area has a potential for H2S and the following measures will be taken:
   a. A H2S contingency plan will be put into operation prior to drilling below the surface shoe.
   b. All personnel shall be familiar with safety precautions of H2S environment.

10. **Anticipated Starting Date and Duration of Operations:**

    a. Road and location construction will begin after the BLM has approved the APD. The anticipated spud date would be 05/15/2011 or as soon as a rig becomes available and as soon as the BLM's approval of this permit. The operation is expected to take 25 days on average. If a producing well is anticipated, completion and producing facilities shall be constructed in a timely manner.

COMPANY PERSONNEL:

Shorty Sweeden (Wellsite Supervisor) 432-634-8722 (c)

Gabe Herrera (Marshall & Winston – Engineer) 432-684-6373 (o)
432-260-8650 (c)

Tom Brandt (Marshall & Winston – Operations) 432-684-6373 (o)
432-553-9747 (c)

George Watters (Marshall & Winston – Geologist) 432-684-6373 (o)
432-631-2051 (c)

Brent May (Marshall & Winston – Geologist) 432-684-6373 (o)
432-254-3525 (c)

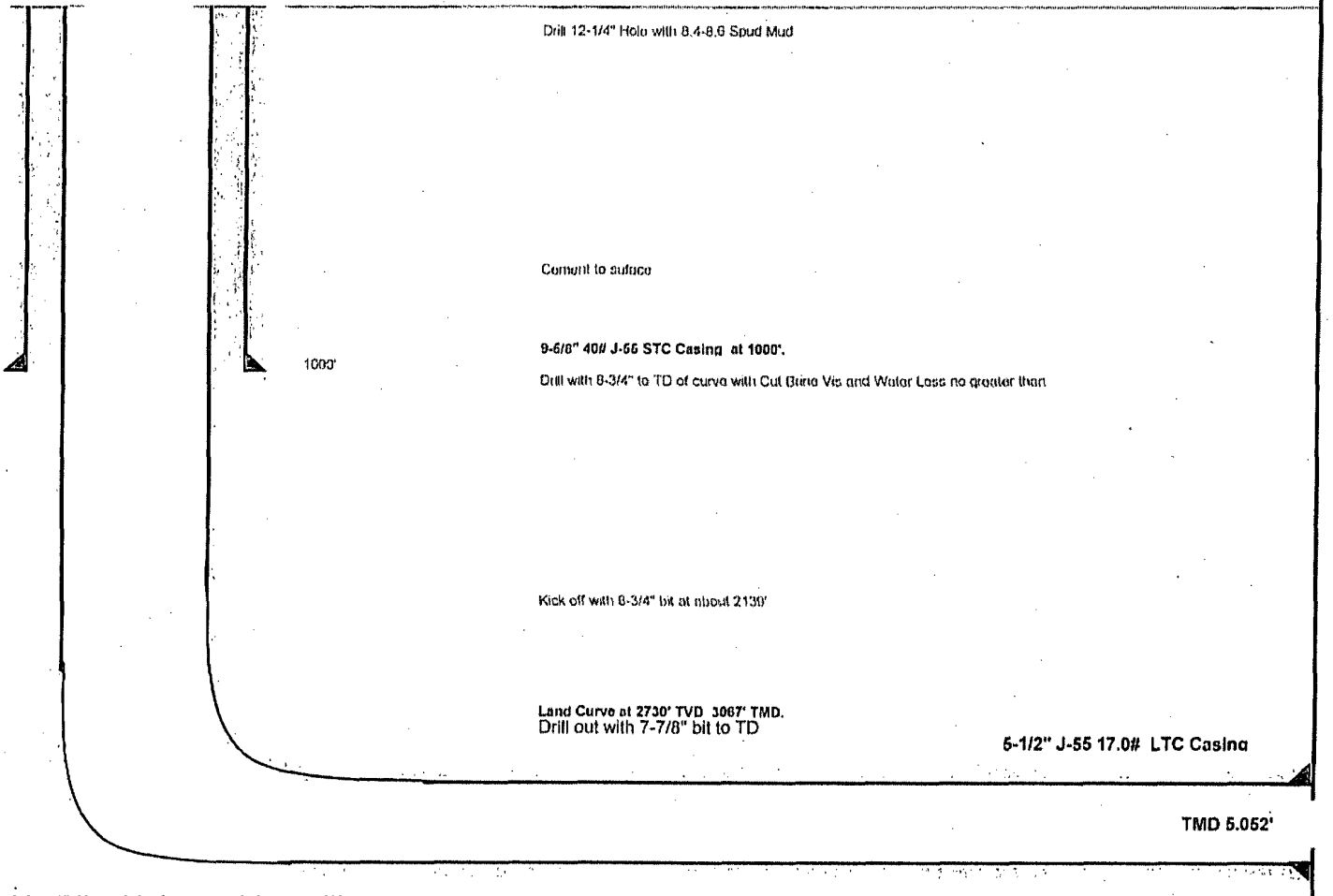
Marshall & Winston, Inc.
P.O. Box 50880
Midland, Tx. 79710-0880

432-684-6373 Office
432-687-2684 Fax

DIRECTIONS TO LOCATION:

From Carlsbad take HWY 285 north towards Artesia. Go north on HWY 285 for about 16 miles, then turn left (west) on Co. Rd. 23 (Rock Daisy Rd). Go west on Rock Daisy Rd. for about 2.1 miles, then turn north approx. 3019 feet. This location is staked approx. 212 feet to the northeast.

AFE No.	Peacemaker Federal 25-1H	AFE Information
API #	Eddy County, NM	Dry Hole: Days:
Permit No.	Proposed Wellbore Sketch	Proposed TD: 5,052' TMD 2730' TVD
Project No.		v



No Pilot Hole on this wellbore

Well Information

Surface Location: Eddy County, T19S R26E Section 25 2490' FNL & 200' FWL

Marshall & Winston, Inc.

Marshall & Winston

Eddy Co, NM (NAD 27)
Sec 25 - T19S - R25E
Peacemaker Fed 25 #1H

Wellbore #1

Plan: Plan #1

Standard Planning Report

06 December, 2010

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Peacemaker Fed 25 #1H
Company:	Marshall & Winston	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy Co, NM (NAD 27)	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 25 - T19S - R25E	**North Reference:**	Grid
Well:	Peacemaker Fed 25 #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project Eddy Co, NM (NAD 27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Sec 25 - T19S - R25E

Site Position:		**Northing:**	593,691.20 usft	**Latitude:**	32° 37' 55.596 N
From:	Map	**Easting:**	465,423.00 usft	**Longitude:**	104° 26' 44.345 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.06 °

Well Peacemaker Fed 25 #1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	593,691.20 usft	**Latitude:**	32° 37' 55.596 N
	+E/-W	0.0 usft	**Easting:**	465,423.00 usft	**Longitude:**	104° 26' 44.345 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	0.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2010/12/03	8.07	60.45	48,877

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	177.38

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,139.3	0.00	0.00	2,139.3	0.0	0.0	0.00	0.00	0.00	0.00	
3,067.1	90.00	168.22	2,730.0	-578.2	120.6	9.70	9.70	0.00	168.22	
3,513.1	90.00	181.60	2,730.0	-1,021.5	160.1	3.00	0.00	3.00	90.00	
5,052.2	90.00	181.60	2,730.0	-2,560.0	117.1	0.00	0.00	0.00	0.00	Peacemaker #1H PBI

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Peacemaker Fed 25 #1H
Company:	Marshall & Winston	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy Co, NM (NAD 27)	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 25 - T19S - R25E	**North Reference:**	Grid
Well:	Peacemaker Fed 25 #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,200.0	5.89	168.22	2,199.9	-3.1	0.6	3.1	9.70	9.70	0.00
2,250.0	10.74	168.22	2,249.4	-10.1	2.1	10.2	9.70	9.70	0.00
2,300.0	15.59	168.22	2,298.0	-21.3	4.4	21.4	9.70	9.70	0.00
2,350.0	20.44	168.22	2,345.6	-36.4	7.6	36.7	9.70	9.70	0.00
2,400.0	25.29	168.22	2,391.6	-55.4	11.6	55.9	9.70	9.70	0.00
2,450.0	30.14	168.22	2,435.9	-78.2	16.3	78.8	9.70	9.70	0.00
2,500.0	34.99	168.22	2,478.0	-104.5	21.8	105.4	9.70	9.70	0.00
2,550.0	39.84	168.22	2,517.7	-134.2	28.0	135.4	9.70	9.70	0.00
2,600.0	44.69	168.22	2,554.7	-167.1	34.9	168.6	9.70	9.70	0.00
2,650.0	49.54	168.22	2,588.7	-203.0	42.3	204.7	9.70	9.70	0.00
2,700.0	54.39	168.22	2,619.5	-241.5	50.4	243.6	9.70	9.70	0.00
2,750.0	59.24	168.22	2,646.9	-282.5	58.9	284.9	9.70	9.70	0.00
2,800.0	64.09	168.22	2,670.6	-325.6	67.9	328.3	9.70	9.70	0.00
2,850.0	68.94	168.22	2,690.5	-370.4	77.3	373.6	9.70	9.70	0.00
2,900.0	73.79	168.22	2,706.5	-416.8	86.9	420.3	9.70	9.70	0.00
2,950.0	78.64	168.22	2,718.4	-464.3	96.8	468.3	9.70	9.70	0.00
3,000.0	83.49	168.22	2,726.2	-512.7	106.9	517.0	9.70	9.70	0.00
3,050.0	88.34	168.22	2,729.7	-561.5	117.1	566.2	9.70	9.70	0.00
3,067.1	90.00	168.22	2,730.0	-578.2	120.6	583.1	9.70	9.70	0.00
EOC - Hold 90° INC									
3,068.9	90.00	168.27	2,730.0	-580.0	121.0	584.9	3.00	0.00	3.00
LP									
3,100.0	90.00	169.21	2,730.0	-610.5	127.0	615.6	3.00	0.00	3.00
3,200.0	90.00	172.21	2,730.0	-709.1	143.2	714.9	3.00	0.00	3.00
3,300.0	90.00	175.21	2,730.0	-808.5	154.1	814.7	3.00	0.00	3.00
3,400.0	90.00	178.21	2,730.0	-908.4	159.9	914.7	3.00	0.00	3.00
3,500.0	90.00	181.21	2,730.0	-1,008.3	160.4	1,014.6	3.00	0.00	3.00
3,513.1	90.00	181.60	2,730.0	-1,021.5	160.1	1,027.7	3.00	0.00	3.00
Begin Turn to TD									
3,600.0	90.00	181.60	2,730.0	-1,108.3	157.6	1,114.3	0.00	0.00	0.00
3,700.0	90.00	181.60	2,730.0	-1,208.3	154.9	1,214.1	0.00	0.00	0.00
3,800.0	90.00	181.60	2,730.0	-1,308.2	152.1	1,313.8	0.00	0.00	0.00
3,900.0	90.00	181.60	2,730.0	-1,408.2	149.3	1,413.5	0.00	0.00	0.00
4,000.0	90.00	181.60	2,730.0	-1,508.1	146.5	1,513.3	0.00	0.00	0.00
4,100.0	90.00	181.60	2,730.0	-1,608.1	143.7	1,613.0	0.00	0.00	0.00
4,200.0	90.00	181.60	2,730.0	-1,708.1	140.9	1,712.7	0.00	0.00	0.00
4,300.0	90.00	181.60	2,730.0	-1,808.0	138.1	1,812.5	0.00	0.00	0.00
4,400.0	90.00	181.60	2,730.0	-1,908.0	135.3	1,912.2	0.00	0.00	0.00
4,500.0	90.00	181.60	2,730.0	-2,008.0	132.5	2,011.9	0.00	0.00	0.00
4,600.0	90.00	181.60	2,730.0	-2,107.9	129.7	2,111.6	0.00	0.00	0.00
4,700.0	90.00	181.60	2,730.0	-2,207.9	126.9	2,211.4	0.00	0.00	0.00
4,800.0	90.00	181.60	2,730.0	-2,307.8	124.1	2,311.1	0.00	0.00	0.00
4,900.0	90.00	181.60	2,730.0	-2,407.8	121.3	2,410.8	0.00	0.00	0.00
5,000.0	90.00	181.60	2,730.0	-2,507.8	118.6	2,510.6	0.00	0.00	0.00
5,051.0	90.00	181.60	2,730.0	-2,558.7	117.1	2,561.4	0.00	0.00	0.00
TD at 5052.1									
5,052.2	90.00	181.60	2,730.0	-2,560.0	117.1	2,562.6	0.00	0.00	0.00
Peacemaker #1H PBHL									

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Peacemaker Fed 25 #1H
Company:	Marshall & Winston	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy Co, NM (NAD 27)	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 25 - T19S - R25E	**North Reference:**	Grid
Well:	Peacemaker Fed 25 #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Peacemaker #1H PBHL - plan misses target center by 0.9usft at 5052.2usft MD (2730.0 TVD, -2560.0 N, 117.1 E) - Point	0.00	0.00	2,730.0	-2,560.0	116.2	591,131.20	465,539.20	32° 37' 30.264 N	104° 26' 42.954 W
LP - plan hits target center - Point	0.00	360.00	2,730.0	-580.0	121.0	593,111.20	465,544.00	32° 37' 49.857 N	104° 26' 42.922 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,139.3	2,139.3	0.0	0.0	KOP 9.7°/100 DLS @ 168.22° AZI
3,067.1	2,730.0	-578.2	120.6	EOC - Hold 90° INC
3,513.1	2,730.0	-1,021.5	160.1	Begin Turn to TD
5,051.0	2,730.0	-2,558.7	117.1	TD at 5052.1

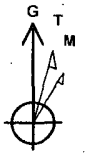
Marshall & Winston, Inc.

WELL DETAILS: Peacemaker Fed 25 #1H					
			Ground Level: 0.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	593691.20	465423.00	32° 37' 55.596 N	104° 26' 44.345 W

SHL: 2490' FNL / 200' FWL
BHL: 330' FSL / 330' FWL

GREAT WHITE DIRECTIONAL SERVICES, L.L.C.

Project: Eddy Co, NM (NAD 27)
Site: Sec 25 - T19S - R25E
Well: Peacemaker Fed 25 #1H
Wellbore: Wellbore #1
Design: Plan #1



Azimuths to Grid North
Total Correction: 8.13°
Magnetic Field
Strength: 48877.0snT
Dip Angle: 60.45°
Date: 12/03/2010
Model: IGRF200510

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

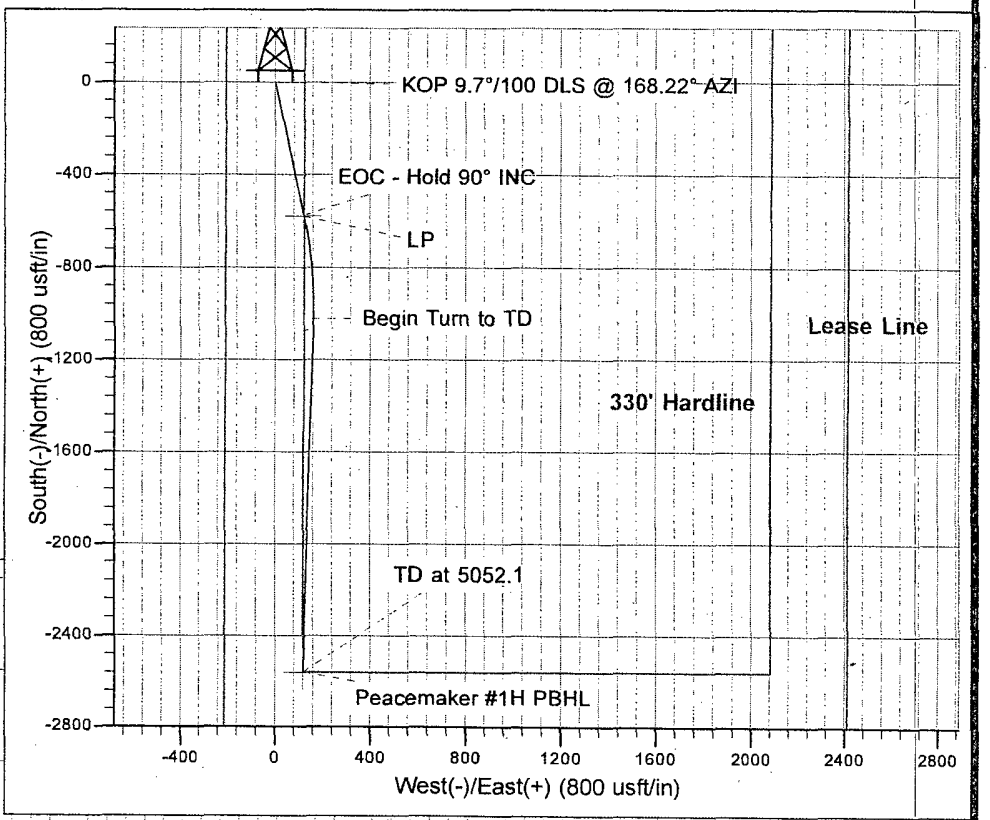
Name	TVD	+N/-S	+E/-W	Northing	Easting
LP	2730.0	-580.0	121.0	593111.20	465544.00
Peacemaker #1H PBHL	2730.0	-2560.0	116.2	591131.20	465539.20

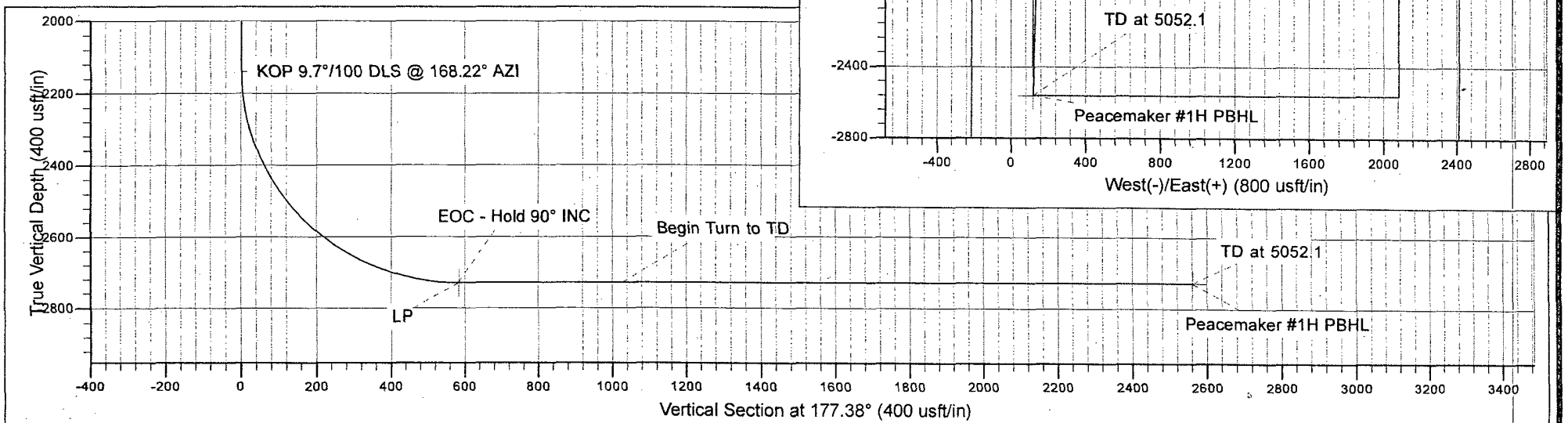
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2139.3	0.00	0.00	2139.3	0.0	0.0	0.00	0.00	0.0	
3	3067.1	90.00	168.22	2730.0	-578.2	120.6	9.70	168.22	583.1	
4	3513.1	90.00	181.60	2730.0	-1021.5	160.1	3.00	90.00	1027.7	
5	5052.2	90.00	181.60	2730.0	-2560.0	117.1	0.00	0.00	2562.6	Peacemaker #1H PBHL

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
2139.3	2139.3	0.00	0.00	0.0	0.0	0.0	0.0	KOP 9.7°/100 DLS @ 168.22° AZI
2730.0	3067.1	90.00	168.22	-578.2	120.6	583.1	590.7	EOC - Hold 90° INC
2730.0	3513.1	90.00	181.60	-1021.5	160.1	1027.7	1036.7	Begin Turn to TD
2730.0	5051.0	90.00	181.60	-2558.7	117.1	2561.4	2574.5	TD at 5052.1





Flare Line Area, a min. 150 ft from wellbore

The Flare Line is buried from the Gas Seperator to outlet point. The Panic line utilizes the flare line beyond the seperator.

RIG 101

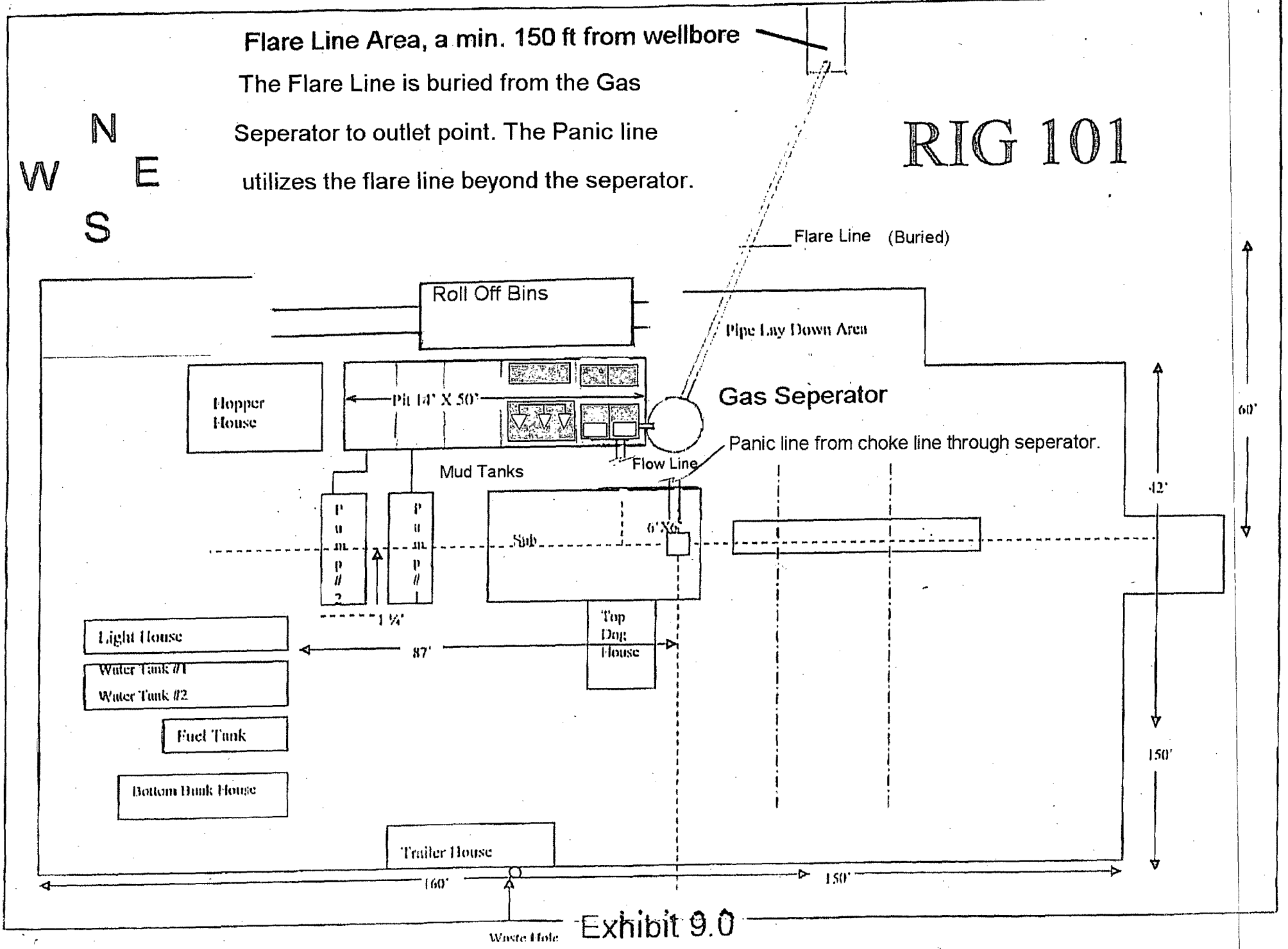
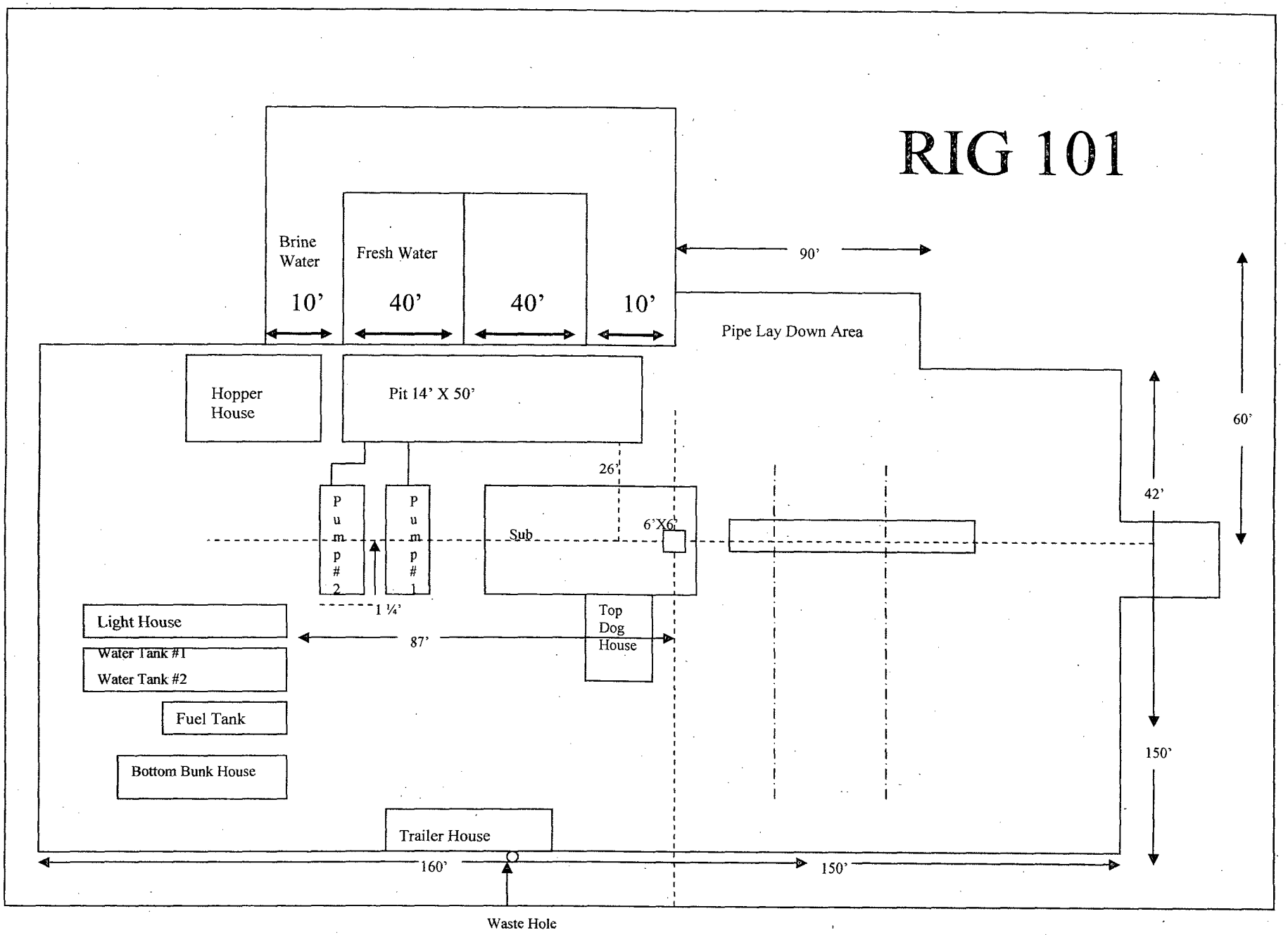
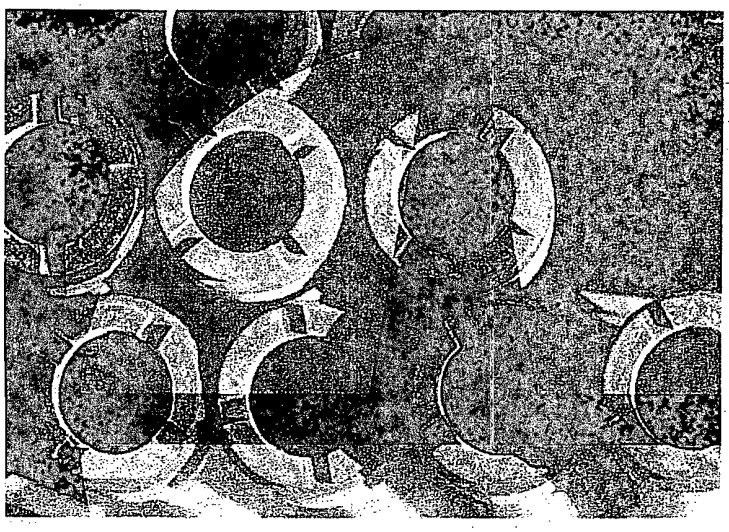


Exhibit 9.0


RIG 101
Brine Water
Fresh Water
10'
40'
40'
10'
90'
Pipe Lay Down Area
Hopper House
Pit 14' X 50'
60'
26'
42'
Pump #2
Pump #1
Sub
6'X6'
1 ¼'
Light House
Water Tank #1
Water Tank #2
87'
Top Dog House
Fuel Tank
Bottom Bunk House
Trailer House
160'
150'
150'
Waste Hole



RIG #101

DRAWWORKS
Skytop Brewster N-55-M (600HP)
1 1/8" drill line, Parmac 341 auxiliary brake

POWER
(2) Caterpillar 3406 engines (375HP each)

LIGHT PLANTS
(2) Caterpillar C-15 engines w/ 320 KW generators

MAST
Superior 110' w/ 320,000# capacity on 10 lines

SUBSTRUCTURE
Superior 17' box
KB 18' 6" Rotary beam clearance 15' 6"

BLOCK HOOK
Mmsco RA-36 (250 Ton) Block Hook Combo

PUMPS
(2) Continental Emsco PZ-8 Triplex pumps
(1) powered by a Caterpillar 3412
(1) powered by a Caterpillar 3508

MUD PITS
(1) tank system - 700 bbl capacity w/ 60 bbl slug pit

SOLIDS EQUIPMENT
Brandt King Cobra Shaker
Brandt 16-cone desilter
(3) mud agitators

BOP'S
11" X 3,000 psi Hydril annular
11" X 3,000 psi Shaffer double

ACCUMULATOR
Patterson 5-Station, 80 gallon accumulator

CHOKE MANIFOLD
3,000 psi choke manifold

SWIVEL
Ideco (200 Ton)

ROTARY TABLE
Skytop Brewster (18")

DRILL PIPE
4 1/2" drill collars

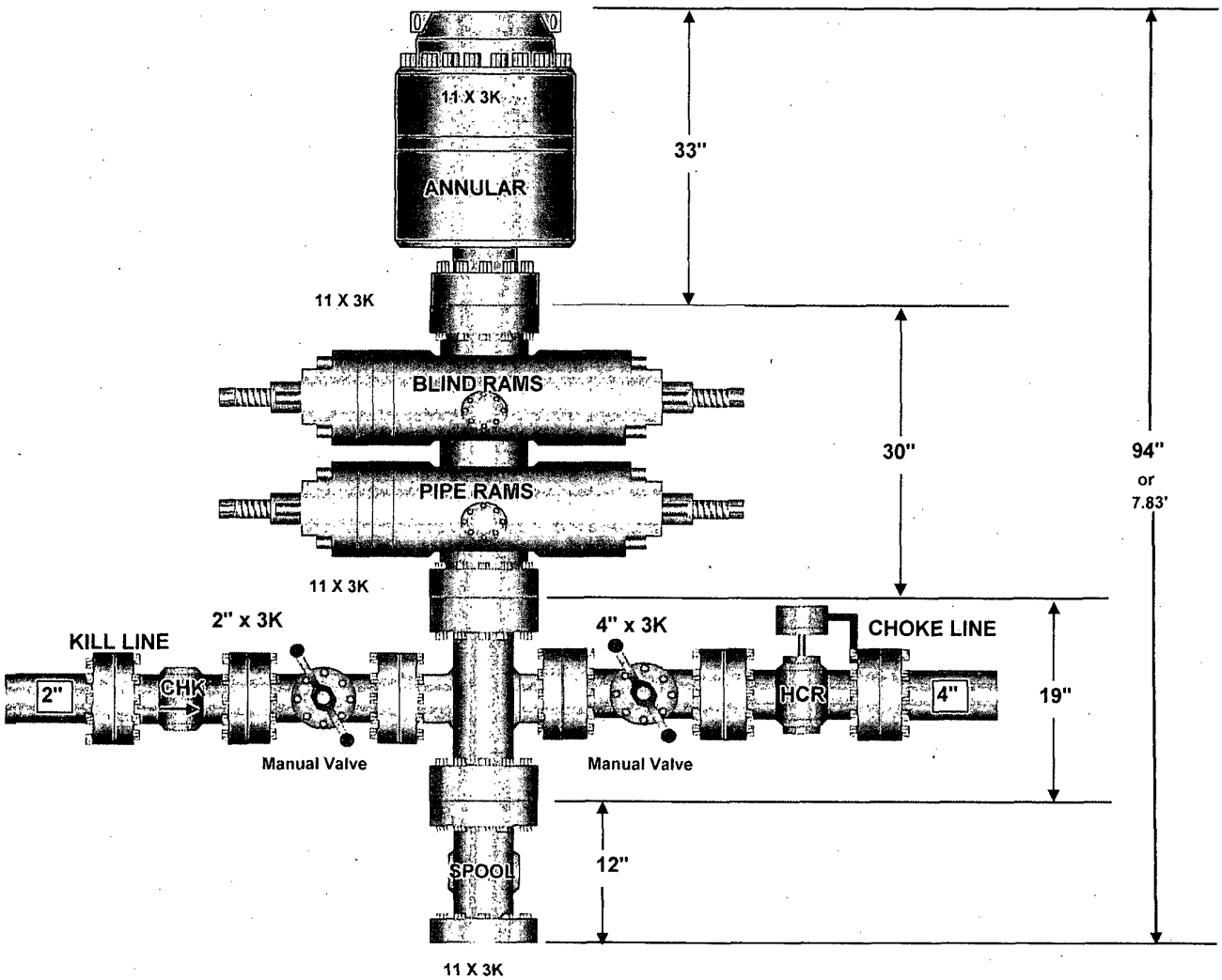
DRILL COLLARS
8" and 6 1/2" drill collars
*quantity subject to availibility

AUXILIARY EQUIPMENT
Pason EDR (base system)
Fuel Tank - 6,000 gallon capacity
Water Tank - 500 barrel capacity
Rig Manager Quarters
Satellite automatic driller
Mathey survey unit

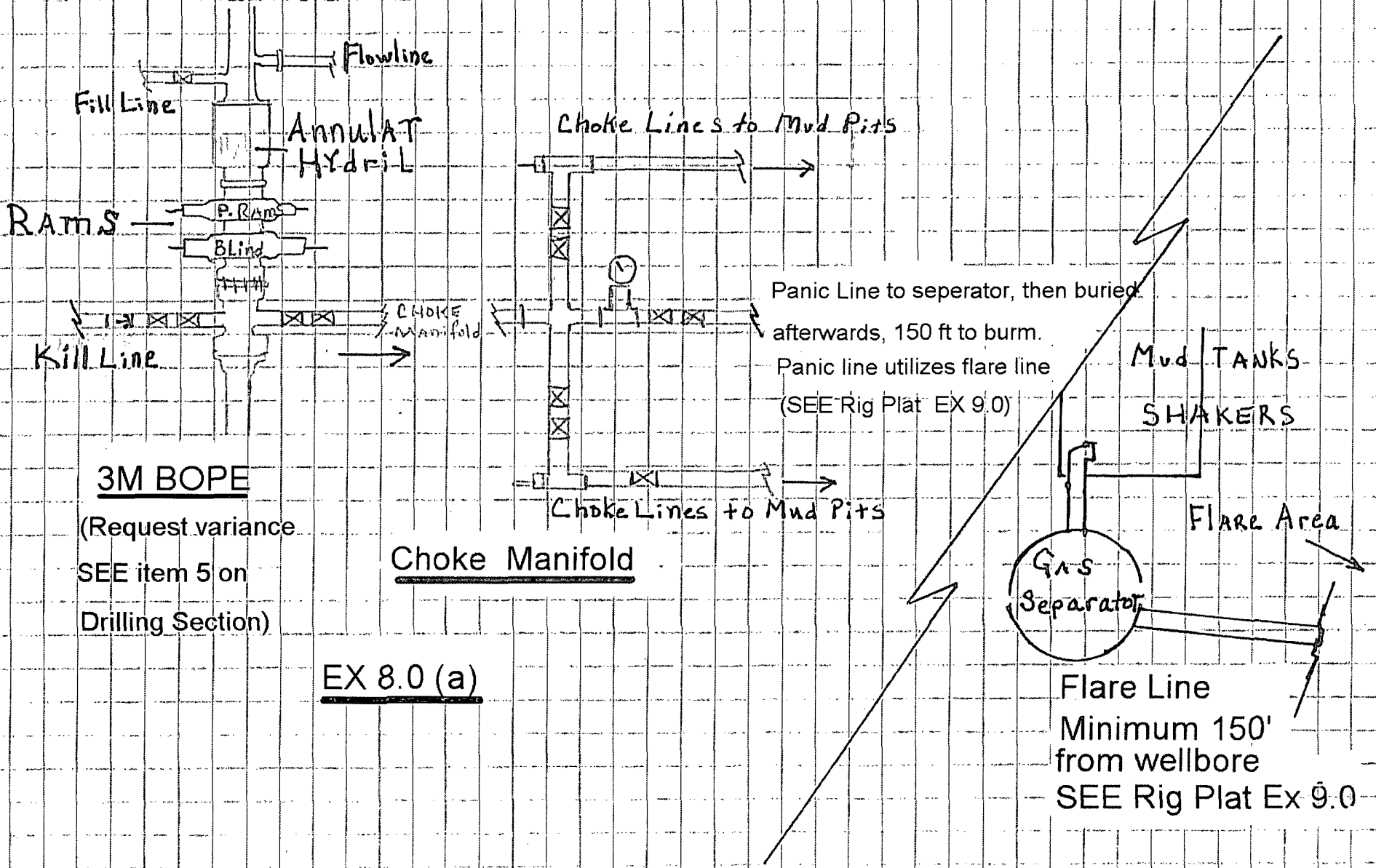
PATTERSON-
DRILLING COMP

Revised 12.01.10

BOP STACK SPACING
SIZE: 11" X 3,000 PSI



EX. 8.0



3M BOPE

(Request variance
SEE item 5 on
Drilling Section)

Choke Manifold

EX 8.0 (a)