30-025-40421

Marshall & Winston, Inc

Lea County, NM (NAD27 NME)
TJG Federal Com 3 #1H
TJG Federal Com 3 #1H

OH

Plan: Plan #1 - 8-3/4" Curve, 6-1/8" Lateral

Standard Planning Report

07 June, 2011

Scientific Drilling
Directional Drilling Operations

Database:	EDM-Julio	**Local Co-ordinate Reference:**	Site TJG Federal Com 3 #1H
Company:	Marshall & Winston, Inc	**TVD Reference:**	GL Elev @ 3674.00usft
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	GL Elev @ 3674 00usft
Site:	TJG Federal Com 3 #1H	**North Reference:**	Grid
Well:	TJG Federal Com 3 #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 8-3/4" Curve, 6-1/8" Lateral		

Project	Lea County, NM (NAD27 NME)		
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	TJG Federal Com 3 #1H				
Site Position:		**Northing:**	612,736.00 usft	**Latitude:**	32° 40' 59 290 N
From:	Map	**Easting:**	680,681 30 usft	**Longitude:**	103° 44' 45.921 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0 32 °

Well	TJG Federal Com 3 #1H					
Well Position	**+N/-S**	0 00 usft	**Northing:**	612,736 00 usft	**Latitude:**	32° 40' 59 290 N
	+E/-W	0 00 usft	**Easting:**	680,681 30 usft	**Longitude:**	103° 44' 45.921 W
Position Uncertainty		0 00 usft	**Wellhead Elevation:**		**Ground Level:**	3,674.00 usft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	2011/06/07	7 70	60.58	48,875

Design	Plan #1 - 8-3/4" Curve, 6-1/8" Lateral				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0 00	0 00	0.00	269 83	

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 00	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	
9,000 00	0 00	0.00	9,000.00	0.00	0.00	0 00	0.00	0 00	0.00	
9,785.42	90.00	269.83	9,500.00	-1.51	-499.99	11.46	11.46	0.00	269.83	
13,909 95	90 00	269 83	9,500.00	-14 00	-4,624 50	0 00	0 00	0.00	0.00	PBHL-TJG #1H

Database:	EDM-Julio	**Local Co-ordinate Reference:**	Site TJG Federal Com 3 #1H
Company:	Marshall & Winston, Inc	**TVD Reference:**	GL Elev @ 3674 00usft
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	GL Elev @ 3674.00usft
Site:	TJG Federal Com 3 #1H	**North Reference:**	Grid
Well:	TJG Federal Com 3 #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 8-3/4" Curve, 6-1/8" Lateral		

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)
0.00	0.00	0 00	0 00	0.00	0.00	0 00	0 00	0 00	0.00
South HL-TJG #1H									
9,000 00	0.00	0 00	9,000.00	0.00	0 00	0 00	0 00	0 00	0 00
KOP Start Build 11.46°/100'									
9,100 00	11 46	269.83	9,099 33	-0.03	-9 97	9.97	11 46	11.46	0 00
9,200 00	22.92	269.83	9,194.71	-0.12	-39 47	39.47	11.46	11.46	0 00
9,300 00	34.38	269 83	9,282 32	-0.26	-87 33	87.33	11 46	11.46	0 00
9,400 00	45 84	269.83	9,358 68	-0.46	-151.64	151.64	11 46	11 46	0.00
9,500 00	57 29	269.83	9,420 74	-0 70	-229.84	229.84	11 46	11.46	0.00
9,600 00	68 75	269.83	9,466 03	-0.97	-318.81	318.81	11 46	11 46	0.00
9,700 00	80.21	269 83	9,492 74	-1 26	-415 01	415.01	11 46	11.46	0.00
9,785 42	90.00	269 83	9,500 00	-1 51	-499 99	500.00	11.46	11.46	0 00
EOC hold 90.00°									
9,800.00	90.00	269 83	9,500 00	-1 56	-514 57	514.57	0.00	0.00	0 00
9,900 00	90.00	269 83	9,500 00	-1 86	-614 57	614.57	0.00	0.00	0 00
10,000 00	90.00	269 83	9,500.00	-2 16	-714 57	714.57	0.00	0.00	0 00
10,100 00	90 00	269.83	9,500 00	-2 47	-814.57	814.57	0.00	0 00	0 00
10,200.00	90 00	269 83	9,500.00	-2 77	-914 57	914.57	0.00	0.00	0.00
10,300.00	90.00	269.83	9,500.00	-3.07	-1,014.57	1,014 57	0 00	0.00	0 00
10,400.00	90.00	269 83	9,500.00	-3 37	-1,114.57	1,114 57	0 00	0.00	0.00
10,500.00	90.00	269 83	9,500.00	-3 68	-1,214.57	1,214 57	0 00	0.00	0.00
10,600.00	90.00	269 83	9,500 00	-3 98	-1,314.57	1,314.57	0 00	0.00	0 00
10,700.00	90 00	269 83	9,500.00	-4 28	-1,414.57	1,414 57	0.00	0.00	0.00
10,800 00	90 00	269 83	9,500.00	-4 59	-1,514.57	1,514.57	0 00	0 00	0 00
10,900.00	90 00	269 83	9,500.00	-4 89	-1,614.57	1,614.57	0 00	0.00	0.00
11,000.00	90.00	269 83	9,500.00	-5.19	-1,714.57	1,714 57	0.00	0.00	0.00
11,100.00	90 00	269 83	9,500.00	-5.49	-1,814 57	1,814.57	0.00	0.00	0.00
11,200.00	90.00	269 83	9,500.00	-5 80	-1,914.56	1,914.57	0.00	0.00	0.00
11,300.00	90.00	269 83	9,500.00	-6.10	-2,014.56	2,014.57	0.00	0.00	0.00
11,400 00	90 00	269.83	9,500.00	-6 40	-2,114.56	2,114.57	0 00	0 00	0 00
11,500 00	90.00	269.83	9,500.00	-6.70	-2,214.56	2,214.57	0.00	0.00	0.00
11,600.00	90.00	269.83	9,500.00	-7.01	-2,314.56	2,314.57	0.00	0 00	0.00
11,700.00	90 00	269 83	9,500.00	-7.31	-2,414 56	2,414.57	0.00	0 00	0.00
11,800 00	90 00	269.83	9,500.00	-7.61	-2,514.56	2,514 57	0 00	0 00	0.00
11,900 00	90 00	269 83	9,500.00	-7.92	-2,614 56	2,614 57	0 00	0 00	0 00
12,000 00	90 00	269.83	9,500.00	-8.22	-2,714.56	2,714 57	0 00	0 00	0 00
12,100 00	90 00	269 83	9,500.00	-8.52	-2,814.56	2,814 57	0 00	0 00	0.00
12,200 00	90 00	269.83	9,500 00	-8 82	-2,914.56	2,914 57	0 00	0.00	0.00
12,300 00	90 00	269 83	9,500.00	-9 13	-3,014.56	3,014 57	0 00	0.00	0.00
12,400 00	90 00	269 83	9,500.00	-9.43	-3,114.56	3,114 57	0 00	0 00	0.00
12,500 00	90 00	269 83	9,500.00	-9 73	-3,214.56	3,214 57	0.00	0.00	0.00
12,600 00	90 00	269 83	9,500.00	-10 03	-3,314.56	3,314 57	0.00	0.00	0.00
12,700 00	90.00	269.83	9,500 00	-10 34	-3,414 56	3,414 57	0.00	0.00	0.00
12,800.00	90.00	269 83	9,500 00	-10.64	-3,514.56	3,514 57	0.00	0.00	0 00
12,900.00	90.00	269.83	9,500.00	-10 94	-3,614 56	3,614 57	0.00	0.00	0 00
13,000.00	90.00	269.83	9,500 00	-11.25	-3,714.56	3,714 57	0.00	0 00	0.00
13,100.00	90.00	269.83	9,500 00	-11.55	-3,814.56	3,814 57	0.00	0.00	0.00
13,200.00	90.00	269.83	9,500 00	-11.85	-3,914.56	3,914.57	0 00	0.00	0.00
13,300.00	90.00	269.83	9,500 00	-12.15	-4,014.55	4,014.57	0 00	0 00	0.00
13,400.00	90 00	269.83	9,500 00	-12.46	-4,114.55	4,114.57	0 00	0.00	0.00
13,500 00	90.00	269.83	9,500 00	-12 76	-4,214 55	4,214.57	0 00	0.00	0.00
13,600.00	90.00	269.83	9,500 00	-13.06	-4,314.55	4,314.57	0.00	0.00	0.00
13,700 00	90 00	269.83	9,500 00	-13 36	-4,414 55	4,414.57	0.00	0 00	0 00

Database:	EDM-Julio	**Local Co-ordinate Reference:**	Site TJG Federal Com 3 #1H
Company:	Marshall & Winston, Inc	**TVD Reference:**	GL Elev @ 3674.00usft
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	GL Elev @ 3674.00usft
Site:	TJG Federal Com 3 #1H	**North Reference:**	Grid
Well:	TJG Federal Com 3 #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 8-3/4" Curve, 6-1/8" Lateral		

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)
13,800.00	90 00	269 83	9,500.00	-13.67	-4,514.55	4,514.57	0.00	0.00	0.00
13,900.00	90.00	269.83	9,500.00	-13.97	-4,614 55	4,614 57	0.00	0.00	0 00
13,909.95	90 00	269 83	9,500.00	-14.00	-4,624 50	4,624 52	0.00	0 00	0.00
PBHL-TJG #1H									

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
South HL-TJG #1H	0 00	0 00	0.00	-84 00	-4,624.50	612,652.00	676,056.80	32° 40' 58.709 N	103° 45' 40 034 W
- plan misses target center by 4625.26usft at 0.00usft MD (0.00 TVD, 0.00 N, 0 00 E)									
- Polygon									
Point 1			0.00	0.00	0 00	612,652 00	676,056.80		
Point 2			0.00	14 00	4,624 50	612,666.00	680,681.30		
PBHL-TJG #1H	0.00	0.00	9,500 00	-14.00	-4,624 50	612,722.00	676,056.80	32° 40' 59 402 N	103° 45' 40.029 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
9,000 00	9,000 00	0.00	0 00	KOP Start Build 11.46°/100'
9,785 42	9,500 00	-1 51	-499 99	EOC hold 90.00°

Marshall & Winston, Inc

Scientific Drilling for Marshall & Winston, Inc
Site: Lea County, NM (NAD27 NME)
Well: TJG Federal Com 3 #1H
Wellbore: OH
Design: Plan #1 - 8-3/4" Curve, 6-1/8" Lateral

Scientific Drilling
Directional Drilling Operations

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	
2	9000 00	0 00	0 00	9000.00	0 00	0.00	0.00	0.00	0 00	
3	9785.42	90.00	269.83	9500 00	-1.51	-499 99	11.46	269 83	500.00	
4	13909 95	90.00	269.83	9500.00	-14 00	-4624 50	0 00	0.00	4624 52	PBHL-TJG #1H

Plan Plan #1 - 8-3/4" Curve, 6-1/8" Lateral (TJG Federal Com 3 #1H/OH

Created By Julio Pina Date: 07-Jun-11
Checked: Date:
Reviewed: Date:

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
South HL-TJG #1H	0 00	-84 00	-4624 50	612652.00	676056 80	32°40' 58.709 N	103°45' 40.034 W	Polygon
PBHL-TJG #1H	9500.00	-14.00	-4624 50	612722.00	676056 80	32°40' 59.402 N	103°45' 40.029 W	Point

AZIMUTH CORRECTIONS
ALL AZIMUTHS MUST BE CORRECTED TO GRID
GRID CORRECTIONS MUST BE APPLIED BEFORE PLOTTING
To convert a Magnetic Direction to a Grid Direction, Add 7.39°
To convert a True Direction to a Grid Direction, Subtract 0.32°

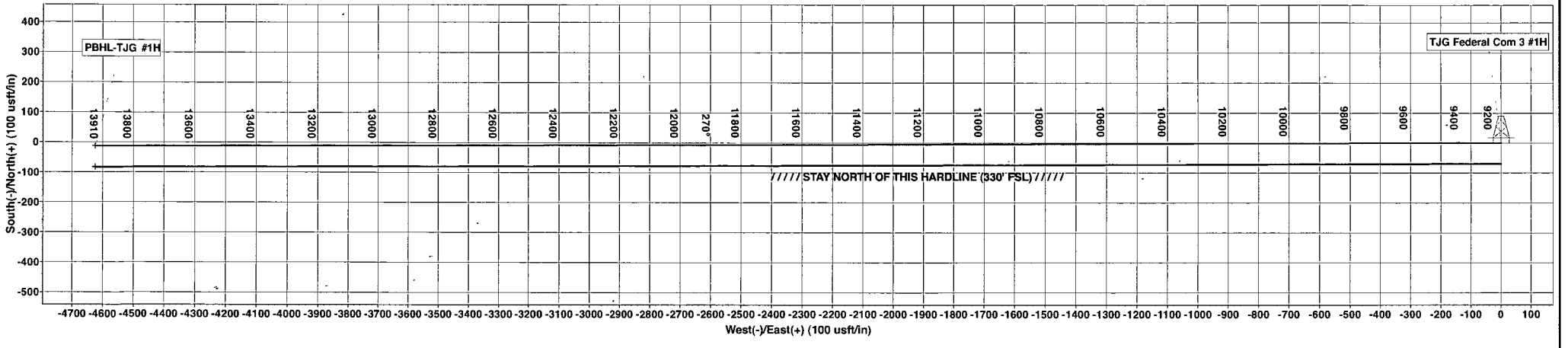
PROJECT DETAILS: Lea County, NM (NAD27 NME)

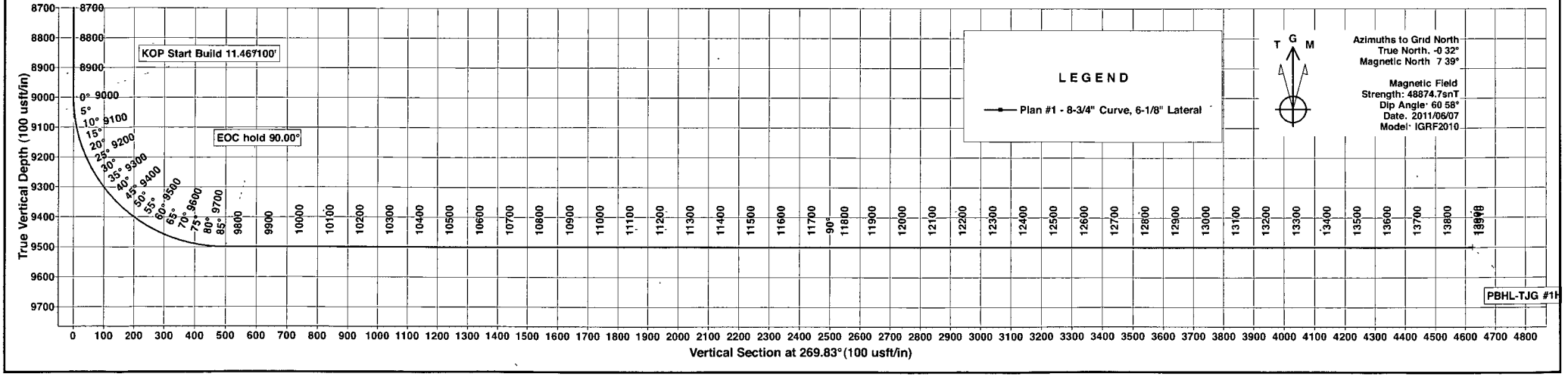
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS. TJG Federal Com 3 #1H

Ground Level 3674 00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0 00	0 00	612736.00	680681 30	32°40' 59.290 N	103°44' 45.921 W	





BOPE Stacking
13 3/8" X 5,000 psi

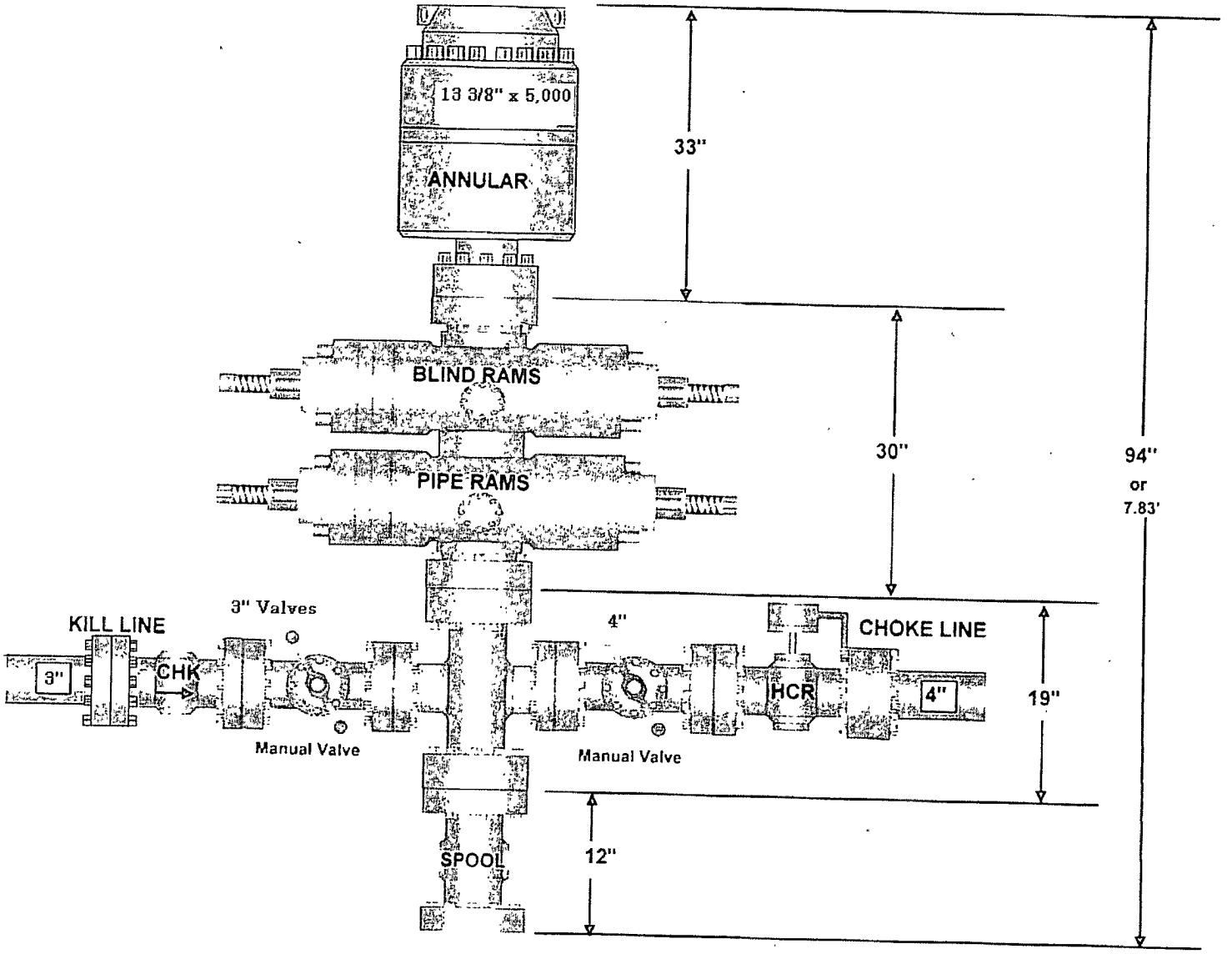


Exhibit 2

BOPE Stacking

13 5/8ths x 5,000 psi

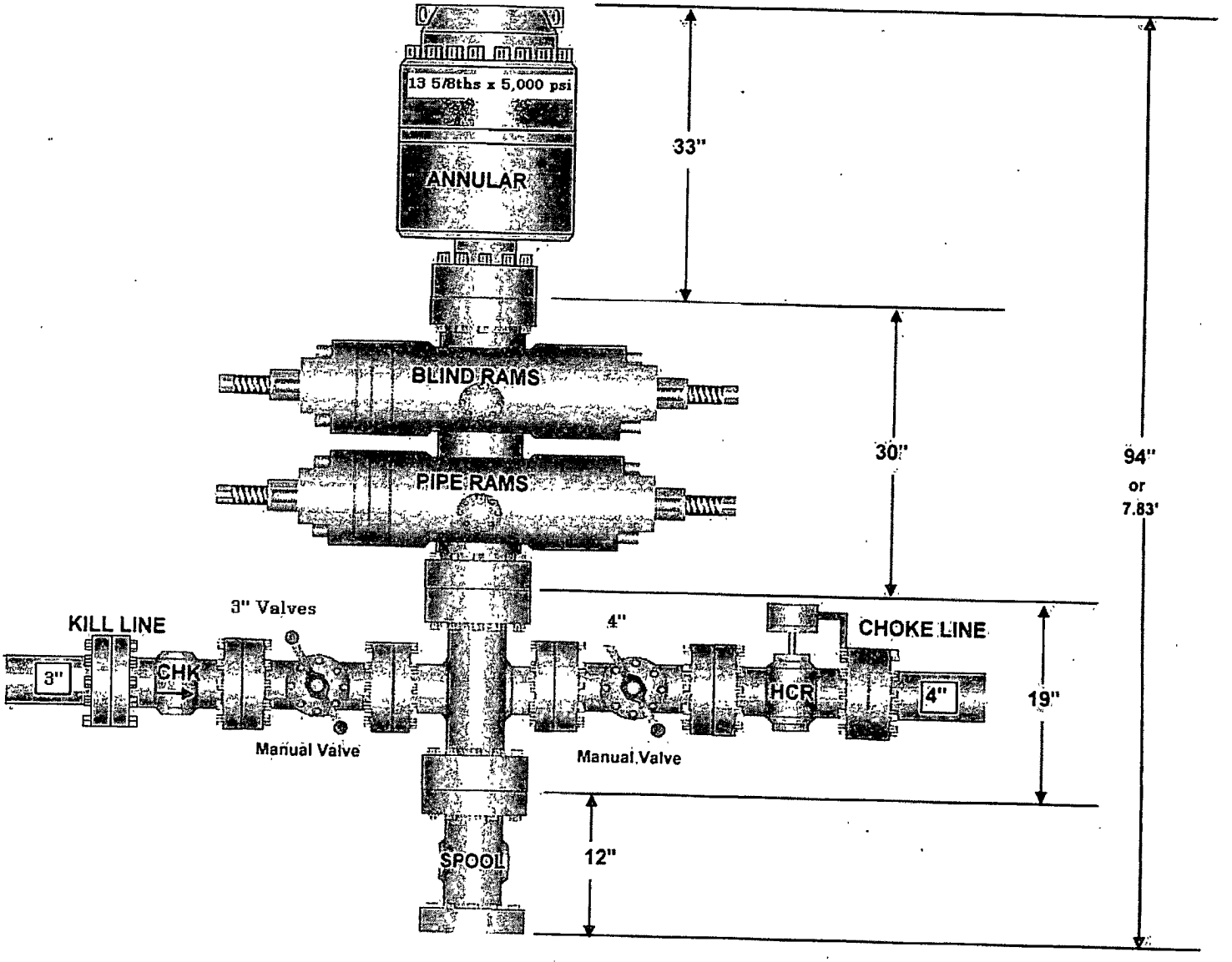
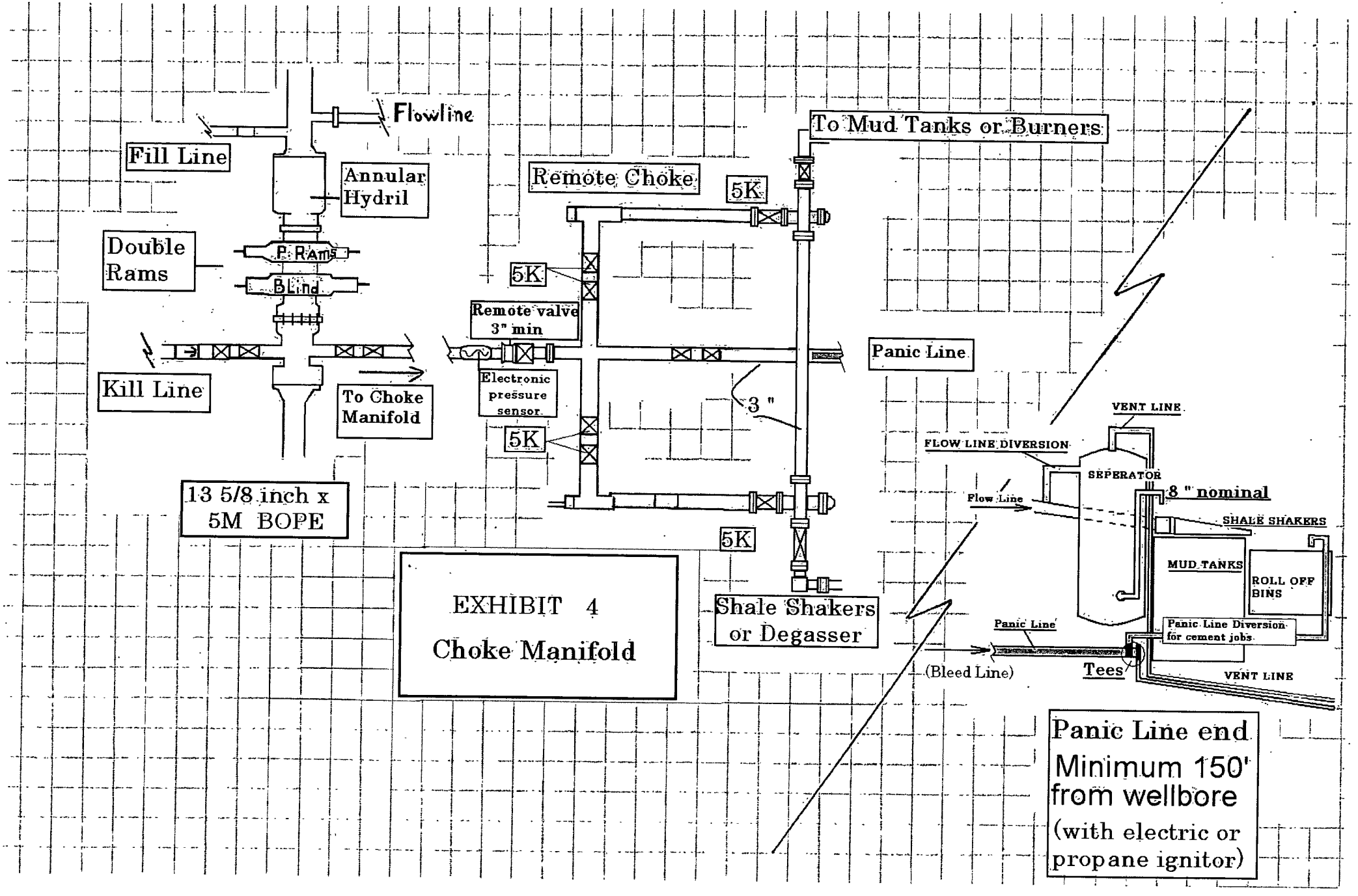
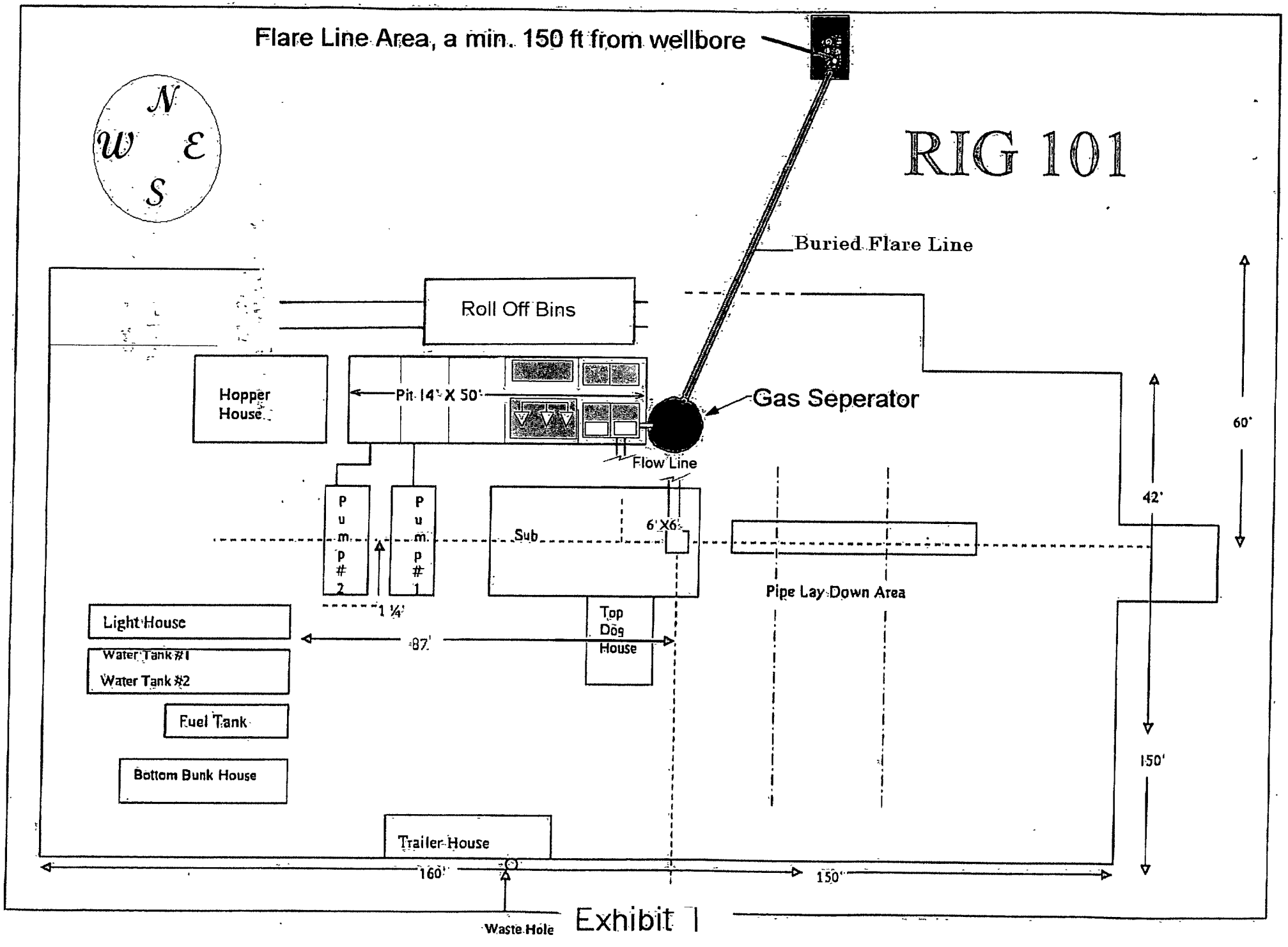


Exhibit 2

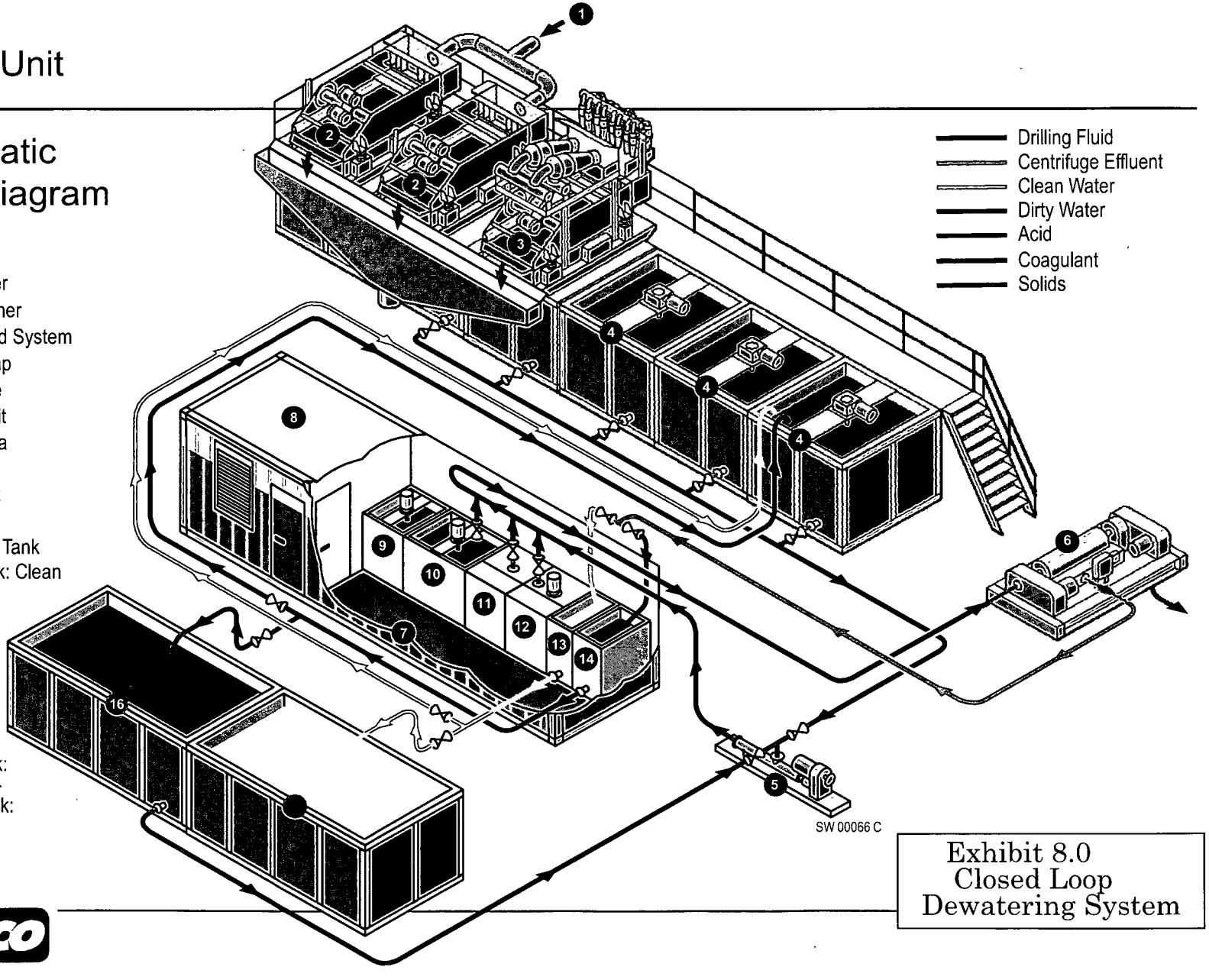

Flowline
Fill Line
Annular Hydril
Double Rams
P. Rams
Blind
Kill Line
To Choke Manifold
13 5/8 inch x 5M BOPE
Remote Choke
5K
5K
Remote valve 3" min
Electronic pressure sensor
5K
3 "
5K
To Mud Tanks or Burners
Panic Line
VENT LINE
FLOW LINE DIVERSION
SEPERATOR
8 " nominal
Flow Line
SHALE SHAKERS
MUD TANKS
ROLL OFF BINS
Panic Line
Panic Line Diversion for cement jobs
(Bleed Line)
Tees
VENT LINE
Shale Shakers or Degasser
EXHIBIT 4
Choke Manifold
Panic Line end
Minimum 150' from wellbore
(with electric or propane ignitor)


Flare Line Area, a min. 150 ft from wellbore
N
W
E
S
RIG 101
Buried Flare Line
Roll Off Bins
Hopper House
Pit 14' X 50'
Gas Seperator
Flow Line
Pump #2
Pump #1
Sub
6' X6'
60'
42'
Pipe Lay Down Area
1 ¼'
Light House
87'
Top Dog House
Water Tank #1
Water Tank #2
Fuel Tank
Bottom Bunk House
Trailer House
160'
150'
150'
Waste Hole
Exhibit 1

Enviro Unit

Schematic Flow Diagram

1. Flow Line
2. Rig Shaker
3. Mud Cleaner
4. Active Mud System
5. Feed Pump
6. Centrifuge
7. Enviro Unit
8. Living Area
9. Mix Tank
10. Store Tank
11. Acid Tank
12. Coagulant Tank
13. Catch Tank: Clean Water
14. Catch Tank: Dirty Water
15. Storage Tank:



SWACO

Exhibit 8.0
Closed Loop
Dewatering System

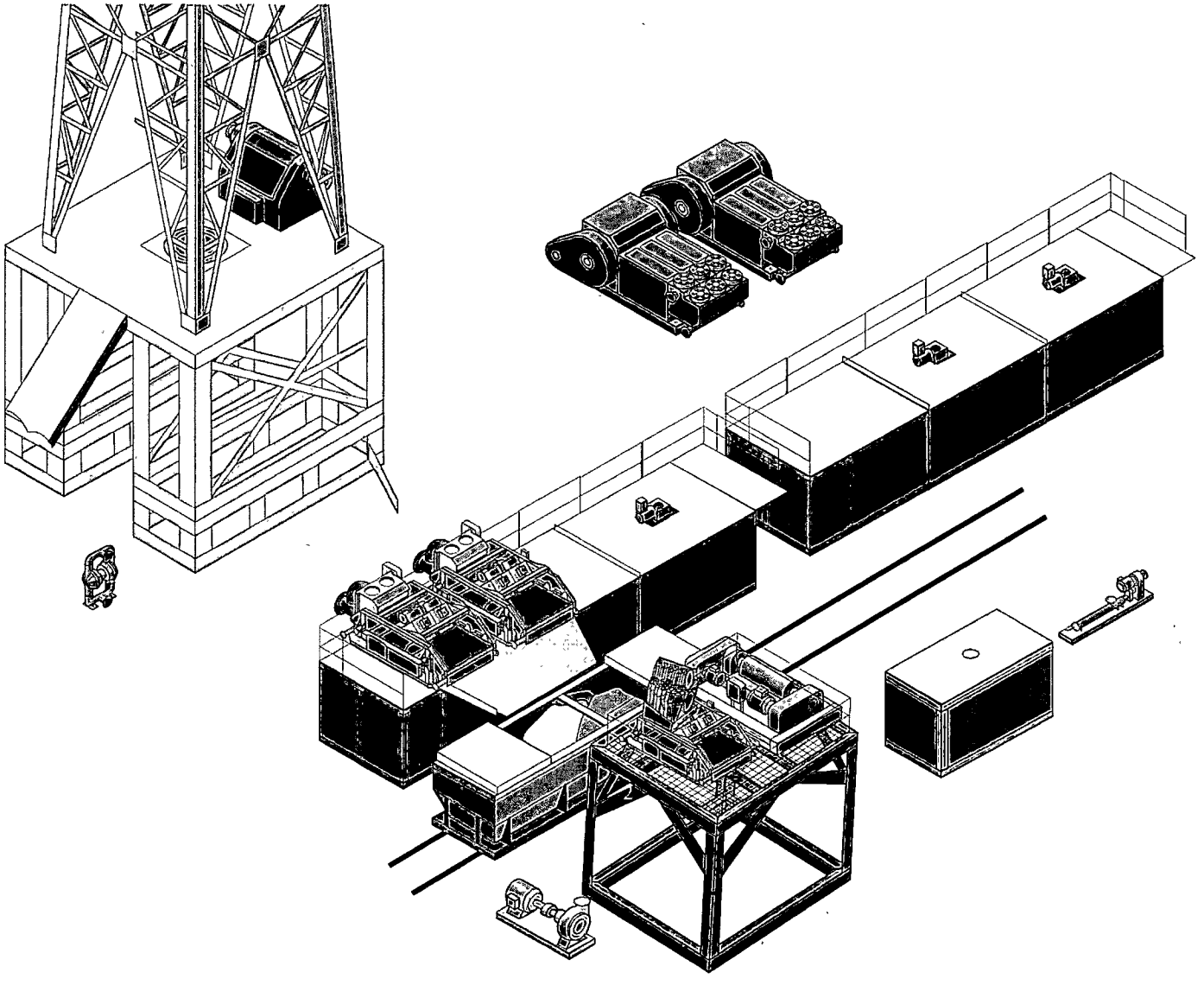


Exhibit 9

Closed Loop/Roll-Off Bins

MI SWACO

C-144 Attachment
Closed Loop System Maintenance Summary
NMOCD Rule 19.15.17 NMAC
District I, NMOCD,
Hobbs, NM at (575) 393-6161

Operator and Well:

Marshall and Winston Incorporated
TJG Federal Com 3 # 1H
Section 3, T. 19 S., R. 32. E
Lea County, NM

Equipment:

The anticipated equipment shall consist of:
Above Ground steel tanks and or Roll-off steel tanks.
Dual motion shale shakers, solid removal centrifuges, gas separator, one 500 bbl fresh water and one 500 bbl brine water frac tanks. The closed loop mud system shall follow the guidance of regulations NM 19.15.17.11 NMAC.

Maintenance:

The drilling crew will inspect the closed loop circulating system at least once during each tour. Inspections or maintenance shall be entered into the driller's log. Any release of spill discovered will be reported to the NMOCD at (575) 393-6161 within 24 hours in accordance to NMOCD Rule 19.15.29 NMAC.

Closure:

All circulating fluids and cuttings deemed for disposal shall be transported to ► (NO.3). The other two sites listed are alternative state permitted waste disposal sites.

1) Gandy Marley Inc., waste disposal site, Route 45 Crossroads, Hwy 380, permit no. NM 711-01-020, EPID 0001002484.
2) Alternative disposal sites are Sundance Services, waste disposal site, located three miles east of Eunice, NM permit no. NM-01-0003.
► 3) Control Recovery Inc. waste disposal site, Halfway, Hwy 62,permit no. NM- 01-0006.

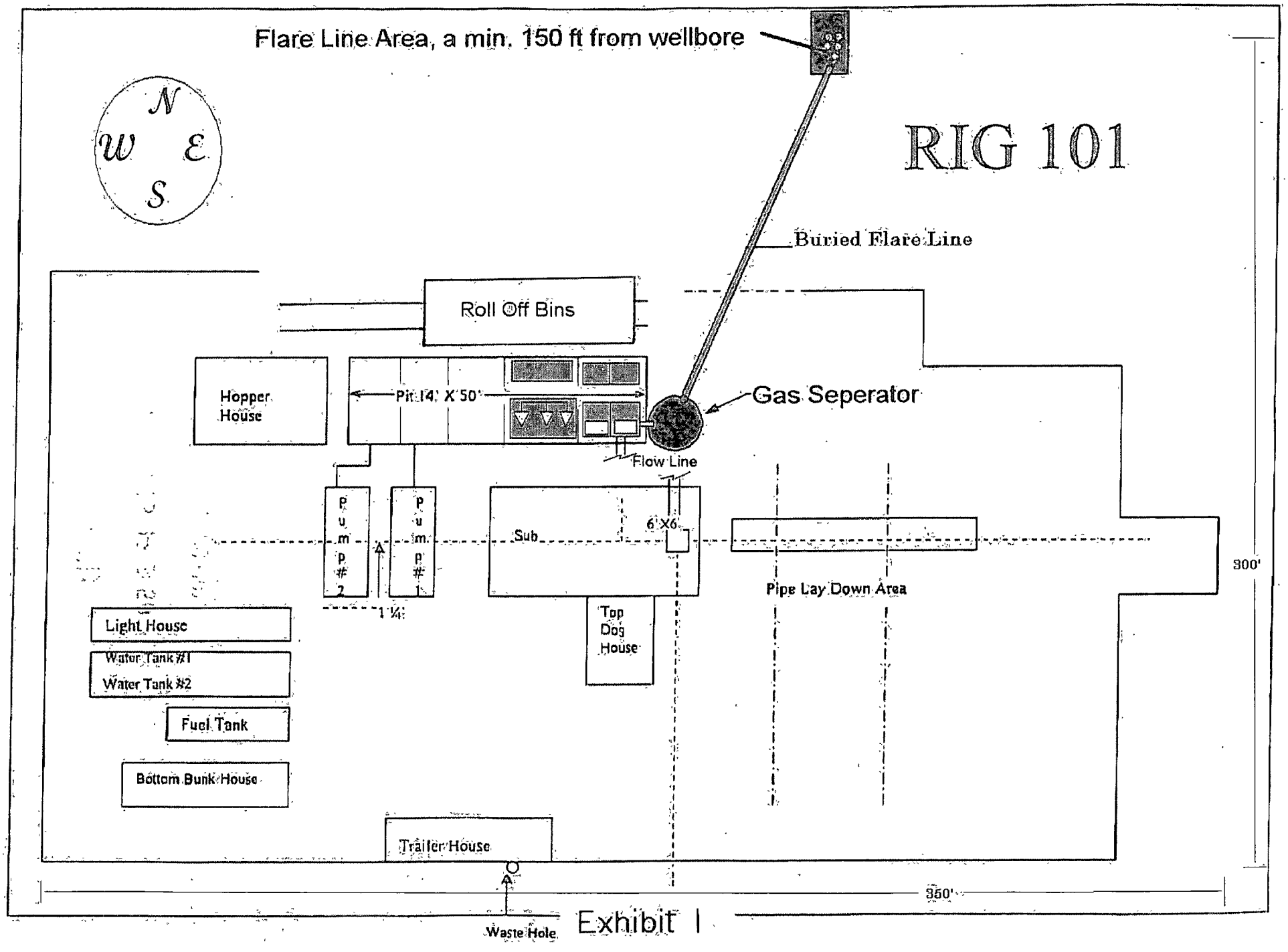


Exhibit I

Amended dimensions of pad size, TJG Fed Com 3-1H, T.Badbear; 09-29-011.

H2S Emergency Procedures

In the case of a release of gas containing H2S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Marshall and Winston Inc. and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H2S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H2S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved, NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and S02:

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1.0	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	$S0_2$	2.21 Air = 1.0	2 ppm	N/A	1000 ppm

Contacting Authorities

Marshall and Winston Inc.'s personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Marshall and Winston Inc.'s response must be in coordination with the State of New Mexico's Hazardous Materials Emergency Response Plan' (HMER)

Marshall & Winston, Incorporated.
P.O. Box 50880 Midland, TX., 79710-0880
OFFICE 1-(432)- 684-6373, Fax 1-(432)-687-2684

COMPANY PERSONNEL:	Cell Phone #
Otis Holt (Wellsite Supervisor)	1-(325)-206-1528
Gabe Herrera (Marshall & Winston – Engineer)	1-(432)-260-8650
Tom Brandt (Marshall & Winston – Operations)	1-(432)-553-9747
George Watters (Marshall & Winston – Geologist)	1-(432)-631-2051

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
PERMIAN BASIN

This Hydrogen Sulfide Drilling Operations Plan shall be implemented prior to drilling out from under casing (surface or intermediate) set above potential H_2S bearing formations.

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

All personnel entering a location posted with the potential of Hydrogen Sulfide shall be required to carry documentation that they have received the proper training. (Training certificate typically valid for 1 year after training)

II. Site Specific Information:

Upon installation of H2S Safety Equipment and Systems on a well, and prior to drilling out of casing above potential Hydrogen Sulfide bearing formations a briefing with all personnel on location shall be held. The briefing should include a review of H_2S Drilling Operations Plan and the Public Protection Plan. This briefing should include site specific elements such as;

- Identification of the briefing areas.
- Discussion of rig orientation and prevailing wind direction.

- Identification of access roads, including secondary egress.
- Confirmation that all personnel have current training.
- Formation tops of potential H2S bearing formations.

The H_2S Drilling Operations Plan and the Public Protection Plan shall be available at the well site.

III. H_2S Safety Equipment and Systems

1. Well Control Equipment that will be installed prior to drilling out of casing above potential Hydrogen Sulfide bearing formations:
   - A. Choke manifold with a minimum of one adjustable choke.
   - B At least one choke line must be directed away from the drilling unit and secured at the end. (For closed-loop operations this should be directed to containment bin at the back edge of the location.)
   - C Blind rams and pipe rams to accommodate all pipe sizes
   - D Annular preventor
   - E Properly sized closing unit.

1.1 Well control equipment to be available to install as needed should H2S be encountered;
   - .A Flare line with electronic igniter or continuous pilot.
   - B Mud gas separator
   - C Flare gun with flares.
   - D One portable S02 monitor positioned near flare line.

2. Protective equipment for essential personnel:
   - A. 30-minute air pack units located in the dog house and at briefing areas.

3. H_2S detection and monitoring equipment:
   - A. Two portable H_2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S levels of 20 ppm are reached.

4. Visual warning systems:
   - A. Wind direction indicators.
   - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

5. Mud program:
   A. The mud program shall be designed to minimize the volume of H_2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H_2S scavengers will minimize hazards when penetrating H_2S-bearing zones.
   B. A mud-gas separator and an H_2S gas buster will be utilized as required if H2S is encountered.

6. Metallurgy:
   A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.
   B. All elastomers used for packing and seals shall be H_2S trim.

7. Communication:
   A. Communications shall be available on the rig site and in company vehicles. Communications equipment may include one or more of the following; land lines, satellite phones, cellular telephone and 2-way radios.

Emergency Phone Numbers

Artesia	State Police	(575) 746 -2703
Artesia	City Police	(575) 746 -2703
Artesia	Sheriff's Office	(575) 746 -9888
Artesia	Ambulance	911
Artesia	Fire Department	(575) 746 -2701
Artesia	LEPC (Local Emergency Planning Committee)	(575) 746 -2122
Artesia	NMOCD	(575) 748 -1283
Carlsbad	State Police	(575) 885 -3137
Carlsbad	City Police	(575) 885 -2111
Carlsbad	Sheriff's Office	(575) 887 -7551
Carlsbad	AMBULANCE	911
Carlsbad	Fire Department	(575) 885 - 2111
Carlsbad	LEPC (Local Emergency Planning Committee)	(575) 887 - 3798
Carlsbad	US Bureau of Land Management	(575) 887 – 6544
Santa Fe	N.M. Emergency Response Commission	(505) 476 -9600
24 Hr.	" " " "	(505) 827 -9126
Santa Fe	N.M. State Emergency Operations Center	(505) 476 -9635
Washington D.C.	National Emergency Response Center	1-(800) 424 -8802

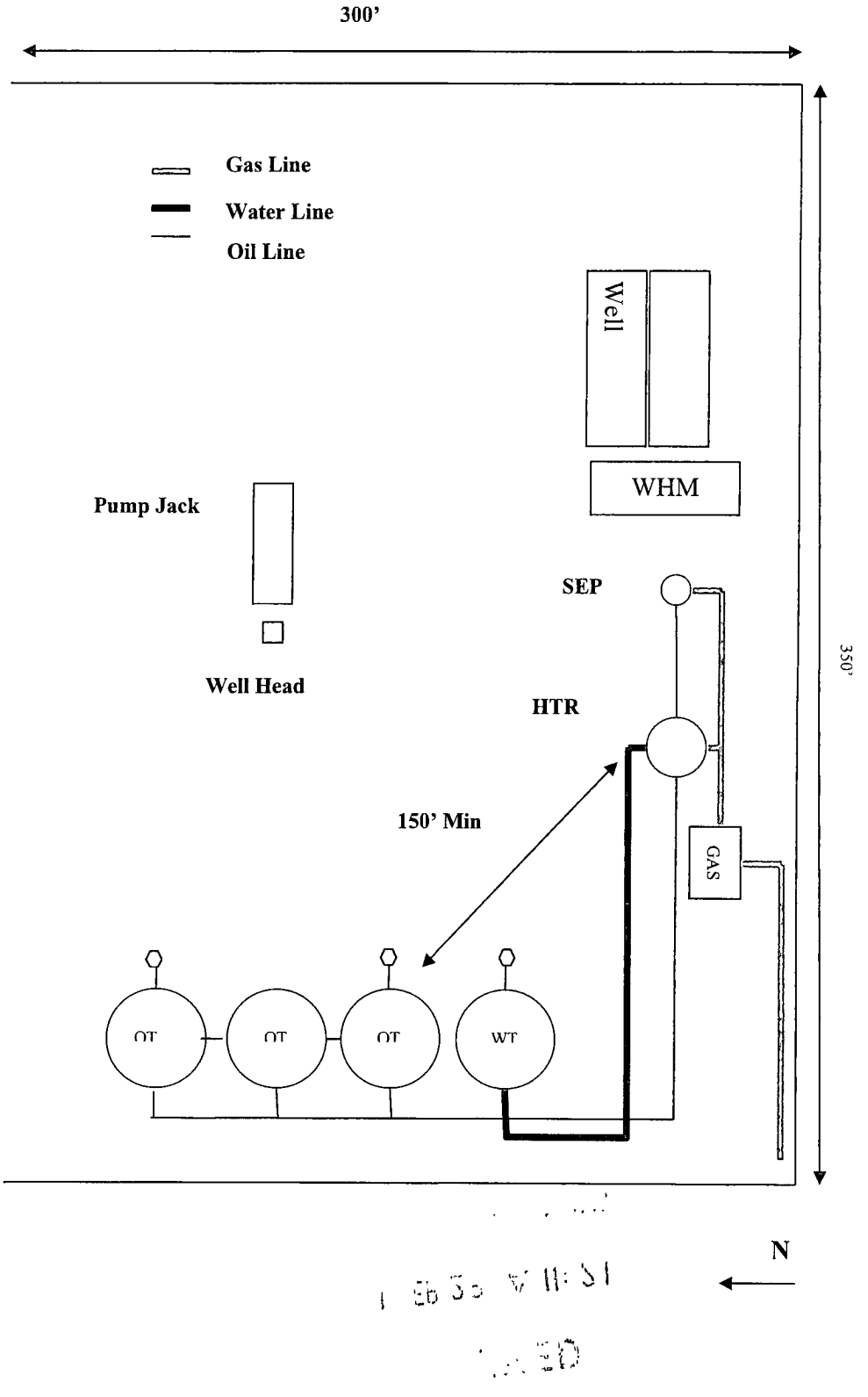
Other Services :

Houston	Boots & Coots IWC	1-800-256-9688 or (281) 931 -8884
Odessa	Cudd Pressure Control	(915) 699-0139 or (915) 563 -3356
Artesia	Halliburton	(575) 746-2757
Artesia	B.J. Services	(575) 746-3569

Air Ambulance

Lubbock, Tx	Flight For Life, 4000 24th St.	(806) 743 - 9911
Lubbock, TX	Aerocare, Rt 3 Box49-F	(806)747- 8923
Albuquerque, NM	Med Flight Air Amb, 2301 Yale Blvd SE #D3,	(505) 842 - 4433
Albuquerque, NM	S B Air Med Svc, 2505 Clark Carr Loop SE,	(505) 842 - 4949

SITE FACILITY DIAGRAM



SURFACE USE PLAN

1. **Existing Roads and Maps:**

SUPO Exhibit 1: The NMOCD Form C-102, Survey Plat, shows the proposed well site as staked.
SUPO Exhibit 2: The 600's Arch Map and access roads anticipated the well location. The survey has directions to location as well as: From the intersection of Hwy. # 529 and Co.Rd. # H126 (Maljamar Rd).), go south on CO.Rd. # H126 approximately 8.0 miles. Turn left and go northeast approximately 2.6 miles, turn right and go southwest approximately 0.3 miles, turn right and go south approximately 0.2 miles. Turn left and go east approximately 0.3 miles to a proposed road survey. Follow road survey takes south approximately 177 feet. This location is staked approximately 230 feet southeast. All existing roads will be maintained in a condition to or better than the current conditions. Any new roads will be constructed to BLM specifications.
SUPO Exhibit 3: Location Verification Map.
SUPO Exhibit 4: Vicinity Map: Indicating direction north, T.19 S, R. 32 E., the well's surface location SESE of Section3. Other landmarks are the Maljamar Hwy (H126) bound N & S, Hwy 62-180 (Hobbs-Carlsbad) bound E & W, The Lusk Plant, surrounding townships and some adjacent county roads.
SUPO Exhibit 5: 1-mile radius map encompasses the relation to a horizontal wellbore.

2. **Planned Access Roads:** There is 177'of proposed access road from the Lease road onto and across the arch-survey area ending at the drilling foundation location.

3. **Locations of Existing Wells in a One-mile radius –**

1. Water Wells – None known.
2. Disposal wells – None known.
3. Drilling wells – N/A
4. Producing wells- See 1-Mile Radius Map.
5. Abandoned wells – Superior State # 1, 1200' East 1965 (Queen), Shell Federal # 4, U/L N, P & A'd, 166 (7R), See 1-Mile Radius Map.

4. **If a completion on this well is a producer**, Marshall & Winston Inc. will furnish maps or plats showing on site facilities or off site facilities if needed. This will be accompanied by a Sundry Notice.

5. **Location and Type of Water Supply:**
Water will be purchased from the rancher's water wells trucked over the access roads. Other sources of water may be needed, if so, the route access roads will be used.

6. **Source of Construction Material:**
Construction material may be obtained from Marshall and Winston's surface. If additional material is needed, it will be purchased from a local source. Material will be transported over the access routes as shown on attached surveys and maps.

7. **Methods of Handling Waste Material:**
A. Drill cuttings will be separated by a series of solids removal equipment and stored in steel containment pits and then hauled to a state- approved disposal facility.
B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.
C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
D. Sewage from any living quarters will drain into holding tanks and be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
E. Drilling fluids will be contained in the steel pits in a closed circulating system. Fluids will be cleaned and reused. Water produced during testing will be contained in the steel pits and disposed of at a state approved disposal facility. The primary anticipated disposal site is CRI, Halfway, NM Hwy 62, Permit No. NM -01-0006. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8. **Ancillary Facilities:**
A. No camps or airstrips to be constructed.

9. **Well Site Layout:**
A. The drilling rig layout diagram is attached.
B. Mud pits in the closed circulating system will be steel pits and the cuttings will be stored in steel containment pits.
C. Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility
D. If the well is a producer, those areas of the location not essential top production facilities will be reclaimed and seeded per BLM requirements.

10. **Plans for Restoration of Surface**:

Rehabilitation of the location will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be notified in certain circumstances to prevent inundation of the location's pad and surface facilities.

After the area has been shaped and contoured, topsoil form the spoil pile will be loaced overt the disturbed area to the extent possible. Re-vegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be re-contoured to match the existing terrain. Topsoil will be spread to the extent possible. Re-vegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required form production facilities.

11. **Other Information:**

A. Topography consists of a sloping plane with loose tan sands. Vegetation is mainly Yucca, Mesquite and Shin Oak.

B. The well site is on the surface owned by Marshall and Winston Incorporated. The land is used mainly for cattle ranching, horse grazing and oil and gas production.

C. An archaeological survey will be conducted on the location and proposed roads, and this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.

D. There is no residential dwelling within 1 ½ miles of this location.

12. **Surface and Mineral Ownership:** The surface and minerals are owned by the U.S.A. and managed by the BLM, Carlsbad, NM (575) 234-5972. The two leases utilized are NMLC 0067230, and NMLC 0067982B.

Lessee's or Operator's Representative and Certification

As required for APD approval in accordance to Onshore Orders 1, 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 currently exist; that the statements made in this plan are , the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Marshall & Winston Incorporated and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of false statement.

Name and Title: Vicki D Dye - Agent **Dated:** 7-26-2011

RE: TJG Federal Com 3 # 1H , Sec. 3 T 19 S, R 32 E, Lea County, NM