OXY USA Inc.
9-POINT DRILLING PLAN

Well Information

Ute Water Federal 27-13A
Section 27, Township 9S, Range 94W
Mesa County, Colorado

1. Geologic Markers and Formations

Names and estimated tops of all geologic groups, formations, members or zones are shown in the table below. Also indicated are probable gas-bearing horizons. The only anticipated water-bearing zones are in the Upper Wasatch. Standard drilling practice is to case off these zones to protect any useable water resources.

Geologic Prognosis

Prognosed Formation Tops			Ungraded GL: 7190 ft		TVDSS (ft)	Gas
Tops			MD (ft)	TVD (ft)		
Wasatch	Fort Union Shale		3399	3160	4048	
Mesaverde	Williams Fork	TOP Marker Mesaverde	3779	3595	3613	
		Ohio Creek	4048	3765	3445	●
		Williams Fork	4150	3862	3266	
		Cameo Coal	6405	6093	1035	●
	Iles	Rollins	6805	6493	635	
	TD based upon structural control at top of Rollins in this area		7673	7673	-242	

2. Estimated Tops of Anticipated Water, Oil, Gas or Minerals and Operator's Plan for Protection

Upper Wasatch (freshwater)	120-500' possible lost circulation
Williams Fork (gas)	4150' mD
Cameo Coal (gas)	6405' mD

The casing and cementation programs will be designed to protect the local aquifers', provide hydraulic isolation to any hydrocarbon bearing zones of non interest in addition to protecting sensitive mineral deposits from contamination and erosion.

All water bearing zones encountered and or indications of water bearing zones will be reported to the appropriate agency within 24 hrs.

Casing will be tested to 0.22 psig/ft or 1500 psig, whichever is greater, but not to exceed 80% of the minimum internal yield pressure, as per standard operating procedures (SOP).

3. The Operators Minimum Specifications for Pressure Control

A schematic diagram of the BOP equipment is provided in Attachment "A".

An annular 11", 3M Blowout Preventer (BOP) along with one pipe ram and one blind ram, will be installed on the 9-5/8" surface casing. The BOP equipment will be used, maintained and tested in accordance with requirements specified in Section III A-1 of Onshore Order 2.

The kill line will not be used as a fill up line.

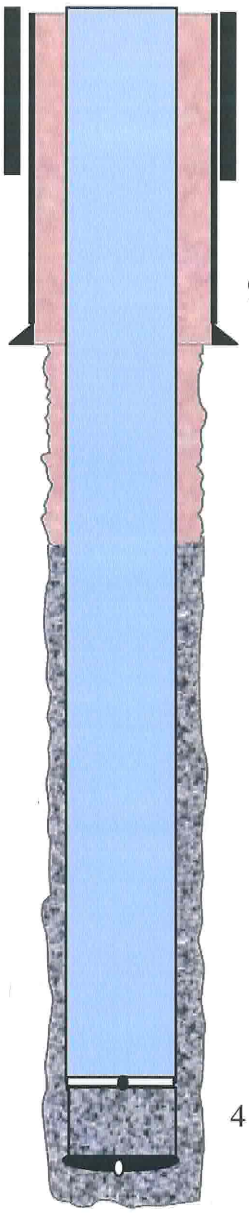
This BOP equipment will be nippled up on the surface casing and tested to 2000 psi before drilling out. The surface casing will be tested to 80% of the rated burst pressure before drilling out. (see attached casing specification sheet).

In addition, the BOP equipment will be tested after any repairs made and or breaks in the connections. The BOP equipment will be fully tested at 21 day intervals and function tested every 7 days.

4. Proposed Casing Setting and Cementing Program

9-5/8" surface casing will be set ~ 1500', will be set to provide proper containment and well control as well as covering all freshwater zones. It will be cemented to surface. Cement volume will be calculated to lift cement to surface plus 75% excess in order to account for any settling action that may occur in addition to allow for potential losses during the cementing operations.

The cement volume for the 4-1/2" production casing will be calculated to cover 500' above any commercial hydrocarbon zones encountered, thereby providing proper hydraulic isolation and preventing any crossflow of the zones of interest.



16 ½" Conductor is set at 90 ft

9 5/8" casing will be set at +/- 1500 ft mD

Formation	ft mD	ft TVD	Ft SS
TOP Marker Mesaverde	3779	3595	3613
Ohio Creek	4048	3765	3445
Williams Fork	4150	3862	3266
Cameo Coal	6405	6093	1035
Rollins	6805	6493	635

4 ½" casing will be set at FTD, estimated at 7673 ft mD

Casing Program:

Hole Size	Casing Size	Wt.	Grade	Connection	Length	Setting Depth	Condition
12-1/4"	9-5/8"	36.0#	K-55	LTC	1500'	1500'	New
7-7/8"	4-1/2"	11.6#	N-80	LTC	7673	7673'	New

9-5/8", 36#, K-55, LTC	Collapse	Burst	Tensile	ID	Make-up Torque
100%	2020 psi	3520 psi	489,000 lb	8.921"	Optimum – 4350
80%	1616 psi	2816 psi	391,200 lb	8.765" Drift	

4-1/2", 11.6#, N-80, LTC	Collapse	Burst	Tensile	ID	Make-up Torque – Optimal (ft-lbs)
100%	6,350 psi	7,780 psi	304,000 lb	4.00"	Make up to mark
80%	5,080 psi	6,224 psi	243,200 lb	3.875" Drift	

Casing Program							
Item	From (ft)	To (ft)	Length (ft)	Weight (ppf)	Grade	Joint Type	Total Weight (lbs)*
9-5/8"	0	1500	1500	36	K-55	LTC	*54,000
4-1/2"	0	7673	7673	11.6	N-80	BTC	*89,006

* buoyancy is not calculated

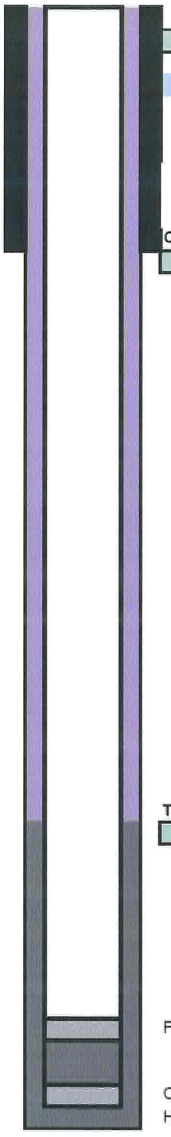
Minimum Safety Factors			
Item	External Pressure Collapse	Internal Yield Pressure	Tension Yield Strength
Target	1	1.1	1.3
9-5/8"	4.5	1.7	4.8
4-1/2"	1.9	1.6	3.2

Cementing Program:

Casing String:	9-5/8", 36#, K-55 Surface Casing	
Slurry Design Basis:	Lead slurry: Halliburton Rockies Light Cement (see below for additives). 9-5/8" X 12-1/4" annulus with 75% excess, 60' of 9-5/8" X 16" annulus. Calculated top of cement = Surface' Tail slurry: Halliburton Standard Cement. 72' of 9-5/8", 36# shoe track; 1500' of 9-5/8" X 12-1/4" annulus with 75% excess. Calculated top of cement = 1077' MD	
Fluids Sequence / Volume:	Spacer	10 bbls Water Spacer at 8.3 ppg
	Lead Slurry	Rockies LT, 12.3 ppg; 2.37 cf/sx 146 bbls
	Tail Slurry	Rockies HE, 12.8 ppg; 2.08cf/sx, 29 bbls

9 5/8" CASING & CEMENTING WORKSHEET:

Well: Ute Federal 27-13A



Top Lead: 0 (FtMD)

OH - 12 1/4"

Conductor: 90

Top Tail Cmt: 1077

Float Collar: 1419

Csg Set @: 1495

Hole Depth: 1500

Casing String Design:	Length	Interval Btm	Interval Top
* Float Shoe	2.5	1495.00	1492.50
* 2 Jts K-55 36# LTC	72	1492.50	1420.50
* Float Collar	2	1420.50	1418.50
* 17Jts.K-55 36# LTC	598.4	1418.50	820.10
* Marker Jt	15	820.10	805.10
*2 Jts K-55 36# LTC	72	805.10	733.10
*15 Jts.K-55 36# LTC	650	733.10	83.10
* LJ - K-55 36# LTC	75	83.10	8.10

Calculations: Lead 0 to 1076.5

12.3 ppg

Slurry Volume:

468 (log Volume cu/ft) X 75% (excess) = 351 cu/ft

1495 (csg annulus ft) X 0.313 (ann vol) = 468 cuft

Total Slurry: 819 (cu/ft) = 146 bbls

Cement Required:

819 / 2.34 (yield) = 350 sxs; 15.0 MT

Mix Fluid:

350 X 12.71 gal/sk = 4451 gallons; 106 bbls

Calculations: Tail 1500 to 1076.5

12.8 ppg

Slurry Volume:

133 (log Volume cu/ft) X 0% (excess) = 133 cu/ft

72 (shoe jts) X 0.442 (cu/ft/ft) = 32 cuft

Total Slurry: 164 (cuft) = 29 bbls

Cement Required:

164 / 2.08 (yield) = 79 sxs; 3.4 MT

Mix Fluid:

79 X 10.75 gal/sk = 850 gallons; 20 bbls

TOTAL CEMENT REQUIRED: 429 SXS; 18.3 MT

DISPLACEMENT:

	N-80	1418.50	X	0.078703	=	111.6 BBLS
	N-80	0	X	0.078703	=	0.0 BBLS
Cementers	TOTAL	111.6	-	106.6	=	5.0 BBLS
(RIG)	TOTAL	106.6	/	0.223	=	478 Strokes
				(1/2 Shoe track)		510 Strokes

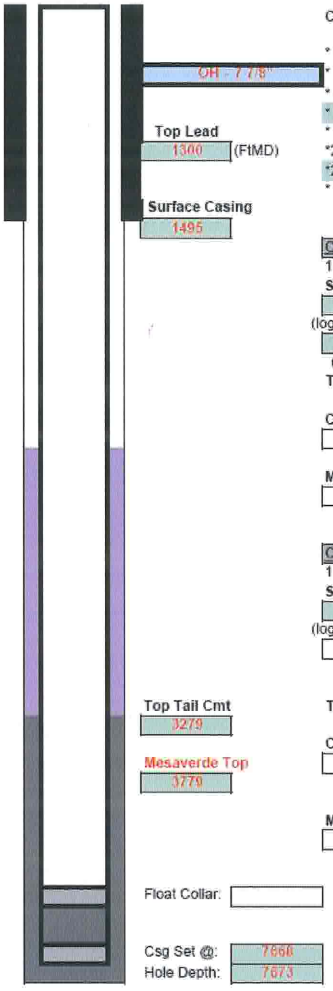
BUMP STROKES: 478 STKS

MAX. STROKES 510 STKS

Casing String:	4-1/2", 11.6#, N-80 Production Casing	
Slurry Design Basis:	Lead slurry: Halliburton Light Standard; 4-1/2" X 9-5/8" annulus with 25% excess, 100' of 4-1/2" X 9-5/8" annulus. Calculated top of cement 1300' MD Tail slurry: Halliburton 50/50 Poz Mix Premium; 42' of 4-1/2", 11.6# shoe track; 4-1/2" X 8-3/4" annulus with 40% excess. Calculated top of cement 500' MD above the top of Mesaverde	
Fluids Sequence / Volume:	Spacer	10 bbl Water
	Reactive Spacer	30 bbls SUPER FLUSH 101 at 10 ppg

	Spacer	10 bbl Water
	Lead Slurry	HLC-Type V/SJ 11.0 ppg; 2.75 cf/sx, 145 bbls
	Tail Slurry	Premium Valley Tail, 13.1 ppg; 1.62 cf/sk., 184 bbls
	Displacement	32 bbls 2% KCl Water

4 1/2" CASING & CEMENTING WORKSHEET: **Well:** Ute Federal 27-13A



Casing String Design:	Length	Interval Btm	Interval Top
* Float Shoe	2.5	7668.00	7665.50
* 2 Jts N-80 #11.6 BTC	72	7665.50	7593.50
* Float Collar	2	7593.50	7591.50
* 17Jts N-80 #11.6 BTC	598.4	7591.50	6993.10
* Marker Jt	15	6993.10	6978.10
*2 Jts N-80 #11.6 BTC	72	6978.10	6906.10
*230 Jts. N-80 #11.6 BTC	6925	6906.10	-18.90
* Stick up N-80 #11.6 BTC	5	-18.90	-23.90

Calculations:	Lead	1300	to	3279	
11.0 ppg					
Slurry Volume:					
650.8 (log Volume cu/ft)	X	25% (excess)	=	163	cu/ft
83.1 (csg ann V)	+	587.7 Open Hole V	=	651	cuft
Total Slurry:		813 (cu/ft)	=	145	bbls
Cement Required:					
813	/	2.75 (yield)	=	296	sxs
				12.6	MT
Mix Fluid:					
296	X	16.29 gal/sk	=	4819	gallons
				115	bbls

Calculations:	Tail	3279	to	7673	
13.1 ppg					
Slurry Volume:					
1001.0 (log Volume cu/ft)	X	0% (excess)	=	1001	cu/ft
72 (shoe jts)	X	0.411 (cu/ft/ft)	=	30	cuft
Total Slurry:		1031 (cuft)	=	184	bbls
Cement Required:					
1031	/	1.62 (yield)	=	636	sxs
				27.2	MT
Mix Fluid:					
636	X	7.43 gal/sk	=	4727	gallons
				113	bbls

TOTAL CEMENT REQUIRED:				932	SXS
				39.8	MT

DISPLACEMENT:

	N-80	7591.50	X	0.0042	=	31.9	BBLS
	N-80		X		=	0.0	BBLS
(Cementer))	TOTAL	31.9	-	26.9		5.0	BBLS
(RIG)	TOTAL	26.9	/	0.223	=	121	Strokes
					(1/2 Shoe track)	122	Strokes

BUMP STROKES:	121	STKS
MAX. STROKES	122	STKS

5. Drilling Fluid Program

The drilling fluid specifications described in Drilling fluid Table A will be used to drill surface to 1,000'. The system will be converted to the drilling fluid specifications described in Drilling fluid Table B for drilling below 1000'. Drilling fluid properties will generally follow the schedule below but may change as hole conditions dictate.

Sufficient drilling fluid materials will be stored onsite to maintain drilling fluid properties, control lost circulation and to contain potential well control situations.

All drilling fluid additives are biodegradable and Material Safety Data Sheets (MSDS) will be kept on location at all times.

No chrome constituent additives will be used in the drilling fluid system without prior Bureau of Land Management (BLM) approval.

Drilling fluid Table A

Hole Section / operation:				Drill 12-1/4" Surface hole to 1,000' MD			
Type	**Density (ppg)**	**Viscosity**	**PV**	**YP**	**API FL**	**Drill Solids**	**Gels 10 sec**
WBM - LSND	8.6 – 9.0	40-50	10-20	10-15	10 -15	<7%	8 - 15

Drilling fluid Table B

Hole Section / operation:				Drilling 7-7/8" Production interval			
Type	**Density (ppg)**	**Viscosity**	**PV**	**YP**	**API FL**	**pH**	**Drill Solids**
WBM - LSND	8.8 – 9.5	45-55	12 - 20	12-18	< 8	8-9	4% - 8%

The drilling fluid will be checked at regular intervals during the drilling operations to determine density, viscosity, chlorides, pH, fluid loss, and LCM.

In addition, the circulating system will contain a gas monitoring system to continuously monitor total hydrocarbon gas levels.

Hole Size (in)	Casing Program		Formations	Interval Comments	Mud Weight (ppg)	Mud Properties
12 1/4" Hole			Surface	**LSND** Drill out with a **NewGel/NewPHPA** System. Add 10-15 ppb **NewGel** add 0.5-1.0 ppb **NewPHPA DSL** and adjust for a 10-15 YP. Additions of **Flow-zan** can be made to enhance low-end Rheology as required. Additions of **Caustic Soda** for a 8.5-9.0 Ph. Sweep hole with High Viscosity **NewGel NewPHPA** sweeps as needed. Reduce YP for cementing operations.	8.5-9.0	**Viscosity** (sec/qt): 40-50 **PV:** 10-15 **YP:** 10-15 **Solids:** </= 6% **Fluid Loss:** 10-15
8 5/8" Casing		1,500'	Casing Point			
7 7/8" Hole				**LSND** Drill out float and casing shoe. Mud up to a **LSND** system. Mix 12-15 ppb **NewGel** for a 40 Sec/Qt viscosity. Build and maintain 0.5-1.0 ppb **NewPHPA**. Maintain API filtrate at 8-10 cc's with **NewPAC** as required.	8.7-8.9	**Viscosity** (sec/qt): 45-55 **PV:** 12-20 **YP:** 12-18 **Fluid Loss:** 8-10 cc's **Solids:** <6%LGS **pH:** 8.0-9.0
		4,129'	Williams Fork			
		6,176	TOG	Possible Lost Circulation Pump sweeps of **NewCarb** and **DynaFiber** frequently. If Losses are severe consider 10-20% with coarse LCM such as **FiberSeal** and **Sawdust**.	8.8-9.2	
		6,701'	Cameo Coal	Pump **FlexDrill** Sweeps as needed for increased penetration and lubricity. For lubricity pump sweeps with **New100N** and **New Ease** as needed. Allow concentrations to rise to 2-4% if required.		
		7,133'	Rollins Sandstone		9.0-9.3	
		7,527'	Cozette Sandstone	Possible Lost Circulation Increase Mud Weight with additions of **NewBar** as hole conditions dictate.		**Viscosity** (sec/qt): 50-60 **PV:** 12-20 **YP:** 12-18 **Fluid Loss:** </= 8-10 cc's **Solids:** 7-10% **pH:** 8.0-9.0
		7,713'	Corcoran		9.3-9.5	**Casing Operations:** **Reduce YP to +/- 15**
4 1/2" Casing		7,963'	TD			

*** Please note the 8 5/8" casing for surface is a typo, it will remain 9 5/8" by 36# casing (K-55)**

6. Logging Program

The logging program for the well is described in the table below. Due to the inherent instability of the wellbore, there is an increased risk of losing wireline logging tools. Consequently, wells are evaluated using cased hole logging to evaluate resource potential.

Open hole logs may be run under specific circumstances (e.g. for geomechanical data).

Hole Section:	Logging Company	Required Sensors / Service
12-1/4" Surface:	No Logging	
7-7/8" Production:	Mud Logging - Totco	Gas Detector on mud return line
Cased Hole:	Halliburton	cement bond, casing collar locator, spectral gamma ray, neutron, and temperature logs will be acquired from TD up to top of cement
Open Hole:	Halliburton	Neutron density, sonic, spectral gamma ray, spontaneous potential and resistivity

6. Anticipated Pressures and Temperatures

No abnormal pressures, temperatures or hazards are expected to be encountered.

No overpressured intervals are expected. Proper drilling fluid weight will be maintained to drill at a balanced or slightly over-balanced condition.

The Williams Fork Shale zone has potential for lost circulation due to the fractured nature of the shale. In addition to drilling in a balanced or slightly over-balanced condition, the drilling fluid will contain various types of LCM to plug the fractures and prevent losses.

No H2S or other hazardous gases have been encountered in offset wells.

7. Directional Program

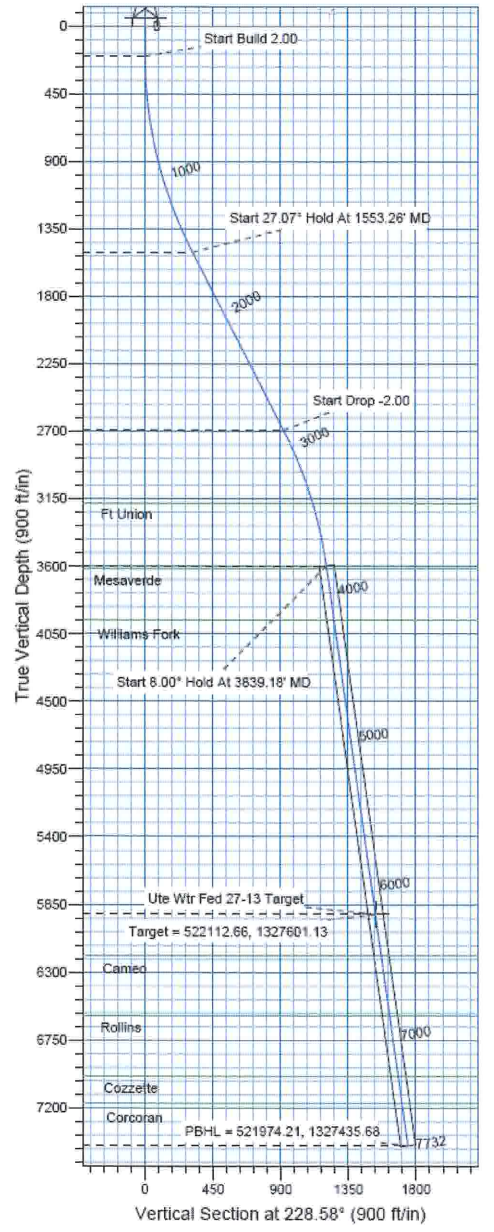
(Directional program description to be provided for each APD)

Maximum Planned Hole Inclination:	27.07 deg
Proximity Issues:	None
Survey Program:	Real-Time MWD

WELL DETAILS: Ute Water Fed 27-13

GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217) 7208.00

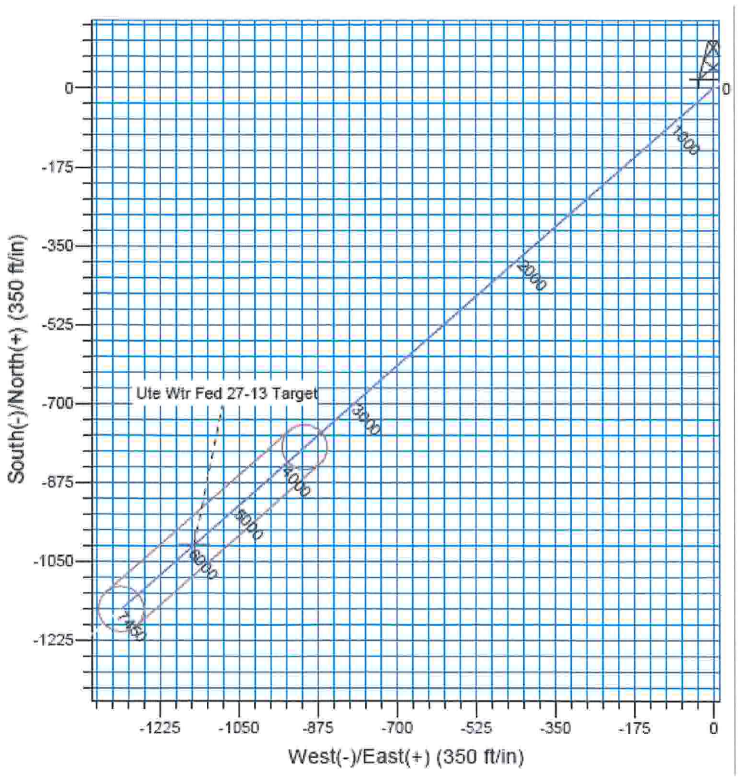
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.00	0.00	523095.84	1328776.01	39° 14' 44.210 N	107° 52' 13.126 W	



Project: Garfield County, CO NAD27
Site: Ute Water 27-11 Pad
Well: Ute Water Fed 27-13
Wellbore: OH
Design: Plan #1

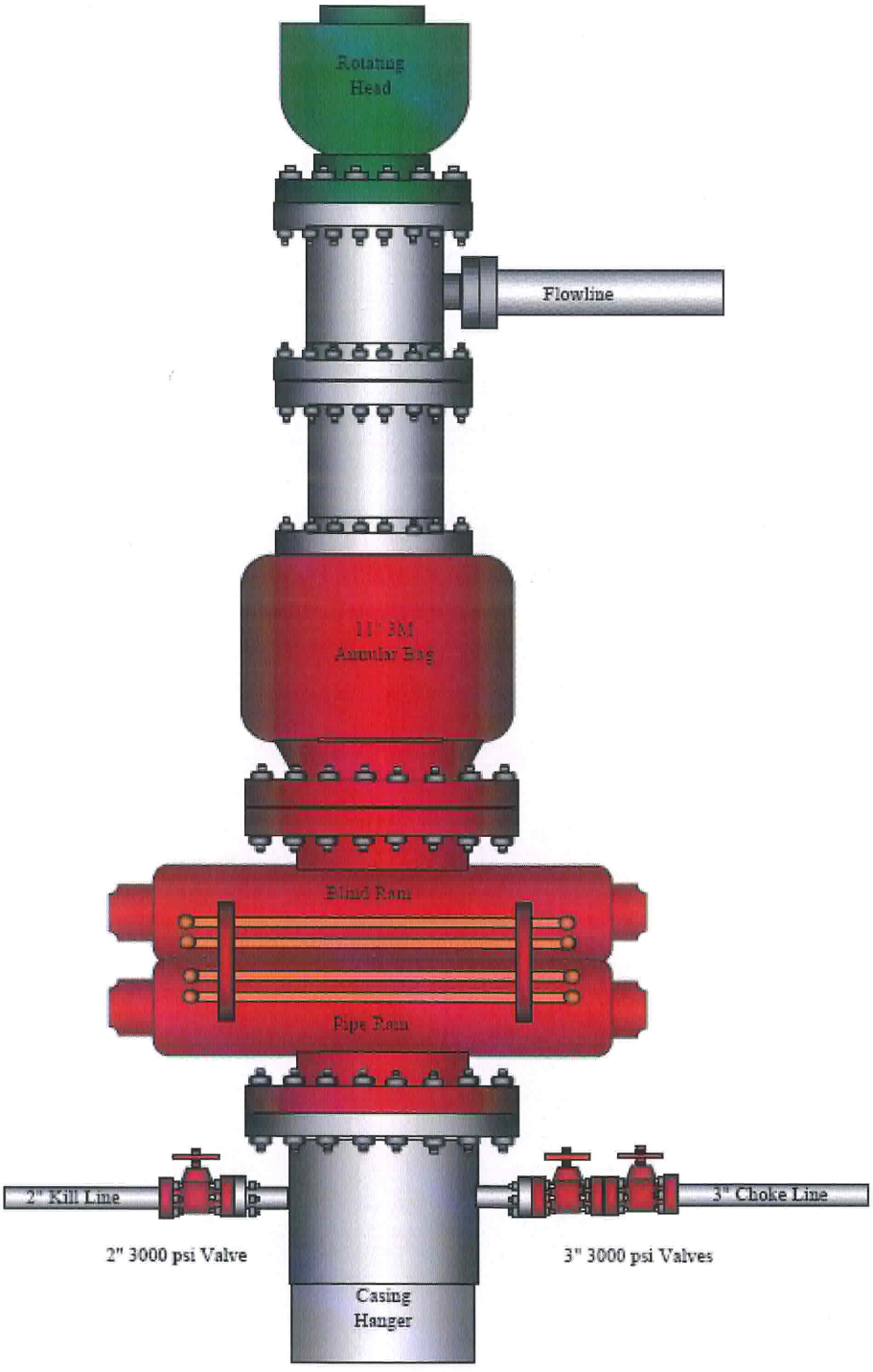
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	1553.26	27.07	228.58	1503.49	-207.55	-235.26	2.00	228.58	313.73	
4	2885.92	27.07	228.58	2690.21	-608.69	-689.97	0.00	0.00	920.09	
5	3839.18	8.00	228.58	3595.00	-797.79	-904.33	2.00	180.00	1205.94	
6	6181.98	8.00	228.58	5915.00	-1013.50	-1148.84	0.00	0.00	1531.99	Ute Wtr Fed 27-13 Target
7	7732.07	8.00	228.58	7450.00	-1156.22	-1310.61	0.00	0.00	1747.72	



Attachments

a) BOPE Schematic



3000 psi system

b) Choke Manifold Schematic