

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

R-111-POTASH

FORM APPROVED
OMB NO 1004-0136
Expires: November 30, 2000

11-787

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM62590-S NMNM62589-BH	
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator OXY USA Inc.		7. Unit or CA Agreement Name and No.	
3a. Address P.O. Box 50250 Midland, TX 79710-0250		8. Lease Name and Well No. Federal 23 #11H	
3b. Phone No. (include area code) 432-685-5717		9. API Well No. 30-015-39437	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 590 FNL 380 FWL NWNW(D) Sec 26 At proposed prod. zone 330 FNL 380 FWL NWNW(D) Sec 23		10. Field and Pool, or Exploratory Livingston Ridge Delaware	
14. Distance in miles and direction from nearest town or post office* 20 miles northeast from Loving, NM		11. Sec., T., R., M., or Blk and Survey or Area S-Sec 26 BH-Sec 26 T22S R31E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 590'		12. County or Parish Eddy	
16. No. of Acres in lease 640		13. State NM	
17. Spacing Unit dedicated to this well 160			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 86'		19. Proposed Depth 13533'M 8230'V	
20. BLM/BIA Bond No. on file ES0136			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3545.5'		22. Approximate date work will start* 9/1/11	
		23. Estimated duration 30	

24. Attachments

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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer |

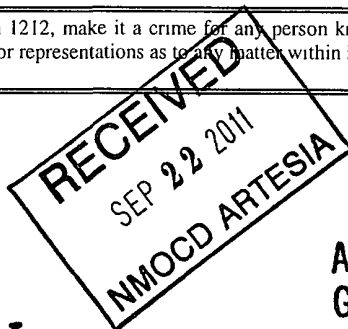
25. Signature 	Name (Printed/Typed) David Stewart	Date 6/13/11
Title Regulatory Advisor		
Approved by (Signature) /s/ Jesse J. Juen	Name (Printed/Typed)	Date SEP 12 2011
Title ACTING STATE DIRECTOR		
Office NM STATE OFFICE		

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

*(Instructions on Reverse)



Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED



DRILLING PROGRAM

Operator Name/Number:	OXY USA Inc.	16696
Lease Name/Number:	Federal 23 #11H	304816
Pool Name/Number:	Livingston Ridge Delaware	39360
Surface Location:	590 FNL 380 FWL NWNW(D) Sec 26 T22S R31E	Federal Lease No. NMNM62590
Bottom Hole Location:	330 FNL 380 FWL NWNW(D) Sec 23 T22S R31E	Federal Lease No. NMNM62589

Proposed TD:	8230' TVD	13533' TMD	Elevation: 3545.5' GL
SL - Lat: 32.3679968	Long: 103.7554333	X= 678428.1 Y= 498074.2	NAD - 1927
BH - Lat: 32.3832201	Long: 103.7554383	X= 678396.6 Y= 503612.2	NAD - 1927

1. Geologic Name of Surface Formation:

a. Permian

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

<u>Geological Marker</u>	<u>Depth</u>	<u>Type</u>
a. Rustler	770'	---
b. Top Salt	969'	---
c. Salado	1100'	---
d. Bottom Salt	4187'	---
e. Delaware	4474'	---
f. Bell Canyon	4500'	Oil
g. Cherry Canyon	5605'	Oil
h. Brushy Canyon	6611'	Oil

3. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>Condition</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
17-1/2"	860-840'	13-3/8"	48	ST&C	H-40	New	1.98	4.62	2.38
				Hole filled with 8.4# Mud			770#	1730#	
12-1/4"	445-425'	9-5/8"	40	LT&C	J-55	New	1.16	1.21	2.12
				Hole filled with 10# Mud			2750#	3950#	
8-3/4"	13533' M	5-1/2"	17	BTC	N-80	New	1.6	2.69	1.89
DVT @ 6000' - POST @ 4300'				Hole filled with 9.2# Mud			6280#	7740#	

Collapse and burst loads calculated using Stress Check with anticipated loads

4. Cement Program

- a. 13-3/8" Surface Circulate cement to surface w/ + 630sx PP cmt w/ 4% Bentonite + .125#/sx Poly-E-Flake + 2% CaCl₂, 13.5ppg, 1.75 yield, 840# 24hr CS, 150% Excess followed by 300sx PP cmt w/ 2% CaCl₂, 14.8ppg, 1.35 yield, 2500#-24hr CS, 150% Excess
- b. 9-5/8" Intermediate Circulate cement to surface w/ 1310sx HES light PP cmt w/ 5% Salt + .125#/sx Poly-E-Flake + 5#/sx Gilsonite + 0.5% Halad-344 + 1% CaCl₂ + 0.3% CFR-3, 12.9ppg, 1.89 yield, 840# 24hr CS, 125% Excess followed by 200sx PP cmt w/ 0.5% WellLife 734, 14.8ppg, 1.34 yield, 1343#-24hr CS, 125% Excess

- c. 5-1/2" Production Cement 1st stage w/ 2190sx Super H w/ .5% Halad-344 + .4% CFR-3 + 3#/sx Gilsonite + .3% HR-800, 13.2ppg, 1.62 yield, 1817# 24 CS, 85% Excess, Calc TOC-5995'
 Cement 2nd stage w/ 600sx HES light PP cmt w/ 1#/sx Salt + .125#/sx Pheno Seal + 5#/sx Gilsonite + 0.4% CFR-3 + 0.3% HR-800, 13.2ppg, 1.61 yield, 1536# 24hr CS, 125% Excess, Calc TOC-3075'
 Cement 3rd stage w/ 640sx HES Light PP cmt w/ 3#/sx Salt, 12.4ppg, 2.08 yield, 560# 24CS, 35% Excess followed by 150sx PP cmt w/ .125#/sx Poly-E-Flake + 5#/sx Gilsonite, 14.8ppg, 1.33 yield, 1750# 24CS, 35% Excess, Circ Surface

5. Pressure Control Equipment:

Surface None

Production 13-5/8" 10M two ram stack w/ 5M annular preventer, 10M Choke Manifold

All BOP's and associated equipment will be tested in accordance with Onshore Order #2 (250/5000 psi on rams for 10 minutes each and 250/3500 for 10 minutes for annular preventer, equal to 70% of working pressure) with a third party BOP testing service before drilling out the 13-3/8" casing shoe. Wellhead pressure rating will support this test and 13-3/8" casing will be protected from high pressure. Since the wellhead system is a multibowl design, this initial test will cover the requirements prior to drilling out the 9-5/8" casing shoe.

Pipe Rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be accommodated on the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having a 5000 psi WP rating. OXY requests that the entire system be tested as a 5000psi WP rating.

OXY also requests a variance to connect the BOP outlet to the choke manifold using a co-flex hose that is manufactured by Contitech Rubber Industrial KFT. It is a 3" ID X 35' flexible hose rated to 10000psi working pressure. It has been tested to 15000psi and is built to API Spec 16C. Once the flex line is installed, it will be tied down with safety clamps, see attached for certifications.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u> <u>ppg</u>	<u>Visc</u> <u>sec</u>	<u>Fluid</u> <u>Loss</u>	<u>Type System</u>
0 - 840' <i>860</i>	8.4-8.9	32-34	NC	Fresh Water/Spud Mud
840 - 4250' <i>4450</i>	9.8-10.0	28-29	NC	Brine Water
4250 - 7600'	8.6-8.8	28-29	NC	Fresh Water
7600 - TD'	9.0-9.2	50-50	8-15	LSND

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached.

8. Logging, Coring and Testing Program:

- a. Drill stem tests are not anticipated but if done will be based on geological sample shows.
- b. The open hole electrical logging program will consist of GR from kick-off point to TD.
- c. No coring program is planned but if done will be sidewall rotary cores.
- d. No mudloggers are currently programmed for this well.

9. Potential Hazards:

No abnormal pressures, temperatures or H₂S gas are expected. The highest anticipated pressure gradient would be 0.54psi/ft or 3700psi. If H₂S is encountered the operator will comply with the provisions of Onshore Oil & Gas Order No.6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

10. Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 45 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

United States Department of the Interior
Bureau of Land Management
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220

Attention: Linda Denniston

RE: Federal 23 #11H
Eddy County, New Mexico

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

OPERATOR NAME: OXY USA Inc.
ADDRESS: P.O. Box 4294
Houston, Texas 77210-4294

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

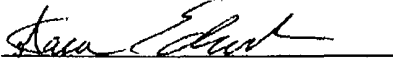
LEASE NO.: NMNM 62590- Section 26 (SL)
NMNM 62589- Section 23 (PBHL)

LEGAL DESCRIPTION: SL: 590 FNL 380 FWL NWNW(D)
PBHL: 330 FNL 380 FWL NWNW(D)
Sections 23 & 26 T22S R31E
Eddy County, New Mexico

FORMATIONS: Brushy Canyon

BOND COVERAGE: Nationwide

BLM BOND FILE NO.: ES 0136

AUTHORIZED SIGNATURE: OXY USA Inc.

Aaron Edwards

TITLE: Landman

DATE: April 14, 2011

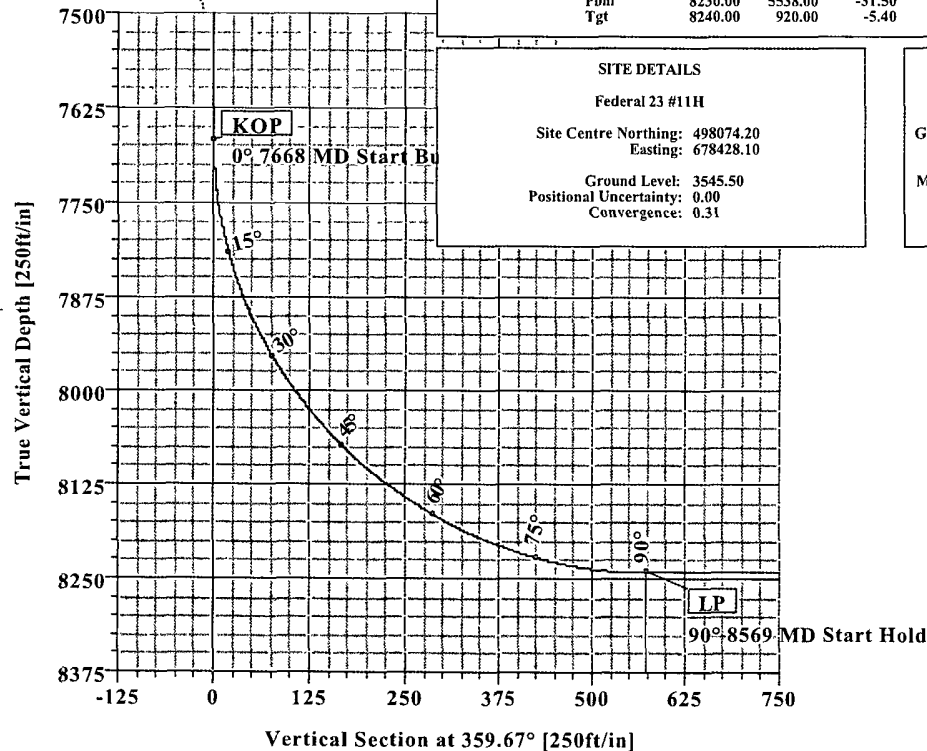
cc: David Stewart



Occidental Permian Ltd.
Federal 23 11H
Eddy Co, NM



KB ELEV: 3570.00
GL ELEV: 3454.50



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	359.66	0.00	0.00	0.00	0.00	0.00	0.00	
2	7667.79	0.00	359.66	7667.79	0.00	0.00	0.00	0.00	0.00	
3	8569.03	90.12	359.66	8240.75	574.19	-3.37	10.00	359.66	574.20	
4	8914.85	90.12	359.66	8240.00	920.00	-5.40	0.00	0.00	920.02	Tgt
5	13532.94	90.12	359.69	8230.00	5538.00	-31.50	0.00	90.14	5538.09	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#11H	0.00	0.00	498074.20	678428.10	32°22'04.789N	103°45'19.560W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	8230.00	5538.00	-31.50	503612.20	678396.60	Point
Tgt	8240.00	920.00	-5.40	498994.20	678422.70	Point

SITE DETAILS

Federal 23 #11H

Site Centre Northing: 498074.20
Easting: 678428.10

Ground Level: 3545.50
Positional Uncertainty: 0.00
Convergence: 0.31

FIELD DETAILS

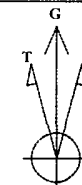
Eddy Co, NM (Nad 27)

Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: Grid North

LEGEND

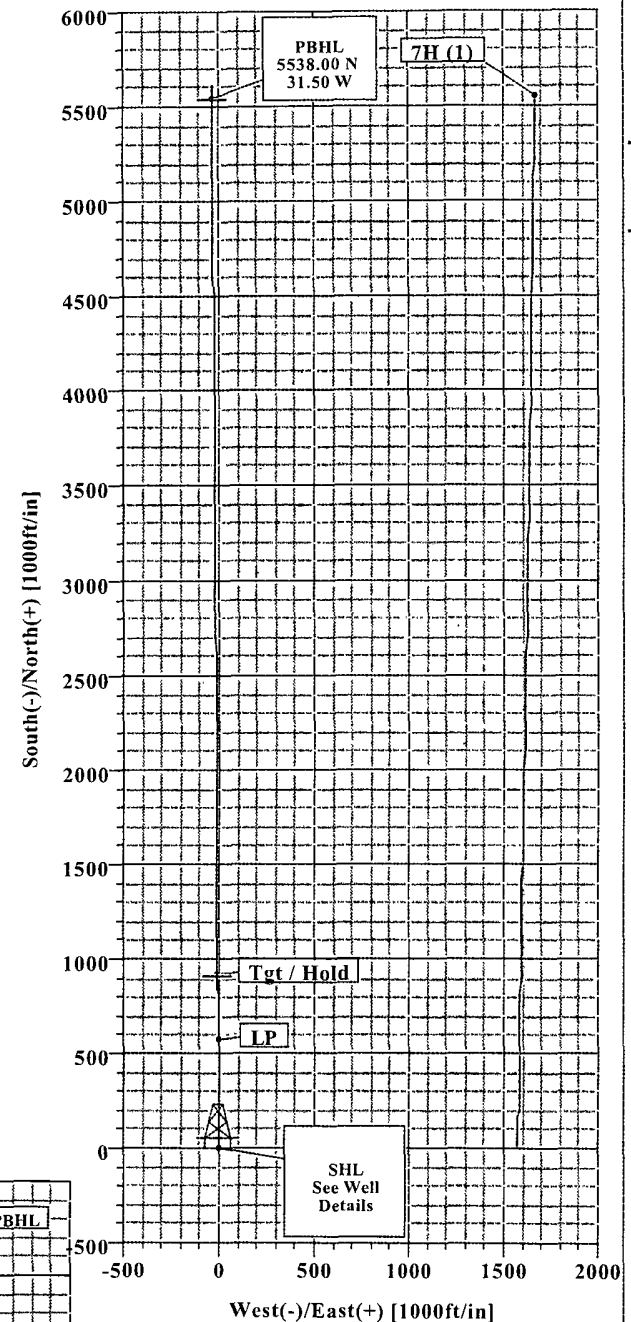
7H (1)
1
Plan #1



Azimuths to Grid North
True North: -0.31°
Magnetic North: 7.37°

Magnetic Field
Strength: 48704nT
Dip Angle: 60.29°
Date: 7/1/2011
Model: IGRF2010

Total Correction to Grid North: 7.37°



Plan: Plan #1 (#11H/1)

Created By: Keith Noack

Date: 4/19/2011



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Occidental Permian Ltd	Date: 4/19/2011	Time: 08:31:03	Page: 1
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well: #11H, Grid North		
Site: Federal 23 #11H	Vertical (TVD) Reference: SITE 3570.0		
Well: #11H	Section (VS) Reference: Well (0.00N, 0.00E, 359.67Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Plan: Plan #1	Date Composed: 4/14/2011
Principal: Yes	Version: 1
	Tied-to: From Surface

Field: Eddy Co, NM (Nad 27)	
Map System: US State Plane Coordinate System 1927	Map Zone: New Mexico, Eastern Zone
Geo Datum: NAD27 (Clarke 1866)	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: IGRF2010

Site:	Federal 23 #11H					
Site Position:	Northing:	498074.20	ft	Latitude:	32 22	4.789 N
From: Map	Easting:	678428.10	ft	Longitude:	103 45	19.560 W
Position Uncertainty:	0.00	ft		North Reference:	Grid	
Ground Level:	3545.50	ft		Grid Convergence:	0.31 deg	

Well: #11H	Slot Name:
Well Position: +N/-S 0.00 ft	Latitude: 32 22 4.789 N
+E/-W 0.00 ft	Longitude: 103 45 19.560 W
Position Uncertainty: 0.00 ft	

Wellpath: 1		Drilled From:	Surface
Current Datum:	SITE	Tie-on Depth:	0.00' ft
Magnetic Data:	7/1/2011	Above System Datum:	Mean Sea Level
Field Strength:	48704 nT	Declination:	7.68 deg
Vertical Section:	Depth From (TVD)	Mag Dip Angle:	60.29 deg
	ft	+N/-S	Direction
		ft	deg
	0.00	0.00	0.00
			359.67

Plan Section Information										
MD	Incl	Azim	TVD	+N/-S	+E/-W	DLS	Build	Turn	TFO	Target
ft	deg	deg	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	deg	
0.00	0.00	359.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7667.79	0.00	359.66	7667.79	0.00	0.00	0.00	0.00	0.00	0.00	
8569.03	90.12	359.66	8240.75	574.19	-3.37	10.00	10.00	0.00	359.66	
8914.85	90.12	359.66	8240.00	920.00	-5.40	0.00	0.00	0.00	0.00	Tgt
13532.94	90.12	359.69	8230.00	5538.00	-31.50	0.00	0.00	0.00	90.14	Pbhl

Survey										
MD	Incl	Azim	TVD	N/S	E/W	VS	DLS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	ft	
7600.00	0.00	359.66	7600.00	0.00	0.00	0.00	0.00	498074.20	678428.10	
7667.79	0.00	359.66	7667.79	0.00	0.00	0.00	0.00	498074.20	678428.10	KOP
7700.00	3.22	359.66	7699.98	0.90	-0.01	0.90	10.00	498075.10	678428.09	
7800.00	13.22	359.66	7798.83	15.19	-0.09	15.19	10.00	498089.39	678428.01	
7900.00	23.22	359.66	7893.70	46.41	-0.27	46.41	10.00	498120.61	678427.83	
8000.00	33.22	359.66	7981.70	93.64	-0.55	93.64	10.00	498167.84	678427.55	
8100.00	43.22	359.66	8060.16	155.43	-0.91	155.43	10.00	498229.63	678427.19	
8200.00	53.22	359.66	8126.70	229.90	-1.35	229.91	10.00	498304.10	678426.75	
8300.00	63.22	359.66	8179.30	314.80	-1.85	314.81	10.00	498389.00	678426.25	
8400.00	73.22	359.66	8216.36	407.55	-2.39	407.55	10.00	498481.75	678425.71	
8500.00	83.22	359.66	8236.74	505.31	-2.97	505.32	10.00	498579.51	678425.13	
8569.03	90.12	359.66	8240.75	574.19	-3.37	574.20	10.00	498648.39	678424.73	LP
8600.00	90.12	359.66	8240.68	605.15	-3.55	605.17	0.00	498679.35	678424.55	
8700.00	90.12	359.66	8240.47	705.15	-4.14	705.16	0.00	498779.35	678423.96	
8800.00	90.12	359.66	8240.25	805.15	-4.73	805.16	0.00	498879.35	678423.37	
8900.00	90.12	359.66	8240.03	905.15	-5.31	905.16	0.00	498979.35	678422.79	



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Occidental Permian Ltd. Date: 4/19/2011 Time: 08:31:03 Page: 2
Field: Eddy Co, NM (Nad 27) Co-ordinate(NE) Reference: Well: #11H, Grid North
Site: Federal 23 #11H Vertical (TVD) Reference: SITE 3570.0
Well: #11H Section (VS) Reference: Well (0.00N 0.00E 359.67Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
8914.85	90.12	359.66	8240.00	920.00	-5.40	920.02	0.00	498994.20	678422.70	Tgt
9000.00	90.12	359.66	8239.82	1005.15	-5.90	1005.16	0.00	499079.35	678422.20	
9100.00	90.12	359.66	8239.60	1105.14	-6.49	1105.16	0.00	499179.34	678421.61	
9200.00	90.12	359.67	8239.38	1205.14	-7.07	1205.16	0.00	499279.34	678421.03	
9300.00	90.12	359.67	8239.17	1305.14	-7.65	1305.16	0.00	499379.34	678420.45	
9400.00	90.12	359.67	8238.95	1405.14	-8.24	1405.16	0.00	499479.34	678419.86	
9500.00	90.12	359.67	8238.73	1505.14	-8.82	1505.16	0.00	499579.34	678419.28	
9600.00	90.12	359.67	8238.52	1605.14	-9.40	1605.16	0.00	499679.34	678418.70	
9700.00	90.12	359.67	8238.30	1705.13	-9.98	1705.16	0.00	499779.33	678418.12	
9800.00	90.12	359.67	8238.08	1805.13	-10.56	1805.16	0.00	499879.33	678417.54	
9900.00	90.12	359.67	8237.87	1905.13	-11.14	1905.16	0.00	499979.33	678416.96	
10000.00	90.12	359.67	8237.65	2005.13	-11.71	2005.16	0.00	500079.33	678416.39	
10100.00	90.12	359.67	8237.43	2105.13	-12.29	2105.16	0.00	500179.33	678415.81	
10200.00	90.12	359.67	8237.22	2205.12	-12.87	2205.16	0.00	500279.32	678415.23	
10300.00	90.12	359.67	8237.00	2305.12	-13.44	2305.16	0.00	500379.32	678414.66	
10400.00	90.12	359.67	8236.78	2405.12	-14.01	2405.16	0.00	500479.32	678414.09	
10500.00	90.12	359.67	8236.57	2505.12	-14.59	2505.16	0.00	500579.32	678413.51	
10600.00	90.12	359.67	8236.35	2605.12	-15.16	2605.16	0.00	500679.32	678412.94	
10700.00	90.12	359.67	8236.13	2705.11	-15.73	2705.16	0.00	500779.31	678412.37	
10800.00	90.12	359.67	8235.92	2805.11	-16.30	2805.16	0.00	500879.31	678411.80	
10900.00	90.12	359.67	8235.70	2905.11	-16.87	2905.16	0.00	500979.31	678411.23	
11000.00	90.12	359.67	8235.48	3005.11	-17.43	3005.16	0.00	501079.31	678410.67	
11100.00	90.12	359.68	8235.27	3105.11	-18.00	3105.16	0.00	501179.31	678410.10	
11200.00	90.12	359.68	8235.05	3205.11	-18.57	3205.16	0.00	501279.31	678409.53	
11300.00	90.12	359.68	8234.83	3305.10	-19.13	3305.16	0.00	501379.30	678408.97	
11400.00	90.12	359.68	8234.62	3405.10	-19.70	3405.16	0.00	501479.30	678408.40	
11500.00	90.12	359.68	8234.40	3505.10	-20.26	3505.16	0.00	501579.30	678407.84	
11600.00	90.12	359.68	8234.18	3605.10	-20.82	3605.16	0.00	501679.30	678407.28	
11700.00	90.12	359.68	8233.97	3705.10	-21.38	3705.16	0.00	501779.30	678406.72	
11800.00	90.12	359.68	8233.75	3805.09	-21.94	3805.16	0.00	501879.29	678406.16	
11900.00	90.12	359.68	8233.54	3905.09	-22.50	3905.16	0.00	501979.29	678405.60	
12000.00	90.12	359.68	8233.32	4005.09	-23.06	4005.16	0.00	502079.29	678405.04	
12100.00	90.12	359.68	8233.10	4105.09	-23.62	4105.16	0.00	502179.29	678404.48	
12200.00	90.12	359.68	8232.89	4205.09	-24.17	4205.16	0.00	502279.29	678403.93	
12300.00	90.12	359.68	8232.67	4305.09	-24.73	4305.16	0.00	502379.29	678403.37	
12400.00	90.12	359.68	8232.45	4405.08	-25.28	4405.16	0.00	502479.28	678402.82	
12500.00	90.12	359.68	8232.24	4505.08	-25.84	4505.16	0.00	502579.28	678402.26	
12600.00	90.12	359.68	8232.02	4605.08	-26.39	4605.16	0.00	502679.28	678401.71	
12700.00	90.12	359.68	8231.80	4705.08	-26.94	4705.16	0.00	502779.28	678401.16	
12800.00	90.12	359.68	8231.59	4805.08	-27.49	4805.16	0.00	502879.28	678400.61	
12900.00	90.12	359.69	8231.37	4905.07	-28.04	4905.16	0.00	502979.27	678400.06	
13000.00	90.12	359.69	8231.15	5005.07	-28.59	5005.15	0.00	503079.27	678399.51	
13100.00	90.12	359.69	8230.94	5105.07	-29.14	5105.15	0.00	503179.27	678398.96	
13200.00	90.12	359.69	8230.72	5205.07	-29.69	5205.15	0.00	503279.27	678398.41	
13300.00	90.12	359.69	8230.50	5305.07	-30.23	5305.15	0.00	503379.27	678397.87	
13400.00	90.12	359.69	8230.29	5405.07	-30.78	5405.15	0.00	503479.27	678397.32	
13500.00	90.12	359.69	8230.07	5505.06	-31.32	5505.15	0.00	503579.26	678396.78	
13532.94	90.12	359.69	8230.00	5538.00	-31.50	5538.09	0.00	503612.20	678396.60	Pbhl



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company:	Occidental Permian Ltd.	Date:	4/19/2011	Time:	08:31:03	Page:	3
Field:	Eddy Co. NM (Nad 27)	Co-ordinate(NE) Reference:	Well: #11H	Grid North:			
Site:	Federal 23 #11H	Vertical (TVD) Reference:	SITE 3570.0				
Well:	#11H	Section (VS) Reference:	Well (0.00N,0.00E,359.67Azi)				
Wellpath:		Survey Calculation Method:	Minimum Curvature	Db:	Sybase		

Targets

Name	Description	TVD	+N-S	+E-W	Map	Map	Latitude			Longitude		
Dip	Dir	ft	ft	ft	Northing	Easting	Deg	Min	Sec	Deg	Min	Sec
					ft	ft						
Pbhl		8230.00	5538.00	-31.50	503612.20	678396.60	32	22	59.592 N	103	45	19.578 W
Tgt		8240.00	920.00	-5.40	498994.20	678422.70	32	22	13.893 N	103	45	19.565 W

Casing Points

MD	TVD	Diameter	Hole Size	Name
ft	ft			

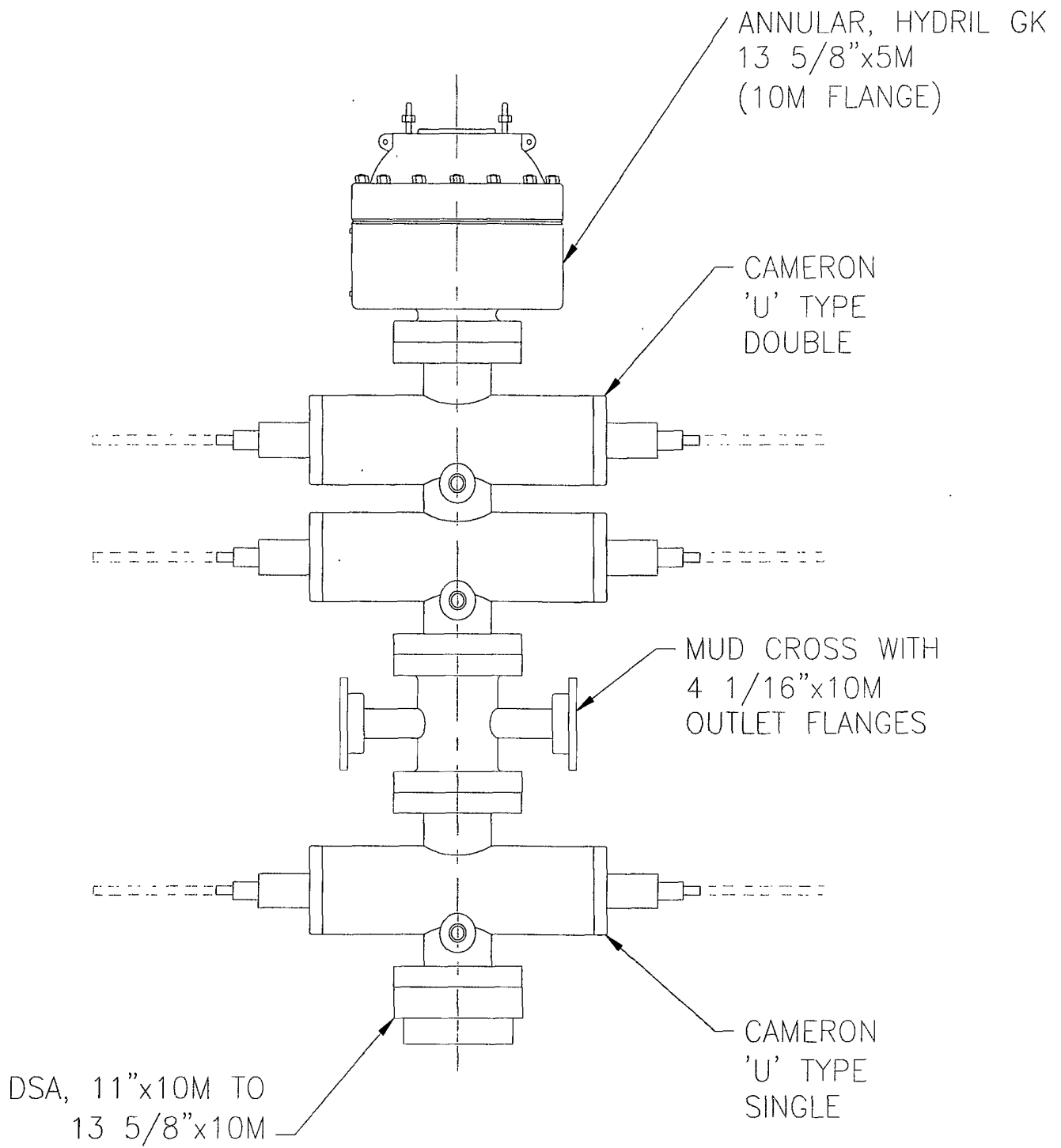
Annotation

MD	TVD	
ft	ft	
7667.79	7667.79	KOP
8569.03	8240.75	LP
8914.85	8240.00	Tgt / Hold
13532.93	8230.00	PBHL

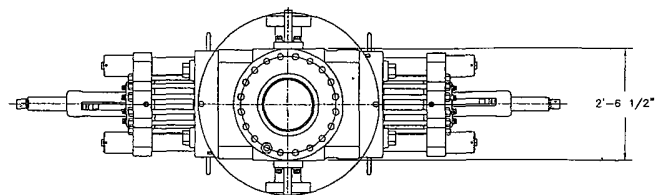
Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction
ft	ft				

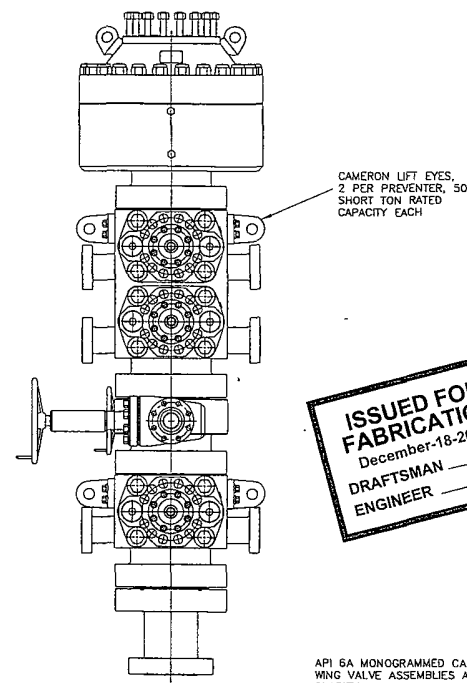
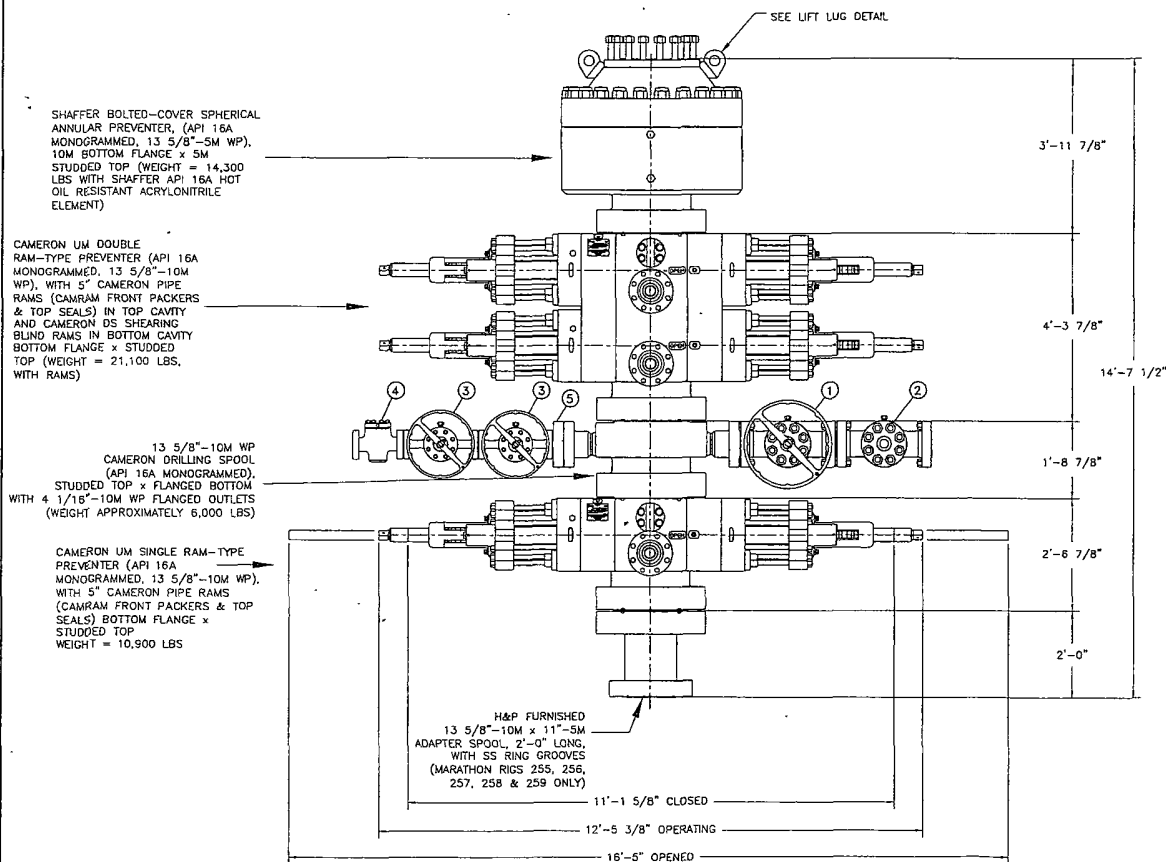
BOP Diagram



BOP STACK



- LEGEND**
- ①— 4 1/16"-10M FLANGED END GATE VALVE
 - ②— 4 1/16"-10M FLANGED END GATE VALVE WITH DOUBLE ACTING HYDRAULIC ACTUATOR
 - ③— 2 1/16"-10M FLANGED END GATE VALVE
 - ④— 2 1/16"-10M FLANGED END CHECK VALVE
 - ⑤— DOUBLE STUDDED ADAPTER



ISSUED FOR FABRICATION
December-18-2007
DRAFTSMAN _____
ENGINEER _____

API 6A MONOGRAMMED CAMERON CHOKE AND KILL WING VALVE ASSEMBLIES ARE NOT SHOWN FOR CLARITY

WEIGHTS DO NOT INCLUDE HOSES, ADAPTER SPOOLS OR QUICK CONNECT FITTINGS

PROPRIETARY

THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED, DISTRIBUTED OR DISCLOSED IN ANY MANNER, WITHOUT THE PRIOR, WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER OF HELMERICH & PAYNE INT'L DRILLING CO.

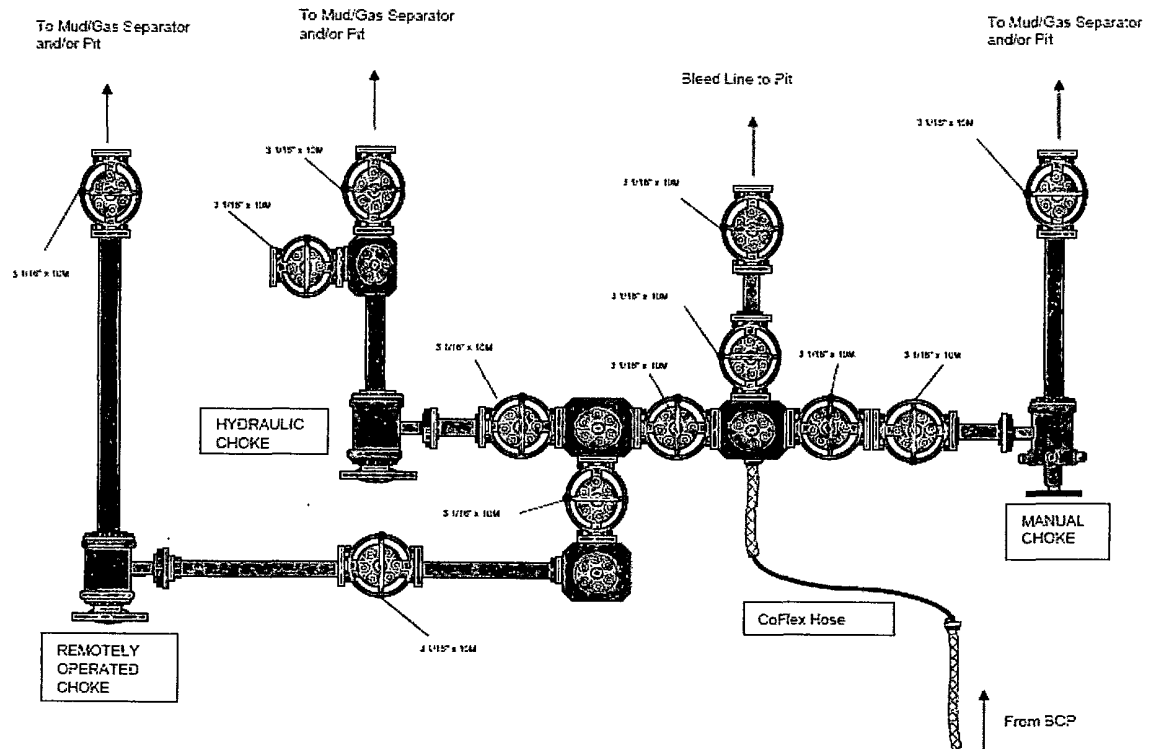
13 5/8-10M STACK

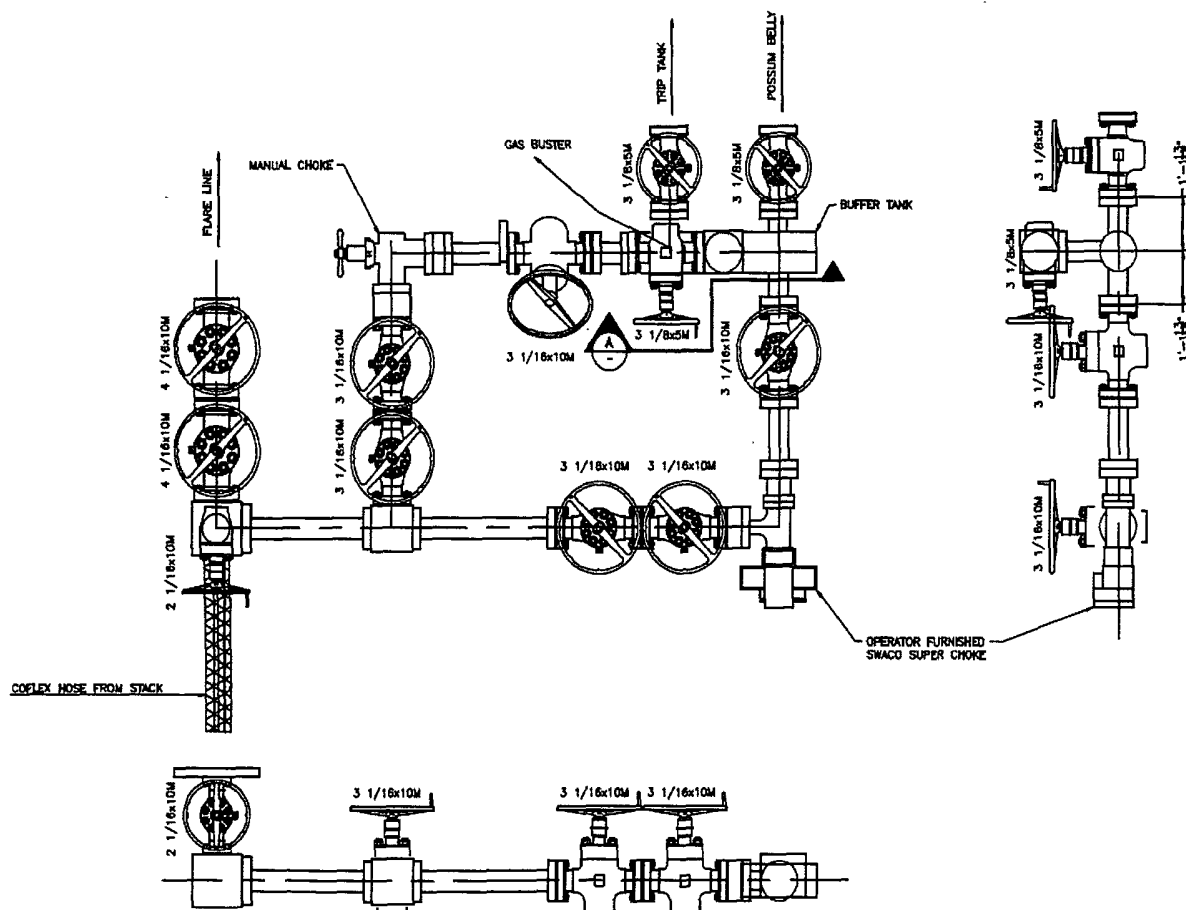
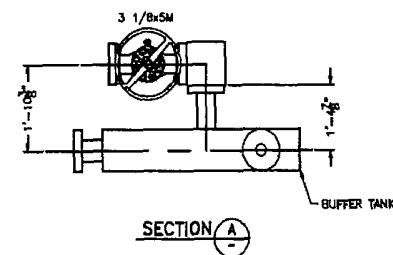
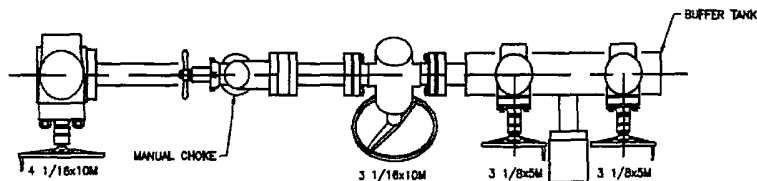
ENGINEERING APPROVAL		DATE	TITLE
12/18/07	ADDED SHEET 03	JAV	13 5/8"-10M BOP 3 RAM STACK
4-10-07	ORIENTATION KINGS' DOUBLE STUDDED ADAPTER VALVES 1, 2, & 3, AND MS CHECK VALVE ADDED	JBG	FLEXRIG3
4-04-07	5" ADDED TO SPACER ADAPTER SPOOL	JBG	
02-07-07	ADDED ADAPTER SPOOL	MWL	
06-13-02	CORRECTED BOP STACK	MWL	
REV	DATE	DESCRIPTION	BY

HELMERICH & PAYNE
INTERNATIONAL DRILLING CO

CUSTOMER	H&P
PROJECT	FLEXRIG3
DRAWN	MTS
DATE	6-5-02
DWG NO.	210-P1-07
SCALE	3/4"=1'
SHEET 1 OF	1
REV	E

10M CHOKE MANIFOLD CONFIGURATION





ISSUED FOR FABRICATION
MARCH 9, 2006
 DRAFTSMAN _____
 ENGINEER _____

PROPRIETARY
 THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED, DISTRIBUTED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER OF HELMERICH & PAYNE INTL. DRILLING CO.

ENGINEERING APPROVAL		DATE	TITLE	
			CHOKE MANIFOLD	
CUSTOMER		H&P		
PROJECT		FLEXIGOS		
DATE	DESCRIPTION	BY	SCALE	REV
10/15/02	ADJUST DIM TO FIELD CONFIRMED DIM	RAY	3/4"=1'	
			SHEET: 1 OF 1	
			DWG. NO.: 216-P1-05	A

HELMERICH & PAYNE
 INTERNATIONAL DRILLING CO.

