

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Operator Copy

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No. NMNM105557	
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> 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. Goodnight 27 Federal #5H	
3b Phone No. (include area code) 16696		9. API Well No. 30-015-39431	
4 Location of Well (Report location clearly and in accordance with any State requirements)* At surface 906 FSL 459 FWL SWSW(M)		10. Field and Pool, or Exploratory Jude Harroun Ranch Delaware NE	
At proposed prod. zone 400 FNL 660 FWL NWNW(D)		11 Sec., T., R., M., or Blk. and Survey or Area Sec 27 T23S R29E	
14 Distance in miles and direction from nearest town or post office* 6 miles northeast from Loving, NM		12. County or Parish Eddy	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 400'	16. No. of Acres in lease 640	17 Spacing Unit dedicated to this well 160	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1655'	19. Proposed Depth 10473'M 6705'V	20. BLM/BIA Bond No. on file BH. <del>ES0136</del> ESB00022	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3010.9' GL	22 Approximate date work will start* 9/1/11	23. Estimated duration 45	

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 5/16/11
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Title  
Regulatory Advisor

Approved by (Signature) 	Name (Printed/Typed) William Merheze	Date 8/29/11
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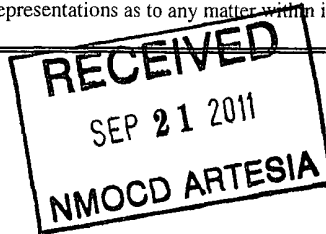
Title  
**Acting STATE DIRECTOR**  
Office  
**NM STATE OFFICE**

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: Goodnight 27 Federal #5H - Federal Lease No. NMNM105557  
Pool Name/Number: Undesignated Harroun Ranch Delaware, Northeast 96878  
Surface Location: 906 FSL 459 FWL SWSW M Sec 27 T23S R29E  
Bottom Hole Location: 400 FNL 660 FWL NWNW(D) Sec 27 T23S R29E

Proposed TD: 6705' TVD 10473' TMD Elevation: 3010.9' GR  
SL - Lat: 32.2709610 Long: 103.9792195 X= 609449.7 Y= 462473.8 NAD - 1927  
BH - Lat: 32.2820101 Long: 103.9785851 X= 609632.4 Y= 466493.9 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. Upper Permian Sand	170'	Water
b. Anhydrite	337'	---
c. Top Salt	648'	---
d. Base Salt	2809'	---
e. Delaware	3024'	Oil
f. Bell Canyon	3060'	Oil
g. Cherry Canyon	3980'	Oil
h. Brushy Canyon	6356'	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"	See COA 550' LHM	13-3/8"	48	ST&C	H-40	New	2.8	4.62	2.58
12-1/4"	3030'	9-5/8"	40	LT&C	J-55	New	1.62	1.24	2.58
8-3/4"	10851' M	5-1/2"	17	LT&C	N-80	New	2.12	1.53	1.95

DVT @ 5800' - POST @ 3080'  
Collapse and burst loads calculated using Stress Check with anticipated loads

**4. Cement Program**

- a. 13-3/8" Surface Circulate cement to surface w/ 480sx PP cmt w/ 4% Bentonite + .125#/sx Poly-E-Flake + 2% CaCl2, 13.5ppg 1.75 yield 165% Excess followed by 200sx PP cmt w/ 2% CaCl2 14.8ppg 1.35 yield 165% Excess
- b. 9-5/8" Intermediate Circulate cement to surface w/ 750sx HES light PP cmt w/ 5% Salt + .125#/sx Poly-E-Flake + 5#/sx Gilsonite, 12.4ppg 2.10 yield 105% Excess followed by 200sx PP cmt w/ 1% CaCl2, 14.8ppg 1.34 yield 105% Excess

- c. 5-1/2" Production Cement 1st stage w/ 1495sx Super H w/ .5% Halad-344 + .4% CFR-3 + 3#/sx Gilsonite + .3% HR-800 + .125#/sx Poly-E-Flake, 13.2ppg 1.59 yield 85% Excess, Calc TOC-5795'  
 Cement 2nd stage w/ 680sx HES light PP cmt w/ 3#/sx Salt + .125#/sx Pheno Seal + 5#/sx Gilsonite, 12.4ppg 2.09 yield 125% Excess followed by 100sx PP cmt w/ 1% CaCl<sub>2</sub>, 14.8ppg 1.34 yield 125% Excess, Calc TOC-3075'  
 Cement 3rd stage w/ 480sx HES Light PP cmt w/ 3#/sx Salt, 12.4ppg 1.98 yield 35% Excess followed by 100sx PP cmt w/ 2% CaCl<sub>2</sub>, 14.8ppg 1.35 yield 35% Excess, Circ Surface
- The above cement volumes could be revised pending the caliper measurement.

**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.

*See COA*

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 - 550' <i>290</i>	8.4-8.9	32-34	NC	Fresh Water/Spud Mud
550 - 3030'	9.8-10.0	28-29	NC	Brine Water
3030 - 6200'	8.6-8.8	28-29	NC	Fresh Water
6200 - 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. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.
- c. 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. If Hydrogen Sulfide is encountered, measured amounts and formations will be reported to the BLM.

**8. Logging, Coring and Testing Program:** *See COA*

- 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 a 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 H<sub>2</sub>S gas are expected. The highest anticipated pressure gradient would be 0.54psi/ft or 3700psi. If H<sub>2</sub>S 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: Goodnight 27 Federal #5H  
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:**

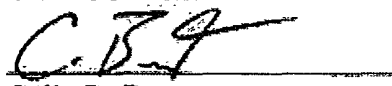
**LEASE NO.:** NMNM 105557

**LEGAL DESCRIPTION:** SL: 906 FSL 459 FWL SWSW(M)  
PBHL: 400 FNL 660 FWL NWNW(D)  
Section 27 T23S R29E  
Eddy County, New Mexico

**FORMATIONS:** Bone Springs *Delaware*

**BOND COVERAGE:** Nationwide

**BLM BOND FILE NO.:** ~~ES-0136~~ *ESB000226* *BA*

**AUTHORIZED SIGNATURE:** OXY USA Inc.  
  
Colin D. Barnett

**TITLE:** Landman

**DATE:** April 11, 2011

cc: David Stewart



Occidental Permian Ltd.  
Goodnight 27 #5H  
Eddy Co, NM

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	
2	6122.04	0.00	2.60	6122.04	0.00	0.00	0.00	0.00	0.00	
3	7020.38	89.83	2.60	6695.00	570.71	25.94	10.00	2.60	571.30	
4	10473.35	89.83	2.60	6705.00	4020.10	182.70	0.00	0.00	4024.25	PBHL

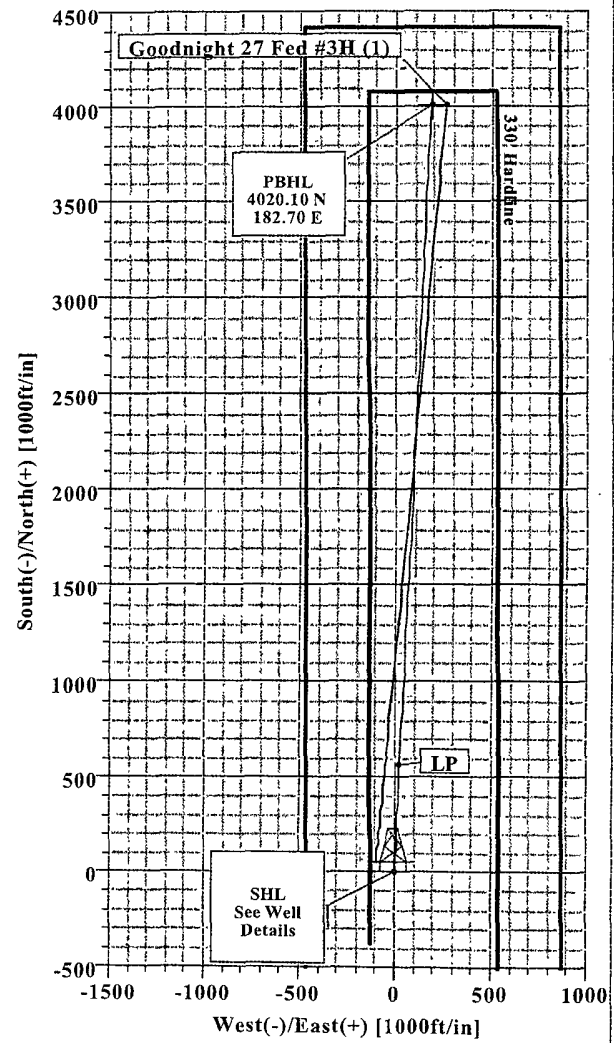
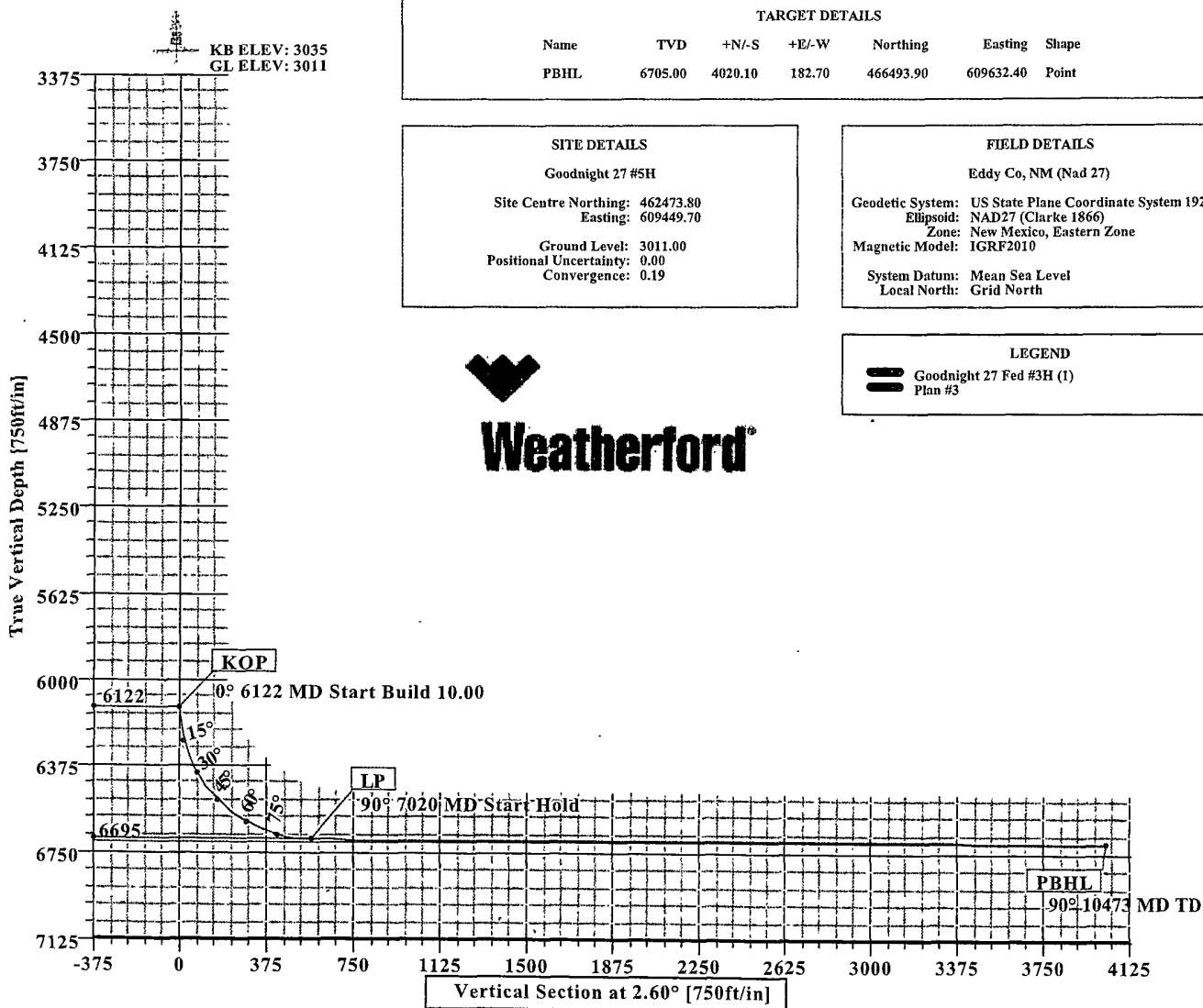
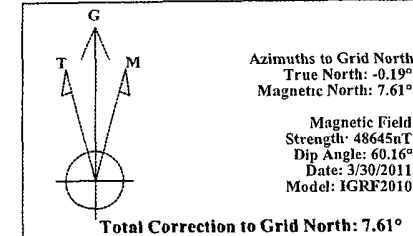
WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Goodnight 27 #5H	0.00	0.00	462473.80	609449.70	32°16'15.459N	103°58'45.190W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	6705.00	4020.10	182.70	466493.90	609632.40	Point

SITE DETAILS	
Goodnight 27 #5H	
Site Centre Northing:	462473.80
Easting:	609449.70
Ground Level:	3011.00
Positional Uncertainty:	0.00
Convergence:	0.19

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	
	Goodnight 27 Fed #3H (1)
	Plan #3



Plan: Plan #3 (Goodnight 27 #5H/1)  
Created By: Keith Noack  
Date: 3/17/2011



# Weatherford International Ltd.

## WFT Plan Report - X & Y's



<b>Company:</b> Occidental Permian Ltd <b>Field:</b> Eddy Co, NM (Nad 27) <b>Site:</b> Goodnight 27 #5H <b>Well:</b> Goodnight 27 #5H <b>Wellpath:</b> 1	<b>Date:</b> 3/17/2011 <b>Time:</b> 11:50:03 <b>Page:</b> 1 <b>Co-ordinate(NE) Reference:</b> Well: Goodnight 27 #5H; Grid North <b>Vertical (TVD) Reference:</b> SITE 3035.0 <b>Section (VS) Reference:</b> Well: (0.00N;0.00E,2.60Azi) <b>Survey Calculation Method:</b> Minimum Curvature <b>Db:</b> Sybase
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<b>Plan:</b> Plan #3  <b>Principal:</b> Yes	<b>Date Composed:</b> 3/3/2011 <b>Version:</b> 1 <b>Tied-to:</b> From Surface
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<b>Field:</b> Eddy Co, NM (Nad 27)  <b>Map System:</b> US State Plane Coordinate System 1927 <b>Geo Datum:</b> NAD27 (Clarke 1866) <b>Sys Datum:</b> Mean Sea Level	<b>Map Zone:</b> New Mexico, Eastern Zone <b>Coordinate System:</b> Well Centre <b>Geomagnetic Model:</b> IGRF2010
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<b>Site:</b> Goodnight 27 #5H			
<b>Site Position:</b>	<b>Northing:</b>	<b>Latitude:</b>	
<b>From:</b> Map	462473.80 ft	32 16 15.459 N	
<b>Position Uncertainty:</b> 0.00 ft	<b>Easting:</b> 609449.70 ft	<b>Longitude:</b> 103 58 45.190 W	
<b>Ground Level:</b> 3011.00 ft		<b>North Reference:</b> Grid	
		<b>Grid Convergence:</b> 0.19 deg	

<b>Well:</b> Goodnight 27 #5H	<b>Slot Name:</b>
<b>Well Position:</b> +N/-S 0.00 ft <b>Northing:</b> 462473.80 ft <b>Latitude:</b> 32 16 15.459 N	
+E/-W 0.00 ft <b>Easting:</b> 609449.70 ft <b>Longitude:</b> 103 58 45.190 W	
<b>Position Uncertainty:</b> 0.00 ft	

<b>Wellpath:</b> 1	<b>Drilled From:</b> Surface
<b>Current Datum:</b> SITE	<b>Tie-on Depth:</b> 0.00 ft
<b>Magnetic Data:</b> 3/30/2011	<b>Above System Datum:</b> Mean Sea Level
<b>Field Strength:</b> 48645 nT	<b>Declination:</b> 7.80 deg
<b>Vertical Section:</b> Depth From (TVD)	<b>Mag Dip Angle:</b> 60.16 deg
ft	ft
0.00	0.00
0.00	0.00
0.00	2.60

### 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	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6122.04	0.00	2.60	6122.04	0.00	0.00	0.00	0.00	0.00	0.00	
7020.38	89.83	2.60	6695.00	570.71	25.94	10.00	10.00	0.00	2.60	
10473.35	89.83	2.60	6705.00	4020.10	182.70	0.00	0.00	0.00	0.00	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	
6100.00	0.00	2.60	6100.00	0.00	0.00	0.00	0.00	462473.80	609449.70	
6122.04	0.00	2.60	6122.04	0.00	0.00	0.00	0.00	462473.80	609449.70	KOP
6200.00	7.80	2.60	6199.76	5.29	0.24	5.30	10.00	462479.09	609449.94	
6300.00	17.80	2.60	6297.15	27.39	1.24	27.42	10.00	462501.19	609450.94	
6400.00	27.80	2.60	6389.22	66.04	3.00	66.11	10.00	462539.84	609452.70	
6500.00	37.80	2.60	6473.18	120.08	5.46	120.21	10.00	462593.88	609455.16	
6600.00	47.80	2.60	6546.46	187.87	8.54	188.06	10.00	462661.67	609458.24	
6700.00	57.80	2.60	6606.85	267.33	12.15	267.61	10.00	462741.13	609461.85	
6800.00	67.80	2.60	6652.51	356.07	16.18	356.43	10.00	462829.87	609465.88	
6900.00	77.80	2.60	6682.05	451.37	20.51	451.84	10.00	462925.17	609470.21	
7000.00	87.80	2.60	6694.57	550.36	25.01	550.92	10.00	463024.16	609474.71	
7020.38	89.83	2.60	6695.00	570.71	25.94	571.30	10.00	463044.51	609475.64	LP
7100.00	89.83	2.60	6695.23	650.25	29.55	650.92	0.00	463124.05	609479.25	
7200.00	89.83	2.60	6695.52	750.14	34.09	750.92	0.00	463223.94	609483.79	
7300.00	89.83	2.60	6695.81	850.04	38.63	850.92	0.00	463323.84	609488.33	
7400.00	89.83	2.60	6696.10	949.94	43.17	950.92	0.00	463423.74	609492.87	
7500.00	89.83	2.60	6696.39	1049.83	47.71	1050.92	0.00	463523.63	609497.41	



# Weatherford International Ltd.

## WFT Plan Report - X & Y's



<b>Company:</b> Occidental Permian Ltd.	<b>Date:</b> 3/17/2011	<b>Time:</b> 11:50:03	<b>Page:</b> 2
<b>Field:</b> Eddy Co, NM (Nad 27)	<b>Co-ordinate(NE) Reference:</b> Well: Goodnight 27 #5H, Grid North		
<b>Site:</b> Goodnight 27 #5H	<b>Vertical (TVD) Reference:</b> SITE 3035.0		
<b>Well:</b> Goodnight 27 #5H	<b>Section (VS) Reference:</b> Well: (0.00N,0.00E,2.60Azi)		
<b>Wellpath:</b> 1	<b>Survey Calculation Method:</b> Minimum Curvature	<b>Db:</b> 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
7600.00	89.83	2.60	6696.67	1149.73	52.25	1150.92	0.00	463623.53	609501.95	
7700.00	89.83	2.60	6696.96	1249.63	56.79	1250.91	0.00	463723.43	609506.49	
7800.00	89.83	2.60	6697.25	1349.52	61.33	1350.91	0.00	463823.32	609511.03	
7900.00	89.83	2.60	6697.54	1449.42	65.87	1450.91	0.00	463923.22	609515.57	
8000.00	89.83	2.60	6697.83	1549.31	70.41	1550.91	0.00	464023.11	609520.11	
8100.00	89.83	2.60	6698.12	1649.21	74.95	1650.91	0.00	464123.01	609524.65	
8200.00	89.83	2.60	6698.41	1749.11	79.49	1750.91	0.00	464222.91	609529.19	
8300.00	89.83	2.60	6698.70	1849.00	84.03	1850.91	0.00	464322.80	609533.73	
8400.00	89.83	2.60	6698.99	1948.90	88.57	1950.91	0.00	464422.70	609538.27	
8500.00	89.83	2.60	6699.28	2048.80	93.11	2050.91	0.00	464522.60	609542.81	
8600.00	89.83	2.60	6699.57	2148.69	97.65	2150.91	0.00	464622.49	609547.35	
8700.00	89.83	2.60	6699.86	2248.59	102.19	2250.91	0.00	464722.39	609551.89	
8800.00	89.83	2.60	6700.15	2348.49	106.73	2350.91	0.00	464822.29	609556.43	
8900.00	89.83	2.60	6700.44	2448.38	111.27	2450.91	0.00	464922.18	609560.97	
9000.00	89.83	2.60	6700.73	2548.28	115.81	2550.91	0.00	465022.08	609565.51	
9100.00	89.83	2.60	6701.02	2648.18	120.35	2650.91	0.00	465121.98	609570.05	
9200.00	89.83	2.60	6701.31	2748.07	124.89	2750.91	0.00	465221.87	609574.59	
9300.00	89.83	2.60	6701.60	2847.97	129.43	2850.91	0.00	465321.77	609579.13	
9400.00	89.83	2.60	6701.89	2947.87	133.97	2950.91	0.00	465421.67	609583.67	
9500.00	89.83	2.60	6702.18	3047.76	138.51	3050.91	0.00	465521.56	609588.21	
9600.00	89.83	2.60	6702.47	3147.66	143.05	3150.91	0.00	465621.46	609592.75	
9700.00	89.83	2.60	6702.76	3247.55	147.59	3250.91	0.00	465721.35	609597.29	
9800.00	89.83	2.60	6703.05	3347.45	152.13	3350.91	0.00	465821.25	609601.83	
9900.00	89.83	2.60	6703.34	3447.35	156.67	3450.91	0.00	465921.15	609606.37	
10000.00	89.83	2.60	6703.63	3547.24	161.21	3550.91	0.00	466021.04	609610.91	
10100.00	89.83	2.60	6703.92	3647.14	165.75	3650.90	0.00	466120.94	609615.45	
10200.00	89.83	2.60	6704.21	3747.04	170.29	3750.90	0.00	466220.84	609619.99	
10300.00	89.83	2.60	6704.50	3846.93	174.83	3850.90	0.00	466320.73	609624.53	
10400.00	89.83	2.60	6704.79	3946.83	179.37	3950.90	0.00	466420.63	609629.07	
10473.35	89.83	2.60	6705.00	4020.10	182.70	4024.25	0.00	466493.90	609632.40	PBHL

### Targets

Name	Description Dip	Dir	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude		Longitude					
								Deg	Min	Sec	Deg	Min	Sec		
PBHL			6705.00	4020.10	182.70	466493.90	609632.40	32	16	55.237	N	103	58	42.907	W

### Casing Points

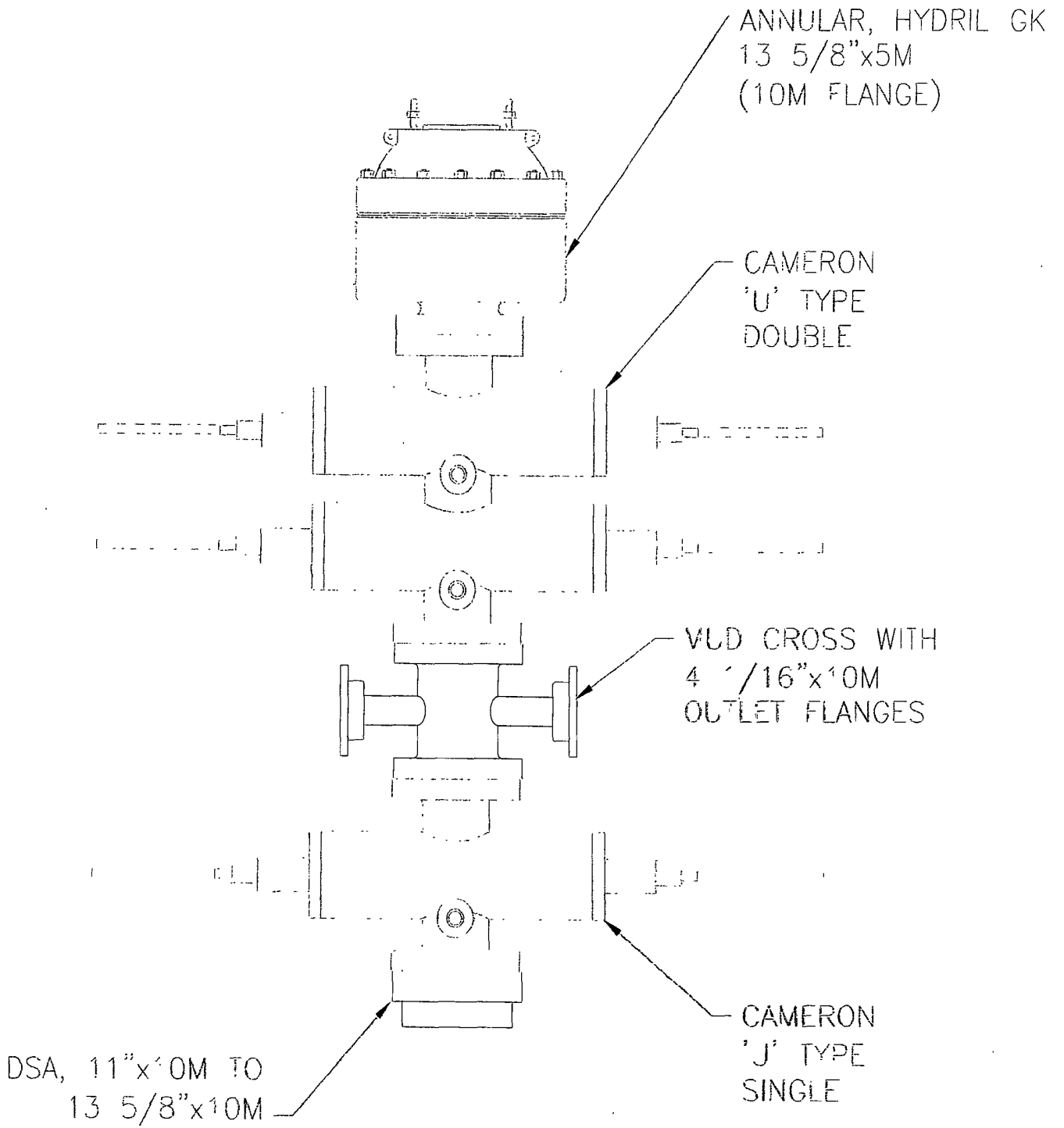
MD	TVD	Diameter	Hole Size	Name

### Annotation

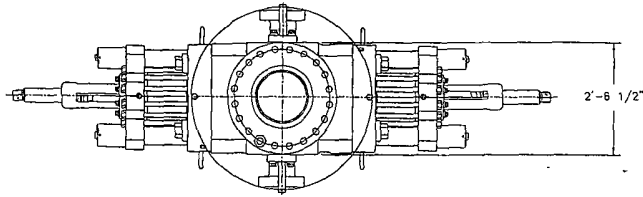
MD ft	TVD ft	
6122.04	6122.04	KOP
7020.38	6695.00	LP
10473.34	6705.00	PBHL



**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

SEE LIFT LUG DETAIL

SHAFFER BOLTED-COVER SPHERICAL ANNULAR PREVENTER, (API 16A MONOGRAMMED, 13 5/8"-10M WP), 10M BOTTOM FLANGE x 5M STUDDED TOP (WEIGHT = 14,300 LBS WITH SHAFFER API 16A HOT OIL RESISTANT ACRYLONITRILE ELEMENT)

3'-11 7/8"

CAMERON UM DOUBLE RAM-TYPE PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), WITH 5" CAMERON PIPE RAMS (CAMRAM FRONT PACKERS & TOP SEALS) IN TOP CAVITY AND CAMERON DS SHEARING BLIND RAMS IN BOTTOM CAVITY BOTTOM FLANGE x STUDDED TOP (WEIGHT = 21,100 LBS, WITH RAMS)

4'-3 7/8"

14'-7 1/2"

13 5/8"-10M WP CAMERON DRILLING SPOOL (API 16A MONOGRAMMED), STUDDED TOP x FLANGED BOTTOM WITH 4 1/16"-10M WP FLANGED OUTLETS (WEIGHT APPROXIMATELY 6,000 LBS)

1'-8 7/8"

CAMERON UM SINGLE RAM-TYPE PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), WITH 5" CAMERON PIPE RAMS (CAMRAM FRONT PACKERS & TOP SEALS) BOTTOM FLANGE x STUDDED TOP WEIGHT = 10,900 LBS

2'-6 7/8"

2'-0"

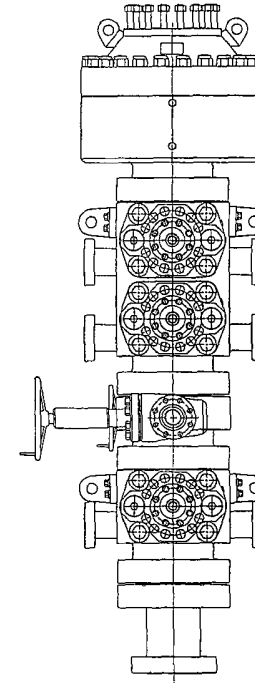
H&P FURNISHED 13 5/8"-10M x 11"-5M ADAPTER SPOOL, 2'-0" LONG, WITH SS RING GROOVES (MARATHON RIGS 255, 256, 257, 258 & 259 ONLY)

11'-1 5/8" CLOSED

12'-5 3/8" OPERATING

16'-5" OPENED

13 5/8-10M STACK



CAMERON LIFT EYES, 2 PER PREVENTER, 50 SHORT TON RATED CAPACITY EACH

**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

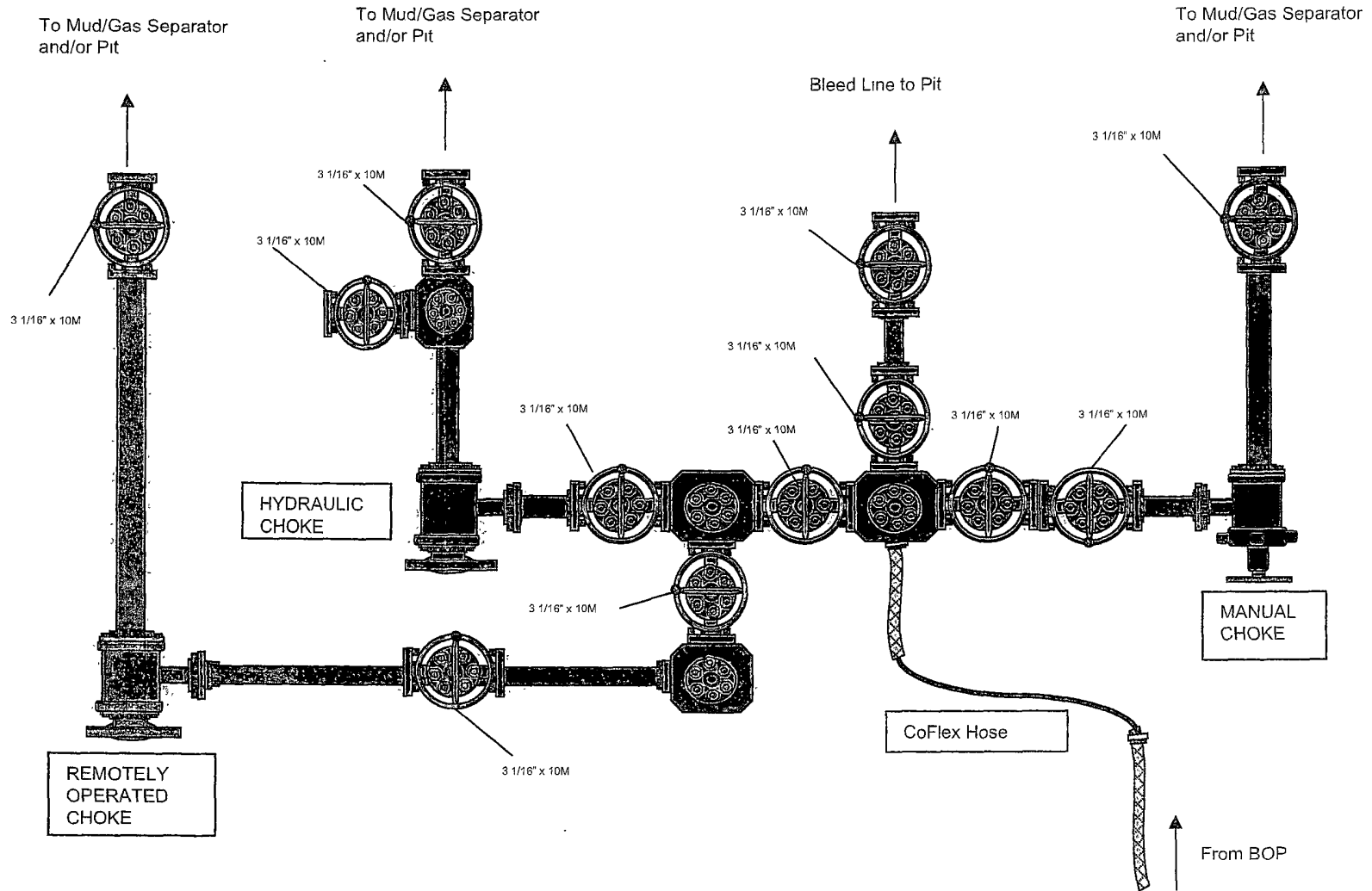
THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED, DISTRIBUTED OR DISCLOSED IN ANY MANNER WITHOUT THE PRIOR, WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER OF HELMERICH & PAYNE INTL. DRILLING CO

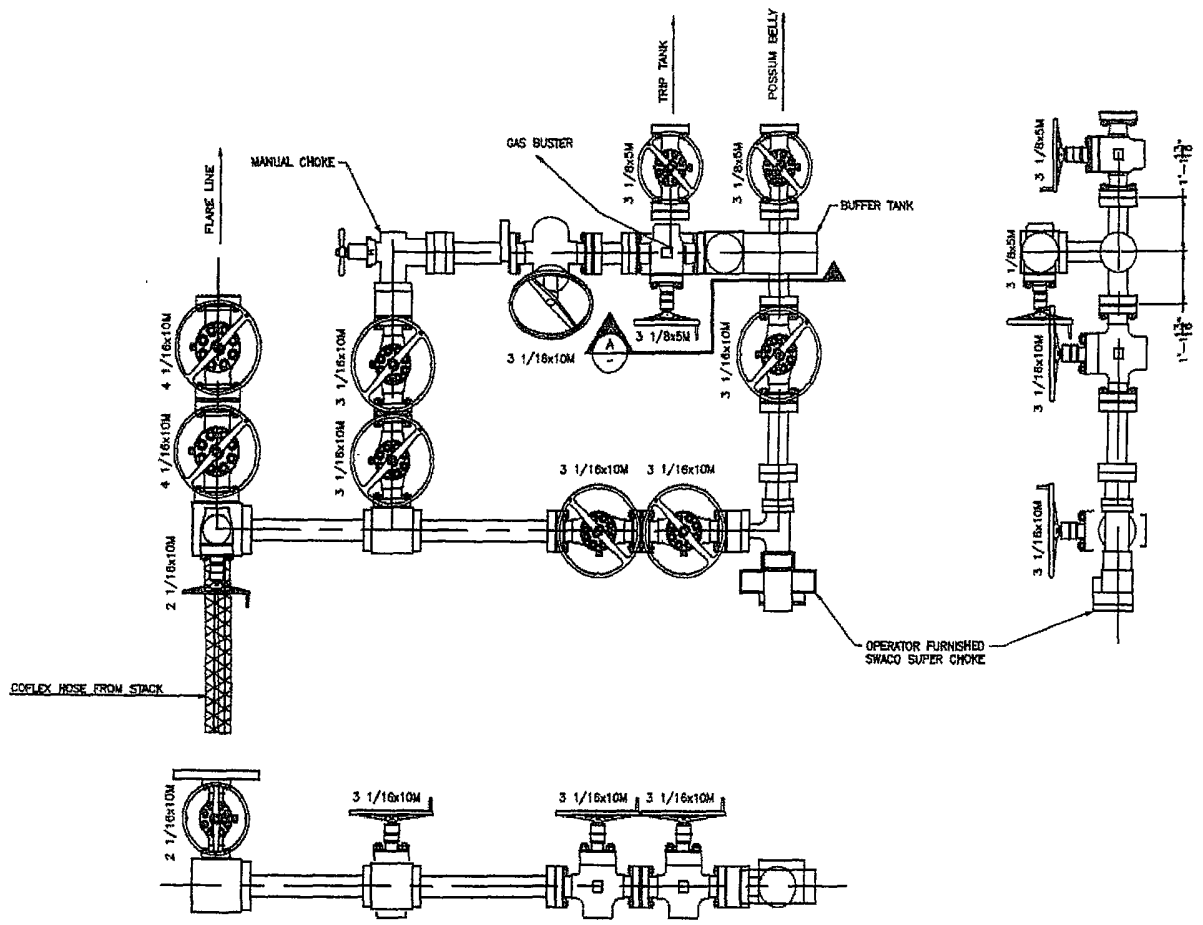
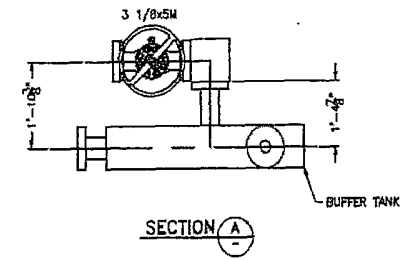
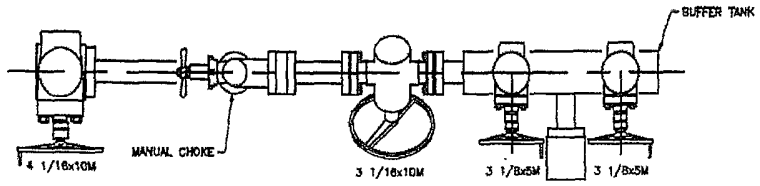
**HELMERICH & PAYNE**  
INTERNATIONAL DRILLING CO

ENGINEERING APPROVAL	DATE	TITLE
		13 5/8"-10M BOP 3 RAM STACK FLEXRIG3
		CUSTOMER H&P
		PROJECT FLEXRIG3
		DRAWN MTS DATE 6-5-02 DWG NO
		SCALE 3/4"=1' SHEET 1 OF 5 210-P1-07 E

REV	DATE	DESCRIPTION	BY
1	12/18/07	ADDED SHEET 03	JAV
2	4-10-07	OPERATION ADDED DOUBLE STUDDED ADAPTER VALVES 1, 2 & 3 AND MS CHECK VALVE ADDED	JBC
3	4-04-07	8" ADDED TO SPACER ADAPTER SPOOL	JBC
4	02-07-07	ADDED ADAPTER SPOOL	MWL
5	08-13-02	CORRECTED BOP STACK	MWL

# 10M CHOKE MANIFOLD CONFIGURATION





**ISSUED FOR FABRICATION**  
 MARCH 9, 2000  
 DRAFTSMAN \_\_\_\_\_  
 ENGINEER \_\_\_\_\_

**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 QUALIFIED OFFICER OF HELMERICH & PAYNE INTL DRILLING CO.

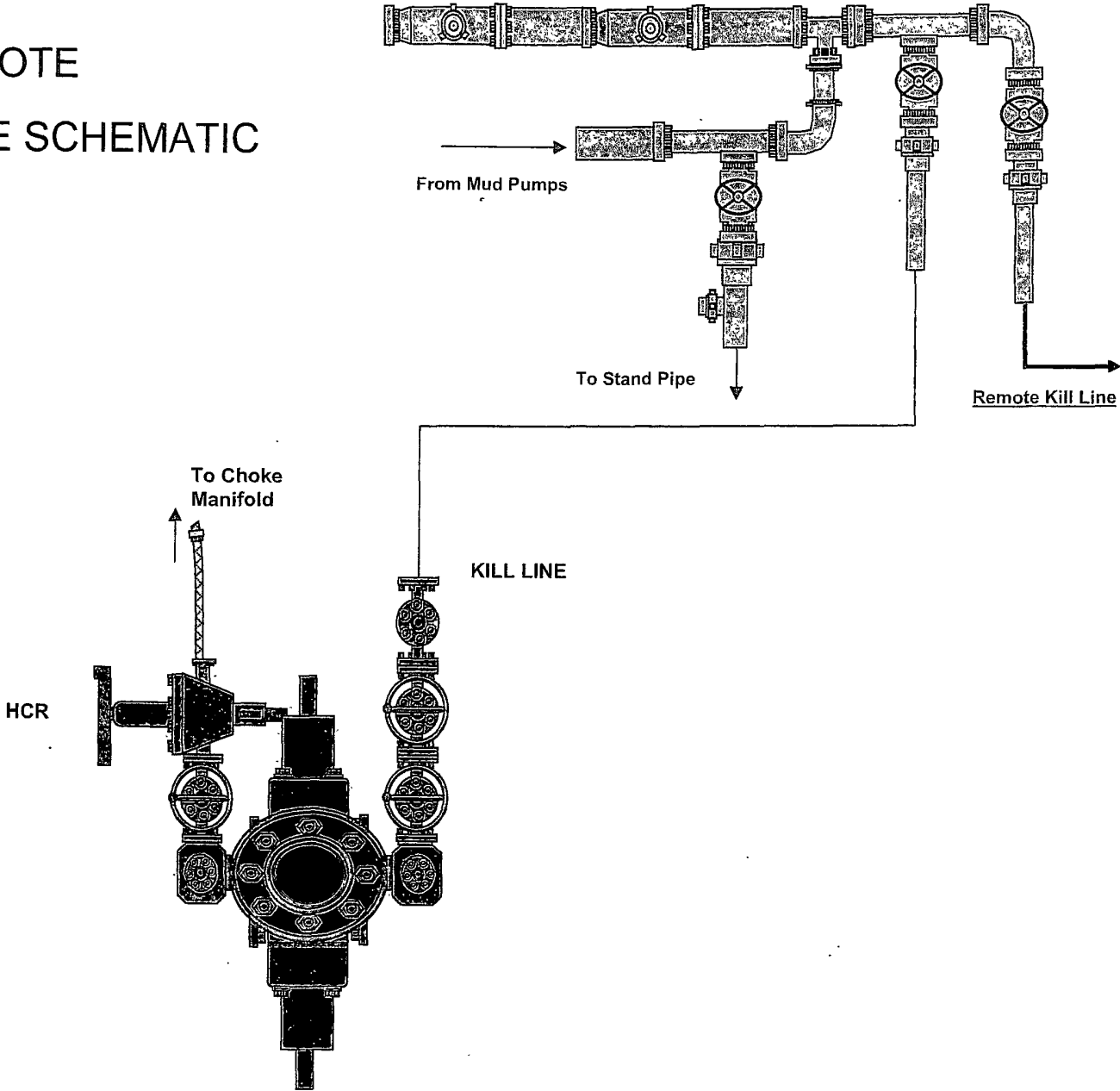
ENGINEERING APPROVAL		DATE	TITLE
▲			CHOKE MANIFOLD
▲			
▲			
▲			
▲	10/15/02	ADJUST DIM TO FIELD CONFIRMED DIM	RAY
REV	DATE	DESCRIPTION	BY

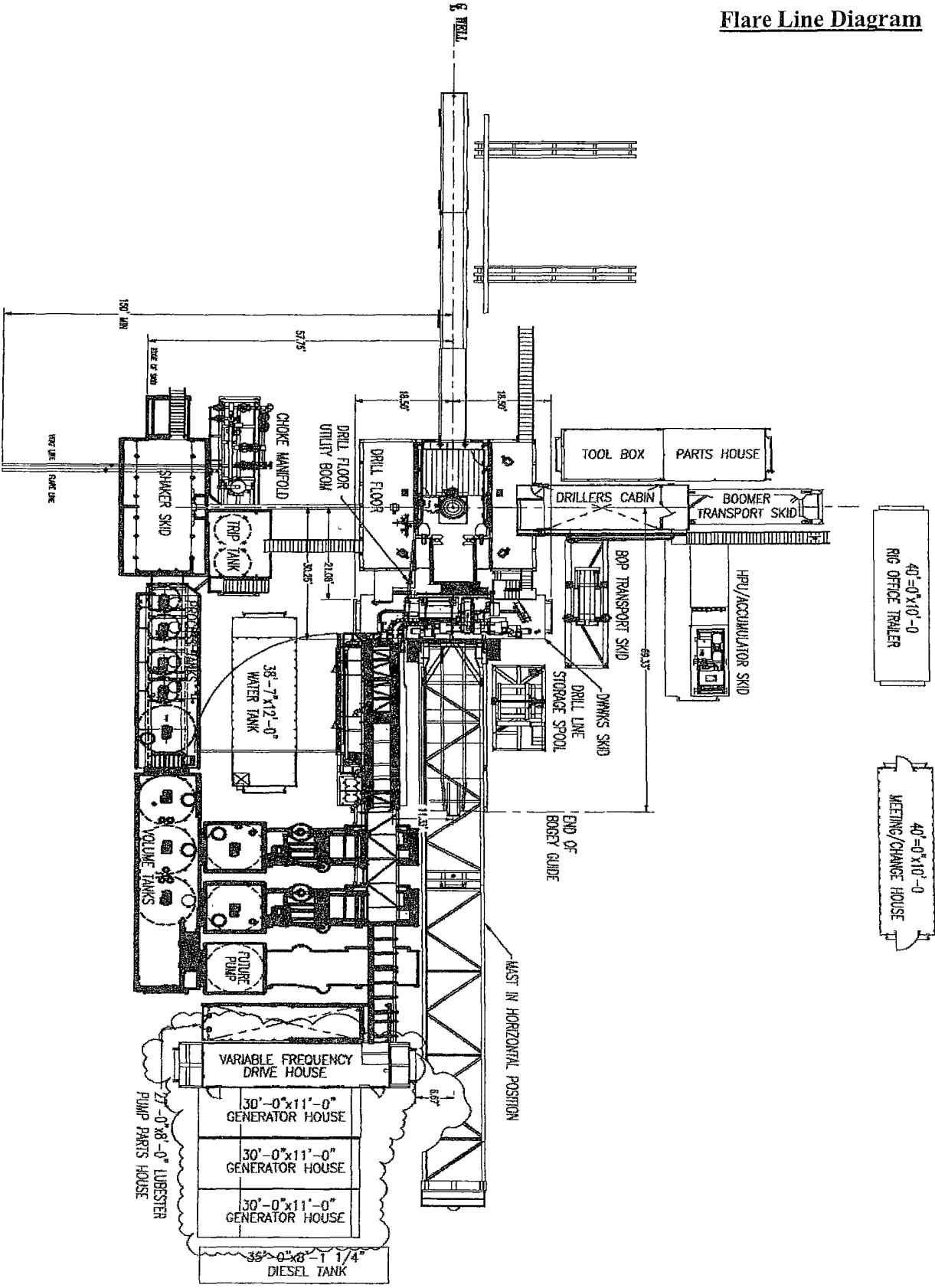
CUSTOMER: H&P		PROJECT: FLEGR03	
DRAWN: MTS	DATE: 2-28-02	DWG. NO.:	REV:
SCALE: 3/4"=1'	SHEET: 1 OF 1	216-P1-05 A	

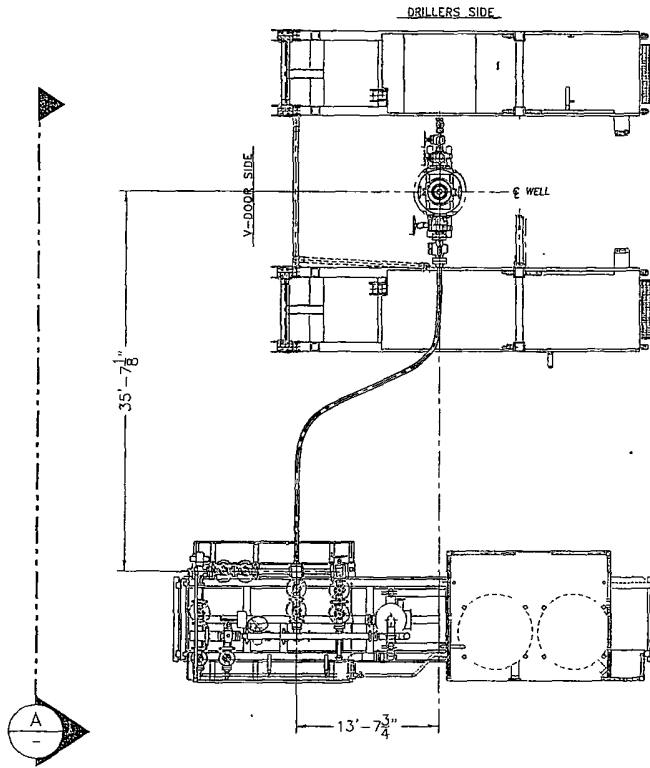
**HELMERICH & PAYNE**  
 INTERNATIONAL DRILLING CO.

10M REMOTE  
KILL LINE SCHEMATIC

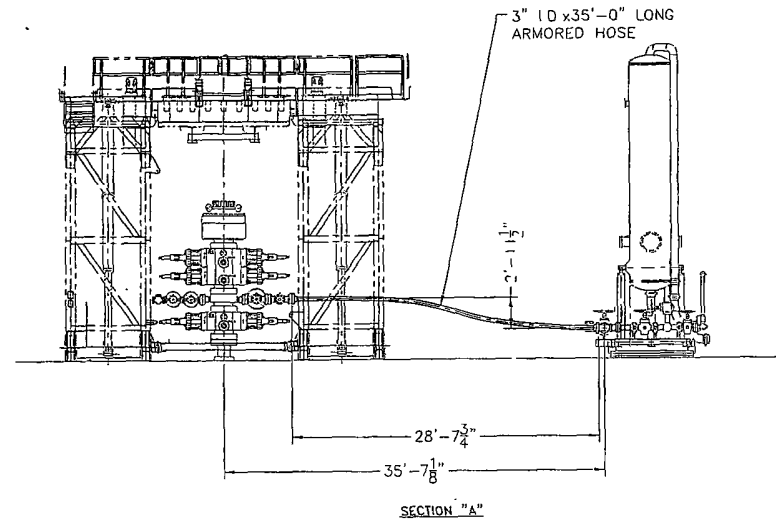


# Flare Line Diagram





PLAN VIEW



SECTION "A"

**ISSUED FOR FABRICATION**  
 December-19-2007  
 DRAFTSMAN \_\_\_\_\_  
 ENGINEER \_\_\_\_\_

**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 INTL. DRILLING CO.

**HP** HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

ENGINEERING APPROVAL		DATE	TITLE								
▲			CHOKE LINE SYSTEM FLEXRIG3								
▲											
▲											
▲											
CUSTOMER:			PROJECT:								
▲	12/16/07	REMOVED SHEET TOTAL CALLOUT	JAV	DRAWN	JBG	DATE	4-10-07	DWG NO.		REV	
REV	DATE	DESCRIPTION	BY	SCALE	3/16"=1'	SHEET	2 OF 3	210-P1-07	A		

---

CERTIFICATE OF CONFORMITY

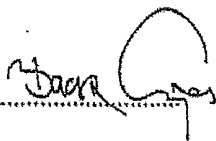
**Supplier** : CONTITECH RUBBER INDUSTRIAL KFT.  
**Equipment** : 6 pcs. Choke and Kill Hose with installed couplings  
**Type** : 3" x 10,67 m WP: 10000 psi  
**Supplier File Number** : 412638  
**Date of Shipment** : April. 2008  
**Customer** : Phoenix Beattie Co.  
**Customer P.o.** : 002491  
**Referenced Standards**  
**/ Codes / Specifications** : API Spec 16 C  
**Serial No.:** 52754,52755,52776,52777,52778,52782

STATEMENT OF CONFORMITY

We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Signed : .....



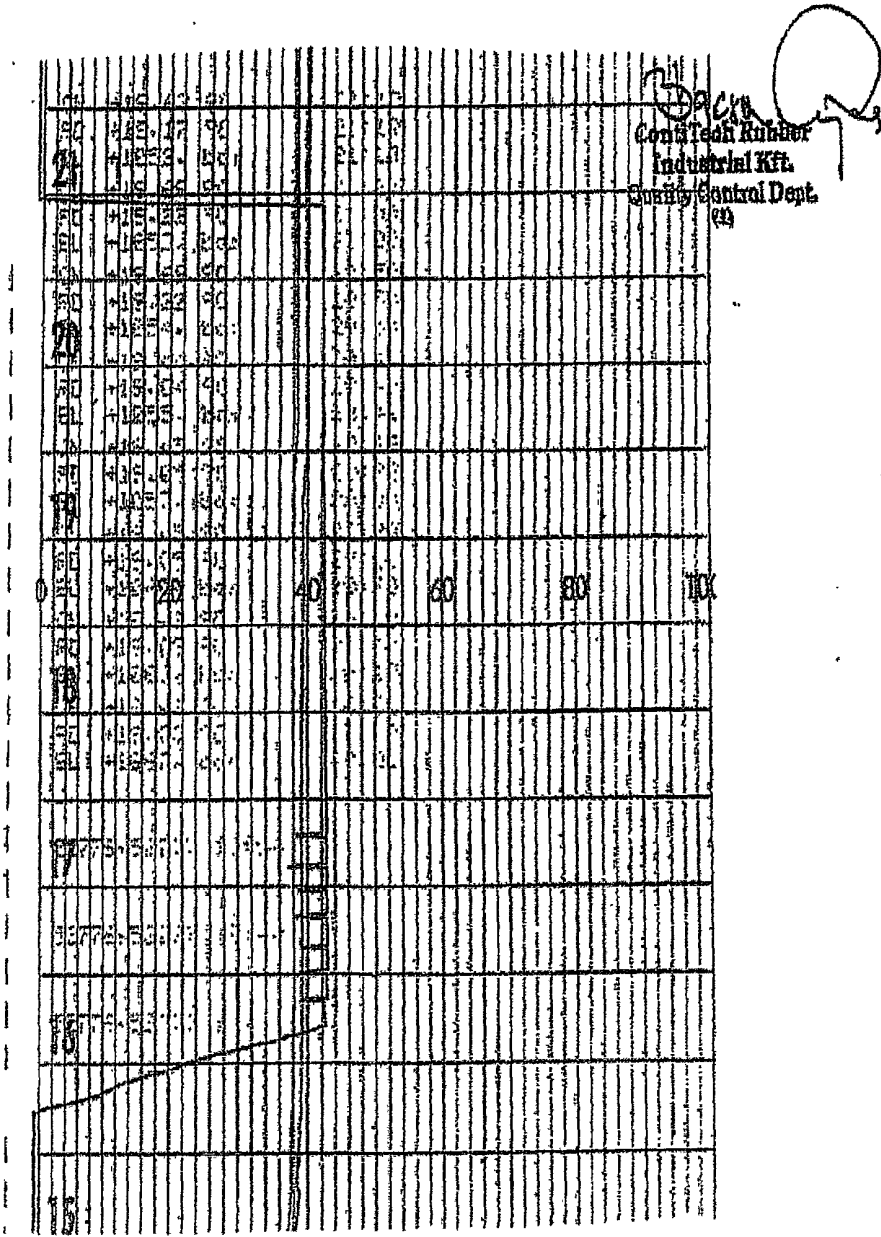
Position: Q.C. Manager

ContiTech Rubber  
Industrial Kft.  
Quality Control Dept.  
(1)

Date: 04. April. 2008



Coflex Hose Certification





Material Identification Certificate

PA No | 006330 | Client | HELMERICH & PAYNE INT'L DRILLING | Client Ref | 370-369-001 | Page | 1

Part No	Description	Material Desc	Material Spec	Qty	WO No	Batch No	Test Cert No	Bin No	Drg No	Issue No
HP16CK3A-35-4F1	3" 10K 16C C&K HOSE x 35ft OAL			1	2491	52777/H884		WATER		
SECK3-HPF3	LIFTING & SAFETY EQUIPMENT TO			1	2440	002440		N/SYK		
SC725-200CS	SAFETY CLAMP 200MM 7.25T	CARBON STEEL		1	2519	H665		22C		
SC725-132CS	SAFETY CLAMP 132MM 7.25T	CARBON STEEL		1	2242	H139		22		

Coflex Hose Certification

We hereby certify that these goods have been inspected by our Quality Management System, and to the best of our knowledge are found to conform to relevant industry standards within the requirements of the purchase order as issued to Phoenix Beattie Corporation.

05/23/09

Coflex Hose Certification

Form No 100/12



**Phoenix Beattie Corp**

11535 Brittonville Park Drive  
Houston, TX 77041  
Tel: (832) 327-0141  
Fax: (832) 327-0148  
E-mail: mail@phoenixbeattie.com  
www.phoenixbeattie.com

**Delivery Note**

<b>Customer Order Number</b>	370-369-001	<b>Delivery Note Number</b>	003078	<b>Page</b>	1
<b>Customer / Invoice Address</b> HELMERICH & PAYNE INT'L DRILLING CO 1437 SOUTH BOULDER TULSA, OK 74119			<b>Delivery / Address</b> HELMERICH & PAYNE IDC ATTN: JOE STEPHENSON - RIG 370 13609 INDUSTRIAL ROAD HOUSTON, TX 77015		

<b>Customer Acc No</b>	<b>Phoenix Beattie Contract Manager</b>	<b>Phoenix Beattie Reference</b>	<b>Date</b>
H01	JJL	006330	05/23/2008

Item No	Beattie Part Number / Description	Qty Ordered	Qty Sent	Qty To Follow
1	HP10CK3A-35-4F1 3" 10K 16C C&K HOSE x 35ft OAL CW 4.1/16" API SPEC FLANGE E/ End 1: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange End 2: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange c/w BX155 Standard ring groove at each end Suitable for H2S Service Working pressure: 10,000psi Test pressure: 15,000psi Standard: API 16C Full specification Armor Guarding: Included Fire Rating: Not Included Temperature rating: -20 Deg C to +100 Deg C	1	1	0
2	SECK3-HPF3 LIFTING & SAFETY EQUIPMENT TO SUIT HP10CK3-35-F1 2 x 160mm ID Safety Clamps 2 x 244mm ID Lifting Collars & element C's 2 x 7ft Stainless Steel wire rope 3/4" OD 4 x 7.75t Shackles	1	1	0
3	SC725-200CS SAFETY CLAMP 200MM 7.25T C/S GALVANISED	1	1	0

Continued...

All goods remain the property of Phoenix Beattie until paid for in full. Any damage or shortage on this delivery must be advised within 5 days. Returns may be subject to a handling charge.



Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE			CERT. N°: 746	
PURCHASER: Phoenix Beattie Co.		P.O. N°: 002491		
CONTITECH ORDER N°: 412638	HOSE TYPE: 3" ID		Choke and Kill Hose	
HOSE SERIAL N°: 52777	NOMINAL / ACTUAL LENGTH: 10,67 m			
W.P. 68,96 MPa 10000 psi	T.P. 103,4 MPa 15000 psi	Duration: 60 min.		
Pressure test with water at ambient temperature  <div style="text-align: center; font-size: 1.2em;">See attachment. (1 page)</div>				
↑ 10 mm = 10 Min. → 10 mm = 25 MPa				
COUPLINGS				
Type	Serial N°		Quality	Heat N°
3" coupling with 4 1/16" Flange end	917	913	AISI 4130	T7998A
			AISI 4130	26984
INFOCHIP INSTALLED			API Spec 16 C Temperature rate: "B"	
All metal parts are flawless				
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.				
Date:  04. April. 2008	Inspector		Quality Control	
			ContiTech Rubber Industrial Kft. Quality Control Dept. (1)	

Coflex Hose Certification

Form No 100/12



**Phoenix Beattie Corp**

11636 Brittanmore Park Drive  
Houston, TX 77041  
Tel: (832) 327-0141  
Fax: (832) 327-0148  
E-mail: mail@phoenixbeattie.com  
www.phoenixbeattie.com

**Delivery Note**

<b>Customer Order Number</b>	370-369-001	<b>Delivery Note Number</b>	003078	<b>Page</b>	2
<b>Customer / Invoice Address</b> HELMERICH & PAYNE INT'L DRILLING CO 1437 SOUTH BOULDER TULSA, OK 74119		<b>Delivery / Address</b> HELMERICH & PAYNE IDC ATTN: JOE STEPHENSON - RIG 370 13609 INDUSTRIAL ROAD HOUSTON, TX 77015			

<b>Customer Acc'No</b>	<b>Phoenix Beattie Contract Manager</b>	<b>Phoenix Beattie Reference</b>	<b>Date</b>
H01	JJL	006330	05/23/2008

Item No	Beattie Part Number / Description	Qty Ordered	Qty Sent	Qty To Follow
4	SC725-132CS SAFETY CLAMP 132MM 7.25T C/S GALVANIZED C/W BOLTS	1	1	0
5	00CERT-HYDRO HYDROSTATIC PRESSURE TEST CERTIFICATE	1	1	0
6	00CERT-LOAD LOAD TEST CERTIFICATES	1	1	0
7	00FREIGHT INBOUND / OUTBOUND FREIGHT PRE-PAY & ADD TO FINAL INVOICE NOTE: MATERIAL MUST BE ACCOMPANIED BY PAPERWORK INCLUDING THE PURCHASE ORDER, RIG NUMBER TO ENSURE PROPER PAYMENT	1	1	0

Phoenix Beattie Inspection Signature :

Received in Good Condition : Signature

Print Name

Date

All goods remain the property of Phoenix Beattie until paid for in full. Any damage or shortage on this delivery must be advised within 5 days. Returns may be subject to a handling charge.