ATS-12-1022

HOBBS OCD

R-111-POTASH

APR 03 2013

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OCD Hobbs

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
S-NMNM109757 BHMWNM42814

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

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

8. Lease Name and Well No. 39795
Cabin Lake 31 Federal Com #6H

2. Name of Operator
OXY USA Inc. 16696

9. API Well No.
30-015-41088

3a. Address P.O. Box 50250
Midland, TX 79710

3b. Phone No. *(include area code)*
432-685-5717

10. Field and Pool, or Exploratory
Lost Tank Delaware 40299

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 560 FSL 330 FWL SWSW Unit M
At proposed prod. zone 560 FSL 355 FEL SESE(P)

11. Sec., T. R. M. or Blk. and Survey or Area
Sec 31 T21S R32E

14. Distance in miles and direction from nearest town or post office*
17 miles northeast from Loving, NM

12. County or Parish
Lea

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of acres in lease 487.44 ac	17. Spacing Unit dedicated to this well 163.74 ac
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 230'	19. Proposed Depth 11702'M 7289'V	20. BLM/BIA Bond No. on file ESB000226 - NMB000862
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3595.5' GL	22. Approximate date work will start* 09/30/2012	23. Estimated duration 45 days

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

25. Signature	Name *(Printed/Typed)*	Date
	David Stewart	7/30/12

Title: Regulatory Advisor

david_stewart@oxy.com

Approved by *(Signature)* /s/ Jesse J. Juen	Name *(Printed/Typed)*	Date MAR 25 2013
Title 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 page 2)

Ka 04/04/13

Approval Subject to General Requirements & Special Stipulations Attached

Carlsbad Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APR 04 2013

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs OCD
APR 03 2013
RECEIVED

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

***SUBMIT IN TRIPLICATE** – Other instructions on page 2.*

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMNM-109757
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No.
	8. Well Name and No. Cabin Lake 31 Federal #6H
2. Name of Operator OXY USA, Inc.	9. API Well No. 30-025-
3a. Address 5 Greenway Plaza, Suite 110 Houston, TX 77046-0521	3b. Phone No. *(include area code)* 713-350-4816 (JDM)
	10. Field and Pool or Exploratory Area Livingston Ridge
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* 560 FSL 330 FWL, SWSW, Sec 31, T21S, R32E	11. Country or Parish, State Lea County, New Mexico.

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☑ New Construction	☐ Recomplete	☐ Other _____
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	_____
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	_____

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The proposed plan is to construct an overhead 3 phase and 1 static 12-470 volt electric line. The conductor size will be 1 alt ACSR. Class 3-50 foot poles will be used. Anchors will be set at angles and dead ends. The electric line will be a Raptor proof design and marker balls will be used where needed. The electric line will provide power to the Cabin Lake 31 Federal #6H located in Section 31, T-21-S, R-32-E, Lea County, New Mexico. Construction should begin within 30 days of BLM approval.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* Jeremy Murphrey	Title Senior Landman
Signature	Date 6/24/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /s/ Jesse J. Juen	Title STATE DIRECTOR	Date
Conditions of approval, if any, are attached. Approval of this notice 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.	Office NM STATE OFFICE	

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 page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment.

NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and grantingapproval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

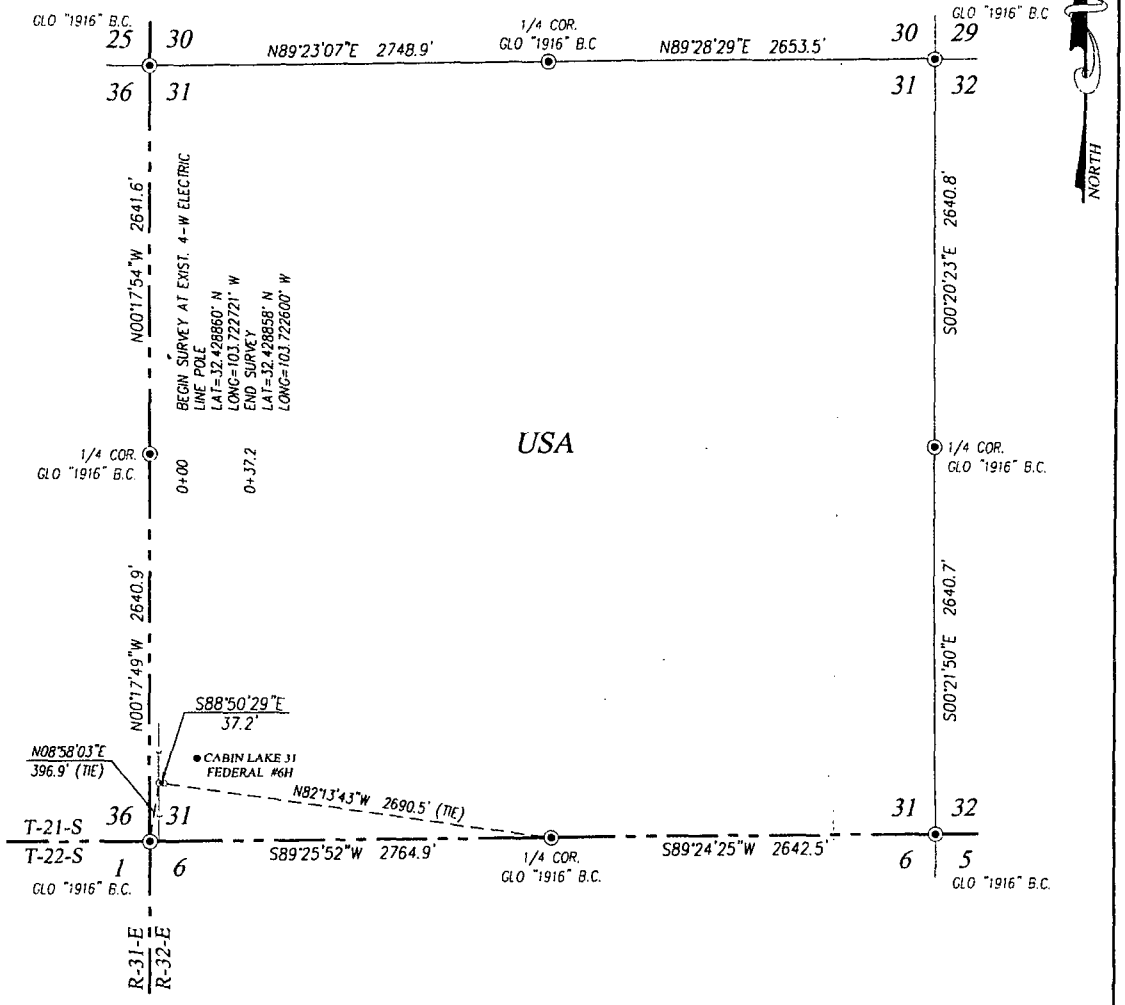
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

SECTION 31, TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY NEW MEXICO



DESCRIPTION

SURVEY OF A STRIP OF LAND 50.0 FEET WIDE AND 37.2 FEET OR 0.007 MILES IN LENGTH CROSSING USA LAND IN SECTION 31, TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M.,.LEA COUNTY, NEW MEXICO, AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE

1) BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

2) LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN DATUM 1983 (NAD83).

LEGEND

◉ DENOTES FOUND CORNER AS NOTED

1000 0 1000 2000 FEET

Scale: 1"=1000'

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON 3239 Ronald J Eidson

DATE: 05/31/2012

NEW MEXICO PROFESSIONAL SURVEYOR

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

OXY U.S.A. INC.

SURVEY OF AN ELECTRIC LINE CROSSING SECTION 31, TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M. LEA COUNTY, NEW MEXICO

Survey Date: 5/4/12	CAD Date: 5/22/12	Drawn By: DSS	
W.O. No.: 12110911	Rev: .	Rel. W.O.:	Sheet 1 of 1

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: Cabin Lake 31 Federal # 6H
Lea 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:

LEGAL DESCRIPTION & LEASE NOS:

Surface Location: 560' FSL & 330' FWL (SWSW)(M)
Section 31-21S-32E
Lease No. NMNM109757

Bottom Hole Location: 560' FSL & 355' FEL (SESE)
Section 31-21S-32E
Eddy County, New Mexico
Lease No. NMNM042814

FORMATIONS: None

BOND COVERAGE: Individual

BLM BOND FILE NO.: NMB000862

OXY USA Inc.

AUTHORIZED SIGNATURE: Donna G. Havins

Donna G. Havins

TITLE: Land Negotiator

DATE: July 23, 2012

cc: David Stewart

DRILLING PROGRAM w/ CORRECTIONS

Operator Name/Number:	OXY USA Inc.	16696
Lease Name/Number:	Cabin Lake 31 Federal Com. #6H	
Pool Name/Number:	Lost Tank Delaware	40299
Surface Location:	560 FSL 330 FWL SWSW(4) Sec 31 T21S R32E	Federal Lse No. NMNM109757
Bottom Hole Location:	560 FSL 355 FEL SESE(P) Sec 31 T21S R32E	Federal Lse No. NMNM042814

Proposed TD: Horizontal Lateral 11702' TMD 7289' TVD
SL - Lat: 32.4292047 Long: 103.7213679 X= 688818.6 Y= 520399.4 NAD - 1927
BH - Lat: 32.4292608 Long: 103.7060692 X= 693538.9 Y= 520447.2 NAD - 1927
Elevation: 3595.5' GL

1. Geologic Name of Surface Formation:

a. Permian

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

Geological Marker	Depth	Type
a. Rustler Anhydrite	714'	Formation
b. Top Salt	1019'	Formation
c. Bottom Salt	4514'	Formation
d. Delaware (Bell Canyon)	4591	Oil/Gas
e. Cherry Canyon	5455'	Oil/Gas
f. Brushy Canyon	6679'	Oil/Gas

*See attached for NMOSE Water/Column Depth to Water

3. Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17-1/2"	0-740'	13-3/8"	48	ST&C	H-40	New	3.0	6.73	9.07
				Hole filled with 8.6# Mud			770#	1730#	
12-1/4"	0-4650'	9-5/8"	40	LT&C	J-55	New	1.28	1.97	2.8
				Hole filled with 10.2# Mud			2570#	3950#	
8-3/4"	0-11702'	5-1/2"	17	LT&C	L-80	New	1.32	1.62	1.75
DVT @ 6000' - POST @ 4700'				Hole filled with 9.2# Mud			6290#	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/ 580sx PP cmt w/ 2% CaCl2 + 4% Bentonite + .125#/sx Poly E-Flake, 13.5ppg 1.75 yield 589# 24hr CS 165% Excess followed by 300sx PP cmt w/ 2% CaCl2, 14.8ppg 1.35 yield 1608# 24hr CS 165% Excess

b. 9-5/8" Intermediate Circulate cement to surface w/ 1200sx HES light PP cmt w/ 5% Salt + .125#/sx Poly-E-Flake + 3#/sx Kol-Seal, 12.9ppg 1.87 yield 625# 24hr CS 105% Excess followed by 450sx PP cmt w/ 1% CaCl2, 14.8ppg 1.34 yield 2125# 24hr CS 105% Excess

c. 5-1/2" Production Cement 1st stage w/ 1550sx Super H w/ .5% Halad R-344 + .4% CFR-3 + 3#/sx Kol-Seal + .125#/sx Poly-E-Flake, 13.2ppg 1.60 yield 1477# 24hs CS 135% Excess Calc TOC 5995' Cement 2nd stage w/ 260sx HES light PP cmt w/ 3#/sx Salt + 3#/sx Kol-Seal + .1% HR-601 + 12.4ppg 2.07 yield 431# 24hr CS 200% Excess followed by 100sx HES light PP cmt w/ 1% CaCl2, 14.8ppg 1.34 yield 1970# 24gr CS 200% excess Calc TOC 4695' Cement 3rd stage w/ 630sx HES Light PP cmt w/ 3#/sx Salt, 12.4ppg 1.98 yield 511# 24hr CS 10% Excess followed by 100sx HES light PP cmt w/ 2% CaCl2, 14.8ppg 1.35 yield 2100# 24hr CS 200% 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 three 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 to15000psi 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

Depth	Mud Wt. ppg	Visc sec	Fluid Loss	Type System
0 - 740'	8.4-8.9	32-34	NC	Fresh Water/Spud Mud
740 - 4650'	9.8-10.0	28-29	NC	Brine Water
4650 - 6000'	8.6-8.8	28-29	NC	Fresh Water
6000 - TD'	9.0-9.2	40-50	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 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:

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 Triple Combo (DLL/MGL/SDL/DSNL) from kick off to TD. GR/NL to Surface.
c. No coring program is planned but if done will be sidewall rotary cores.
d. Mud logging program will be initiated from the base of surface casing to TD.

9. Potential Hazards:

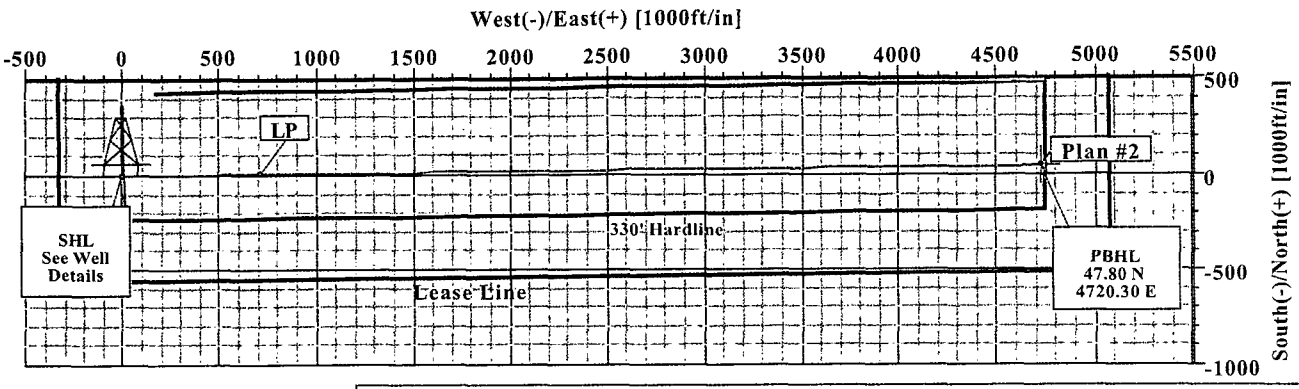
No abnormal pressures, temperatures or H_2S gas are expected. The highest anticipated pressure gradient would 0.49 psi/ft. The bottomhole pressure is anticipated to be between 3000-3500 psi.
If H2S is encountered the operator will comply with the provisions of Onshore Oil & Gas Order No.6.
No lost circulation 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.

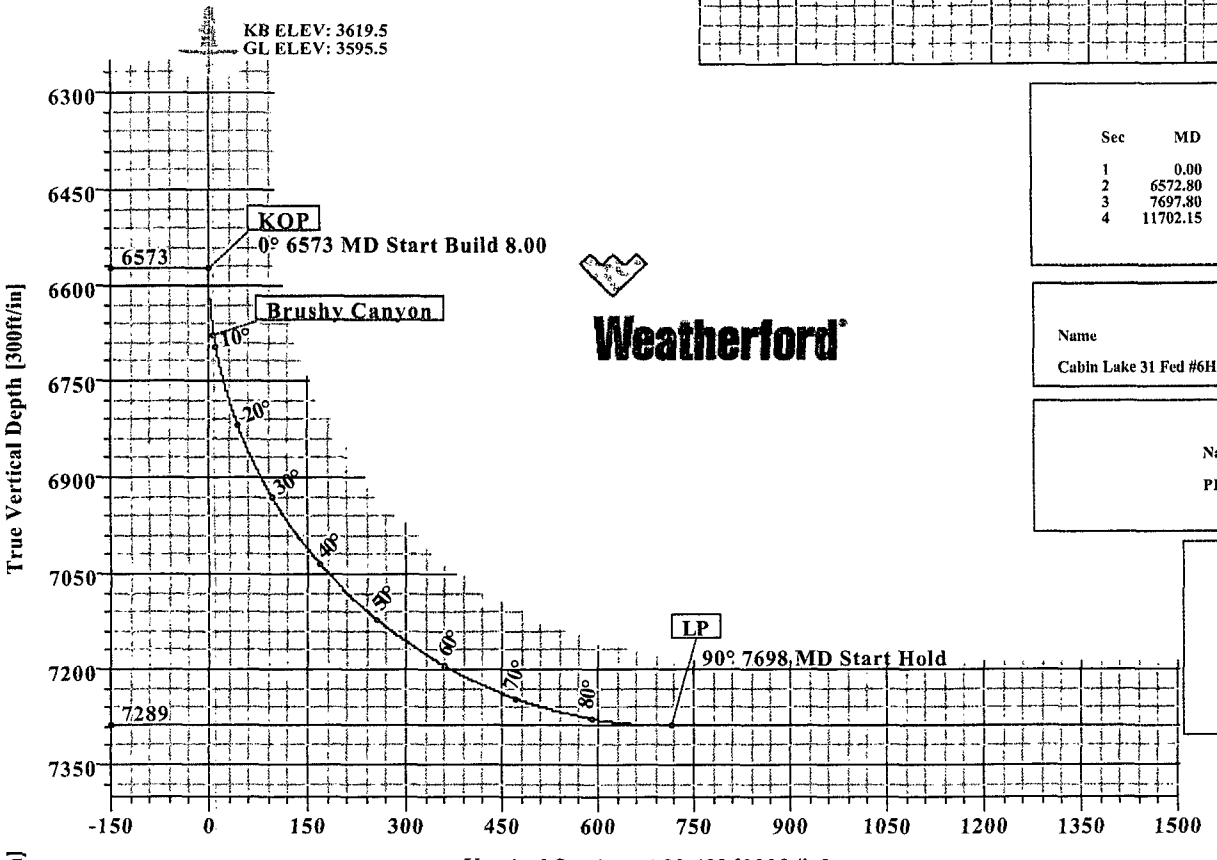
10. Anticipated Starting Date and Duration of Operations:

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.

Occidental Permian Ltd.

Cabin Lake 31 Fed #6H
Lea Co, New Mexico





Weatherford

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	89.42	0.00	0.00	0.00	0.00	0.00	0.00	
2	6572.80	0.00	89.42	6572.80	0.00	0.00	0.00	0.00	0.00	
3	7697.80	90.00	89.42	7289.00	7.25	716.16	8.00	89.42	716.20	
4	11702.15	90.00	89.42	7289.00	47.80	4720.30	0.00	0.00	4720.54	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Cabin Lake 31 Fed #6H	0.00	0.00	520399.40	688818.60	32°25'45.137N	103°43'16.924W	N/A

TARGET DETAILS

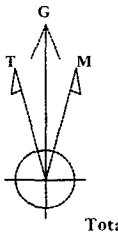
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	7289.00	47.80	4720.30	520447.20	693538.90	Point

SITE DETAILS

Cabin Lake 31 Fed #6H

Site Centre Northing: 520399.40
Easting: 688818.60

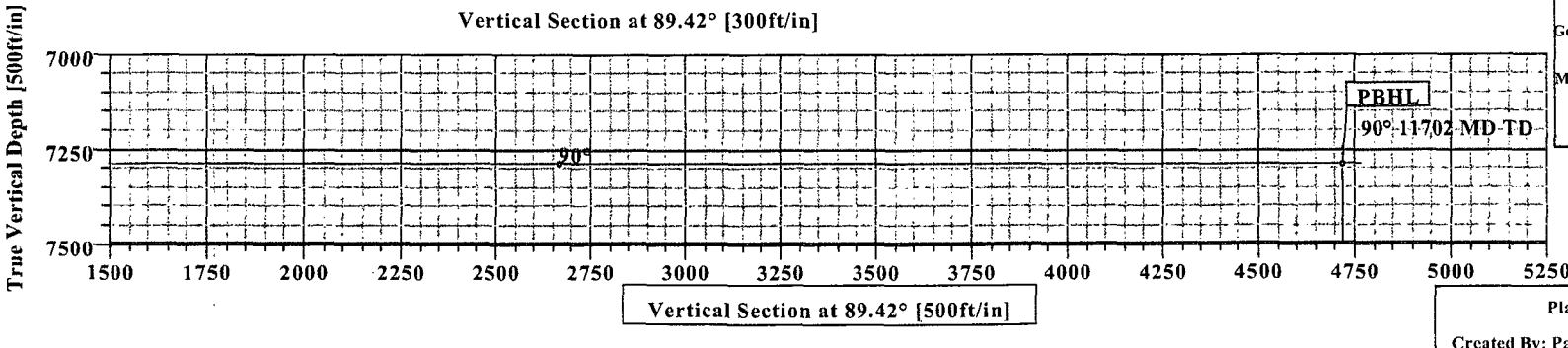
Ground Level: 3595.50
Positional Uncertainty: 0.00
Convergence: 0.33



Azimuths to Grid North
True North: -0.33°
Magnetic North: 7.17°

Magnetic Field
Strength: 48611nT
Dip Angle: 60.32°
Date: 11/1/2012
Model: IGRF2010

Total Correction to Grid North: 7.17°



FIELD DETAILS

Lea Co, New Mexico (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

Plan: Plan #2 (Cabin Lake 31 Fed #6H/1)

Created By: Patrick Rudolph Date: 4/19/2012

Weatherford International Ltd.

WFT Plan Report - X & Y's

Weatherford

Company:	Occidental Permian Ltd.	**Date:** 4/19/2012 **Time:** 10:13:28	**Page:** 1
Field:	Lea Co, New Mexico (Nad 27)	**Co-ordinate(NE) Reference:**	Well: Cabin Lake 31 Fed #6H, Grid North
Site:	Cabin Lake 31 Fed #6H	**Vertical (TVD) Reference:**	SITE 3619.5
Well:	Cabin Lake 31 Fed #6H	**Section (VS) Reference:**	Well (0.00N,0.00E,89.42Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

Plan:	Plan #2	**Date Composed:**	4/18/2012
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Field: Lea Co, New Mexico (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: Cabin Lake 31 Fed #6H

Site Position:		**Northing:**	520399.40 ft	**Latitude:**	32 25 45.137 N	
From:	Map	**Easting:**	688818.60 ft	**Longitude:**	103 43 16.924 W	
Position Uncertainty:	0.00 ft			**North Reference:**	Grid	
Ground Level:	3595.50 ft			**Grid Convergence:**	0.33 deg	

Well: Cabin Lake 31 Fed #6H **Slot Name:**

Well Position:	+N/-S	0.00 ft	**Northing:**	520399.40 ft	**Latitude:**	32 25 45.137 N	
	+E/-W	0.00 ft	**Easting :**	688818.60 ft	**Longitude:**	103 43 16.924 W	
Position Uncertainty:		0.00 ft					

Wellpath: 1 **Drilled From:** Surface

Tie-on Depth: 0.00 ft

Current Datum:	SITE	**Height** 3619.50 ft	**Above System Datum:** Mean Sea Level
Magnetic Data:	11/1/2012		**Declination:** 7.50 deg
Field Strength:	48611 nT		**Mag Dip Angle:** 60.32 deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	0.00	0.00	0.00	89.42

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	89.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6572.80	0.00	89.42	6572.80	0.00	0.00	0.00	0.00	0.00	0.00	
7697.80	90.00	89.42	7289.00	7.25	716.16	8.00	8.00	0.00	89.42	
11702.15	90.00	89.42	7289.00	47.80	4720.30	0.00	0.00	0.00	0.00	PBHL

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
6500.00	0.00	89.42	6500.00	0.00	0.00	0.00	0.00	520399.40	688818.60	
6572.80	0.00	89.42	6572.80	0.00	0.00	0.00	0.00	520399.40	688818.60	KOP
6600.00	2.18	89.42	6599.99	0.01	0.52	0.52	8.00	520399.41	688819.12	
6650.00	6.18	89.42	6649.85	0.04	4.16	4.16	8.00	520399.44	688822.76	
6678.38	8.45	89.42	6678.00	0.08	7.77	7.77	8.00	520399.48	688826.37	Brushy Canyon
6700.00	10.18	89.42	6699.33	0.11	11.26	11.27	8.00	520399.51	688829.86	
6750.00	14.18	89.42	6748.20	0.22	21.81	21.81	8.00	520399.62	688840.41	
6800.00	18.18	89.42	6796.21	0.36	35.73	35.74	8.00	520399.76	688854.33	
6850.00	22.18	89.42	6843.13	0.54	52.97	52.98	8.00	520399.94	688871.57	
6900.00	26.18	89.42	6888.74	0.74	73.45	73.45	8.00	520400.14	688892.05	
6950.00	30.18	89.42	6932.80	0.98	97.05	97.05	8.00	520400.38	688915.65	
7000.00	34.18	89.42	6975.11	1.25	123.67	123.67	8.00	520400.65	688942.27	
7050.00	38.18	89.42	7015.47	1.55	153.17	153.18	8.00	520400.95	688971.77	
7100.00	42.18	89.42	7053.66	1.88	185.42	185.43	8.00	520401.28	689004.02	
7150.00	46.18	89.42	7089.52	2.23	220.26	220.27	8.00	520401.63	689038.86	
7200.00	50.18	89.42	7122.85	2.61	257.51	257.52	8.00	520402.01	689076.11	
7250.00	54.18	89.42	7153.51	3.01	296.99	297.01	8.00	520402.41	689115.59	

Weatherford International Ltd.

WFT Plan Report - X & Y's

Weatherford

Company:	Occidental Permian Ltd.	**Date:** 4/19/2012 **Time:** 10:13:28	**Page:** 2
Field:	Lea Co, New Mexico (Nad 27)	**Co-ordinate(NE) Reference:**	Well: Cabin Lake 31 Fed #6H, Grid North
Site:	Cabin Lake 31 Fed #6H	**Vertical (TVD) Reference:**	SITE 3619.5
Well:	Cabin Lake 31 Fed #6H	**Section (VS) Reference:**	Well (0.00N,0.00E,89.42Azi)
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
7300.00	58.18	89.42	7181.33	3.43	338.52	338.54	8.00	520402.83	689157.12	
7350.00	62.18	89.42	7206.20	3.87	381.89	381.90	8.00	520403.27	689200.49	
7400.00	66.18	89.42	7227.97	4.32	426.88	426.90	8.00	520403.72	689245.48	
7450.00	70.18	89.42	7246.56	4.79	473.29	473.31	8.00	520404.19	689291.89	
7500.00	74.18	89.42	7261.86	5.27	520.87	520.90	8.00	520404.67	689339.47	
7550.00	78.18	89.42	7273.80	5.77	569.41	569.44	8.00	520405.17	689388.01	
7600.00	82.18	89.42	7282.33	6.26	618.67	618.70	8.00	520405.66	689437.27	
7650.00	86.18	89.42	7287.41	6.77	668.40	668.43	8.00	520406.17	689487.00	
7697.80	90.00	89.42	7289.00	7.25	716.16	716.20	8.00	520406.65	689534.76	LP
7700.00	90.00	89.42	7289.00	7.27	718.36	718.39	0.00	520406.67	689536.96	
7800.00	90.00	89.42	7289.00	8.29	818.35	818.39	0.00	520407.69	689636.95	
7900.00	90.00	89.42	7289.00	9.30	918.35	918.39	0.00	520408.70	689736.95	
8000.00	90.00	89.42	7289.00	10.31	1018.34	1018.39	0.00	520409.71	689836.94	
8100.00	90.00	89.42	7289.00	11.32	1118.34	1118.39	0.00	520410.72	689936.94	
8200.00	90.00	89.42	7289.00	12.34	1218.33	1218.39	0.00	520411.74	690036.93	
8300.00	90.00	89.42	7289.00	13.35	1318.33	1318.39	0.00	520412.75	690136.93	
8400.00	90.00	89.42	7289.00	14.36	1418.32	1418.39	0.00	520413.76	690236.92	
8500.00	90.00	89.42	7289.00	15.38	1518.32	1518.39	0.00	520414.78	690336.92	
8600.00	90.00	89.42	7289.00	16.39	1618.31	1618.39	0.00	520415.79	690436.91	
8700.00	90.00	89.42	7289.00	17.40	1718.31	1718.39	0.00	520416.80	690536.91	
8800.00	90.00	89.42	7289.00	18.41	1818.30	1818.39	0.00	520417.81	690636.90	
8900.00	90.00	89.42	7289.00	19.43	1918.30	1918.39	0.00	520418.83	690736.90	
9000.00	90.00	89.42	7289.00	20.44	2018.29	2018.39	0.00	520419.84	690836.89	
9100.00	90.00	89.42	7289.00	21.45	2118.29	2118.39	0.00	520420.85	690936.89	
9200.00	90.00	89.42	7289.00	22.46	2218.28	2218.39	0.00	520421.86	691036.88	
9300.00	90.00	89.42	7289.00	23.48	2318.28	2318.39	0.00	520422.88	691136.88	
9400.00	90.00	89.42	7289.00	24.49	2418.27	2418.39	0.00	520423.89	691236.87	
9500.00	90.00	89.42	7289.00	25.50	2518.27	2518.39	0.00	520424.90	691336.87	
9600.00	90.00	89.42	7289.00	26.51	2618.26	2618.39	0.00	520425.91	691436.86	
9700.00	90.00	89.42	7289.00	27.53	2718.26	2718.39	0.00	520426.93	691536.86	
9800.00	90.00	89.42	7289.00	28.54	2818.25	2818.39	0.00	520427.94	691636.85	
9900.00	90.00	89.42	7289.00	29.55	2918.24	2918.39	0.00	520428.95	691736.84	
10000.00	90.00	89.42	7289.00	30.56	3018.24	3018.39	0.00	520429.96	691836.84	
10100.00	90.00	89.42	7289.00	31.58	3118.23	3118.39	0.00	520430.98	691936.83	
10200.00	90.00	89.42	7289.00	32.59	3218.23	3218.39	0.00	520431.99	692036.83	
10300.00	90.00	89.42	7289.00	33.60	3318.22	3318.39	0.00	520433.00	692136.82	
10400.00	90.00	89.42	7289.00	34.61	3418.22	3418.39	0.00	520434.01	692236.82	
10500.00	90.00	89.42	7289.00	35.63	3518.21	3518.39	0.00	520435.03	692336.81	
10600.00	90.00	89.42	7289.00	36.64	3618.21	3618.39	0.00	520436.04	692436.81	
10700.00	90.00	89.42	7289.00	37.65	3718.20	3718.39	0.00	520437.05	692536.80	
10800.00	90.00	89.42	7289.00	38.66	3818.20	3818.39	0.00	520438.06	692636.80	
10900.00	90.00	89.42	7289.00	39.68	3918.19	3918.39	0.00	520439.08	692736.79	
11000.00	90.00	89.42	7289.00	40.69	4018.19	4018.39	0.00	520440.09	692836.79	
11100.00	90.00	89.42	7289.00	41.70	4118.18	4118.39	0.00	520441.10	692936.78	
11200.00	90.00	89.42	7289.00	42.72	4218.18	4218.39	0.00	520442.12	693036.78	
11300.00	90.00	89.42	7289.00	43.73	4318.17	4318.39	0.00	520443.13	693136.77	
11400.00	90.00	89.42	7289.00	44.74	4418.17	4418.39	0.00	520444.14	693236.77	
11500.00	90.00	89.42	7289.00	45.75	4518.16	4518.39	0.00	520445.15	693336.76	
11600.00	90.00	89.42	7289.00	46.77	4618.16	4618.39	0.00	520446.17	693436.76	
11702.15	90.00	89.42	7289.00	47.80	4720.30	4720.54	0.00	520447.20	693538.90	PBHL

Weatherford International Ltd.

WFT Plan Report - X & Y's

Weatherford

Company:	Occidental Permian Ltd.	Date: 4/19/2012	Time: 10:13:28	Page:	3
Field:	Lea Co, New Mexico (Nad 27)	Co-ordinate(NE) Reference:	Well: Cabin Lake 31 Fed #6H, Grid North		
Site:	Cabin Lake 31 Fed #6H	Vertical (TVD) Reference:	SITE 3619.5		
Well:	Cabin Lake 31 Fed #6H	Section (VS) Reference:	Well (0.00N,0.00E,89.42Azi)		
Wellpath:	1	Survey Calculation Method:	Minimum Curvature	Db:	Sybase

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg	Min	Sec		<--- Longitude ---> Deg	Min	Sec	
PBHL			7289.00	47.80	4720.30	520447.20	693538.90	32	25	45.339	N	103	42	21.849	W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
740.00	740.00	0.000	0.000	Csg
4650.00	4650.00	0.000	0.000	Csg

Annotation

MD ft	TVD ft	
6572.80	6572.80	KOP
7697.80	7289.00	LP
11702.14	7289.00	PBHL

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
1018.00	1018.00	Base Salt		0.00	0.00
4528.00	4528.00	Base Anhydrite		0.00	0.00
4519.00	4519.00	Bell Canyon		0.00	0.00
5454.00	5454.00	Cherry Canyon		0.00	0.00
6678.38	6678.00	Brushy Canyon		0.00	0.00

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 29, 30, 31, 32 **Township:** 21S **Range:** 32E

No records found.

PLSS Search:

Section(s): 25, 36 **Township:** 21S **Range:** 31E

No records found.

PLSS Search:

Section(s): 1 **Township:** 22S **Range:** 31E

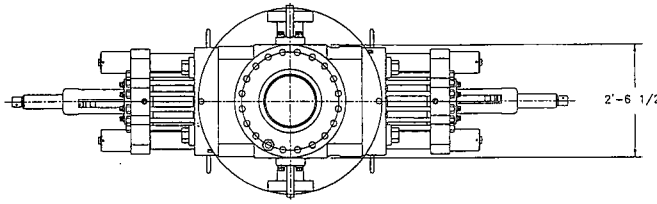
No records found.

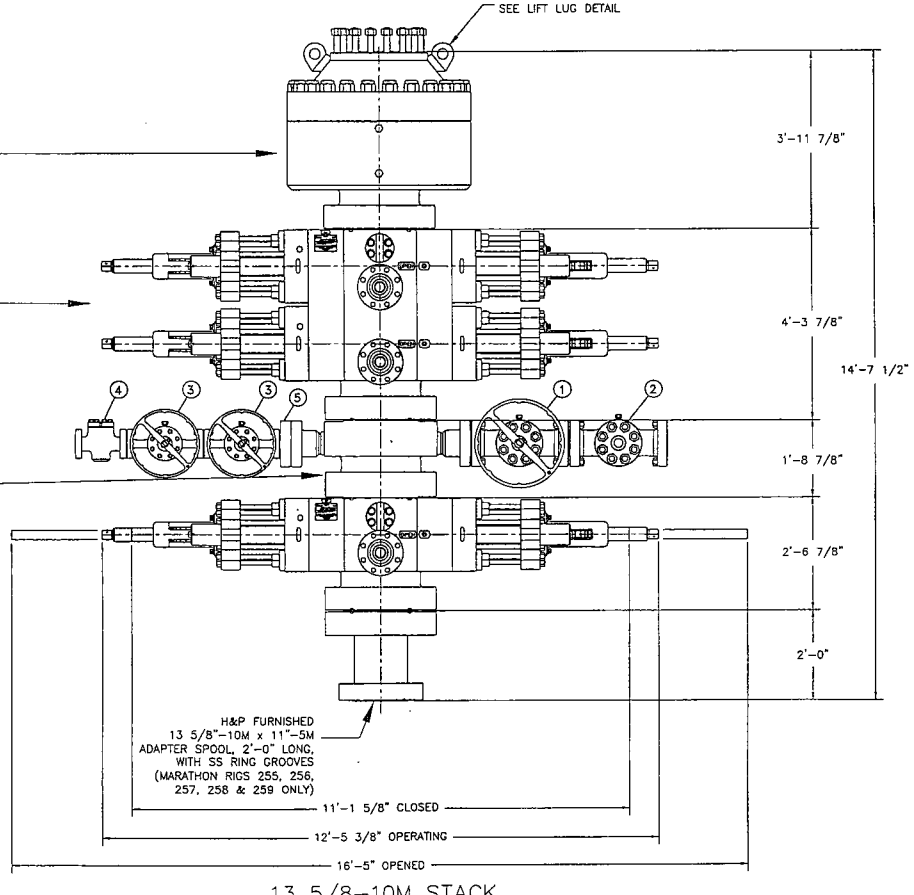
PLSS Search:

Section(s): 5, 6 **Township:** 22S **Range:** 32E

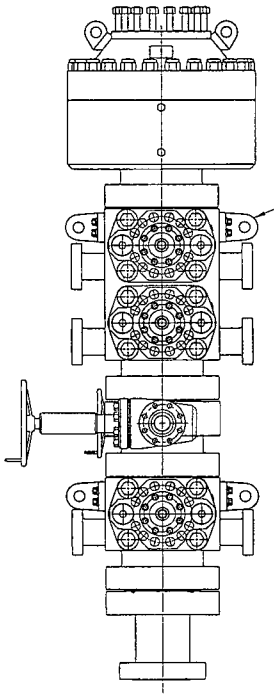
BOP

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





13 5/8–10M STACK



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

REV	DATE	DESCRIPTION	BY
E	12/18/07	ADDED SHEET 03	JAV
D	4-10-07	ORIENTATION REVISED, DOUBLE STUDDED ADAPTER, VALVES 1, 2, & 3, AND MS CHECK VALVE ADDED	JBG
C	4-04-07	6" ADDED TO SPACER ADAPTER SPOOL	JBG
B	02-07-07	ADDED ADAPTER SPOOL	MWL
A	06-13-02	CORRECTED BOP STACK	MWL

ENGINEERING APPROVAL | DATE

HELMERICH & PAYNE
INTERNATIONAL DRILLING CO.

TITLE: 13 5/8"–10M BOP 3 RAM STACK FLEXRIG3

CUSTOMER: H&P

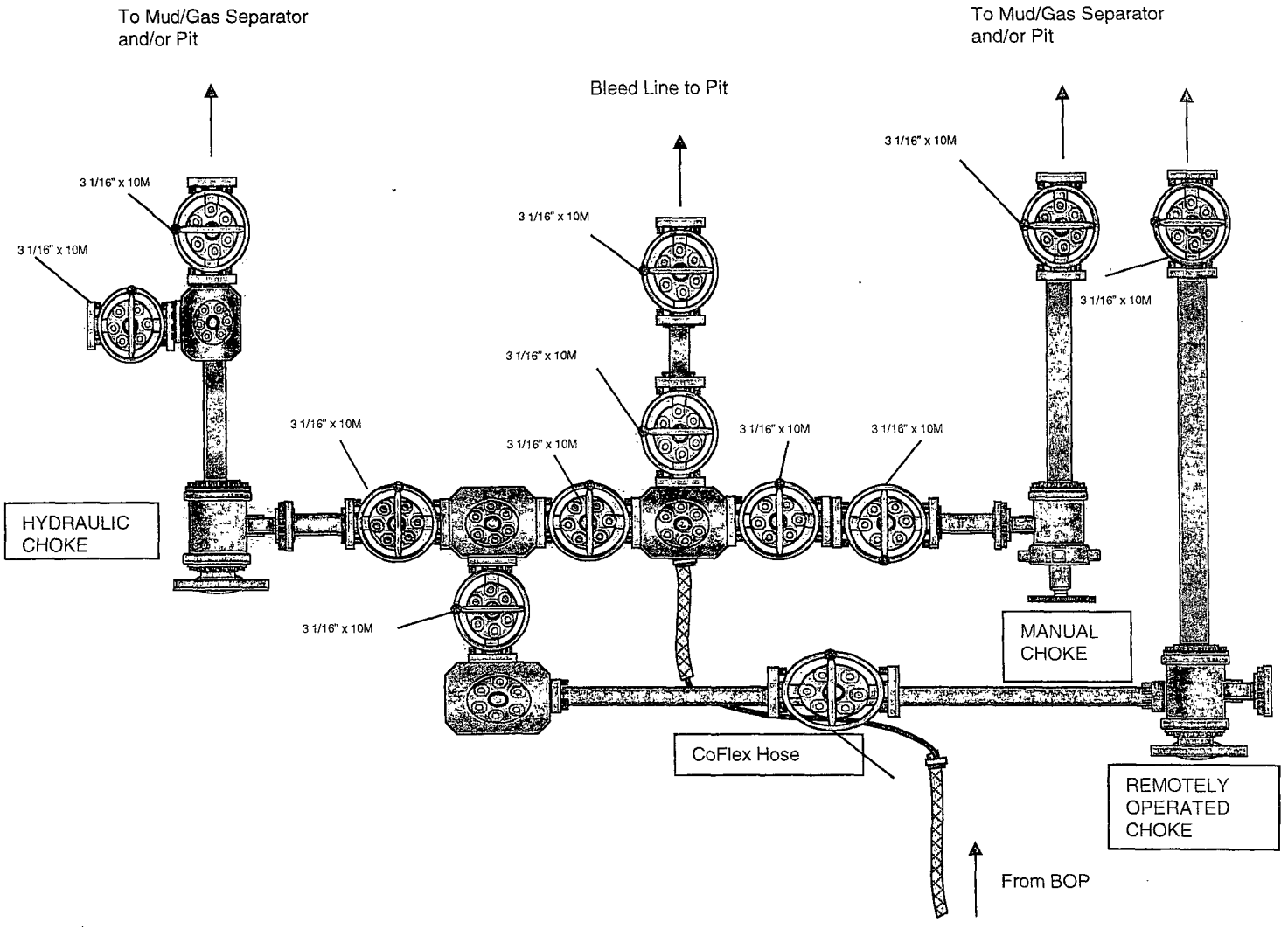
PROJECT: FLEXRIG3

DRAWN: MTS | DATE: 6-5-02 | DWG. NO.: 210–P1–07 | REV: E

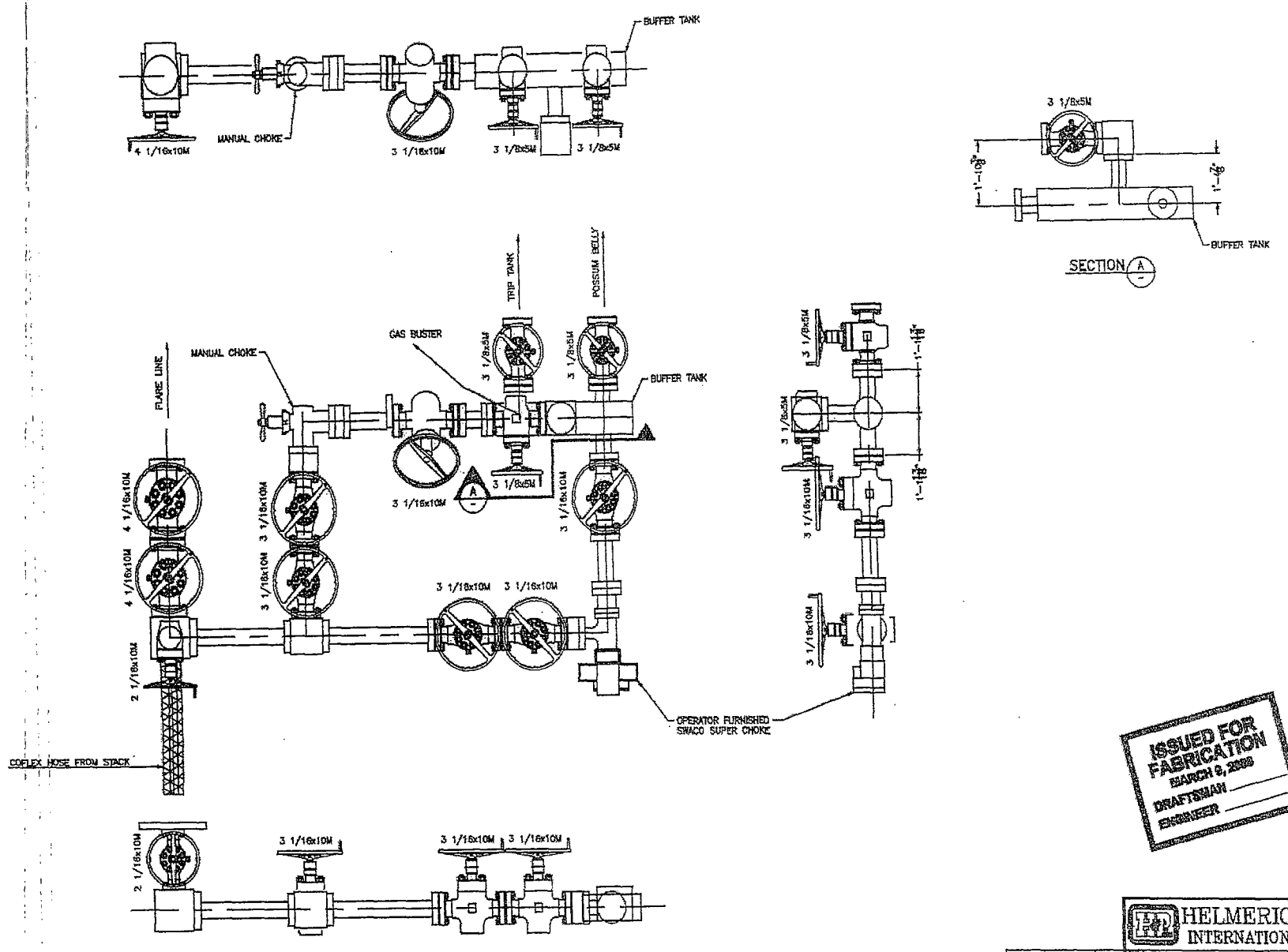
SCALE: 3/4"=1' | SHEET: 1 OF 1

Chk Manfd-1

10M CHOKE MANIFOLD CONFIGURATION



Clk Mufld-2



ISSUED FOR FABRICATION
MARCH 8, 2002
DRAFTSMAN
ENGINEER

REV	DATE	DESCRIPTION	BY	ENGINEERING APPROVAL	DATE
5					
4					
3					
2					
1	10/15/02	ADJUST DIM TO FIELD CONFIRMED DIM	RAY		

HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

TITLE: CHOKE MANIFOLD

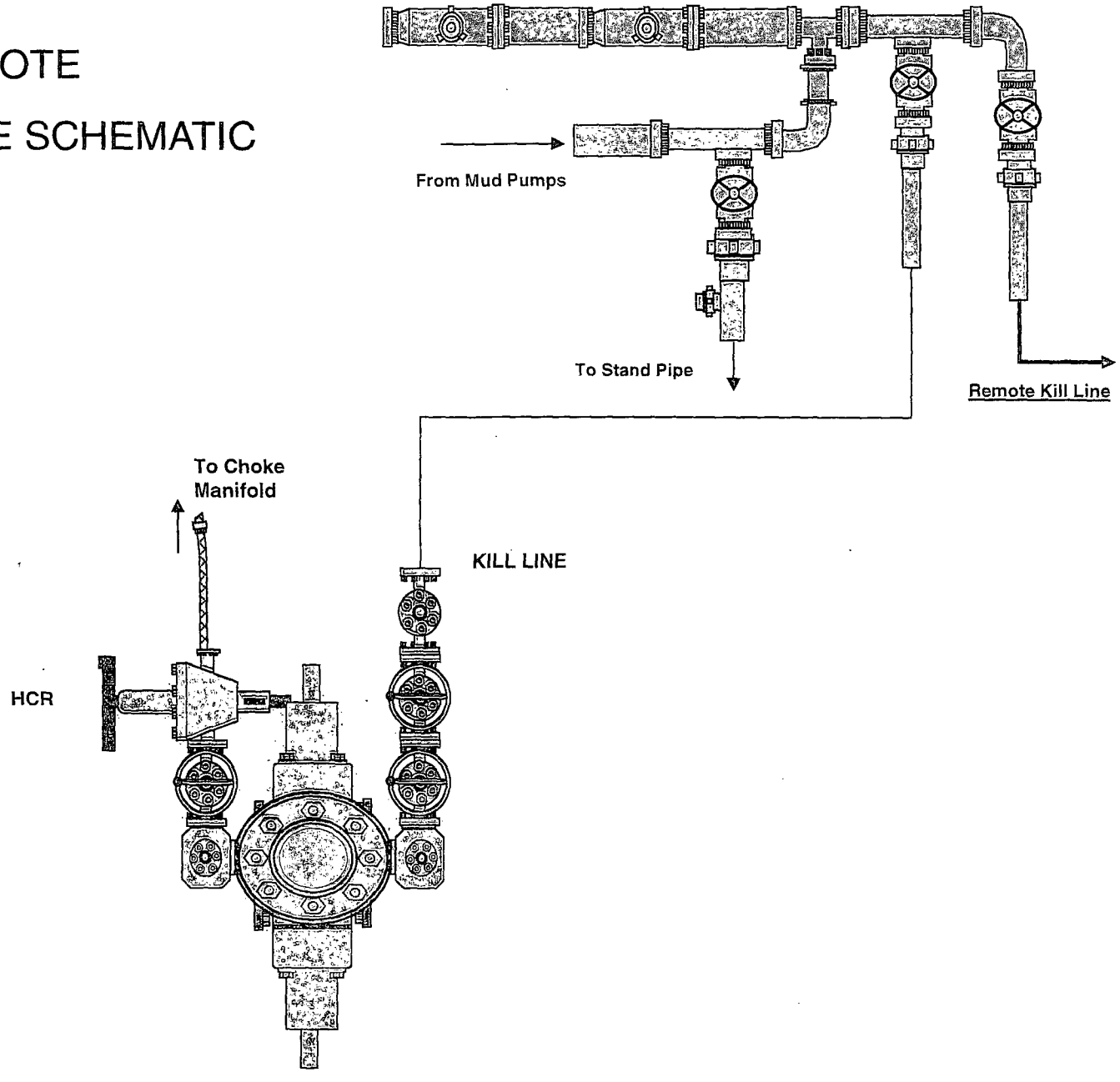
CUSTOMER: H&P

PROJECT: FLEXRIG3

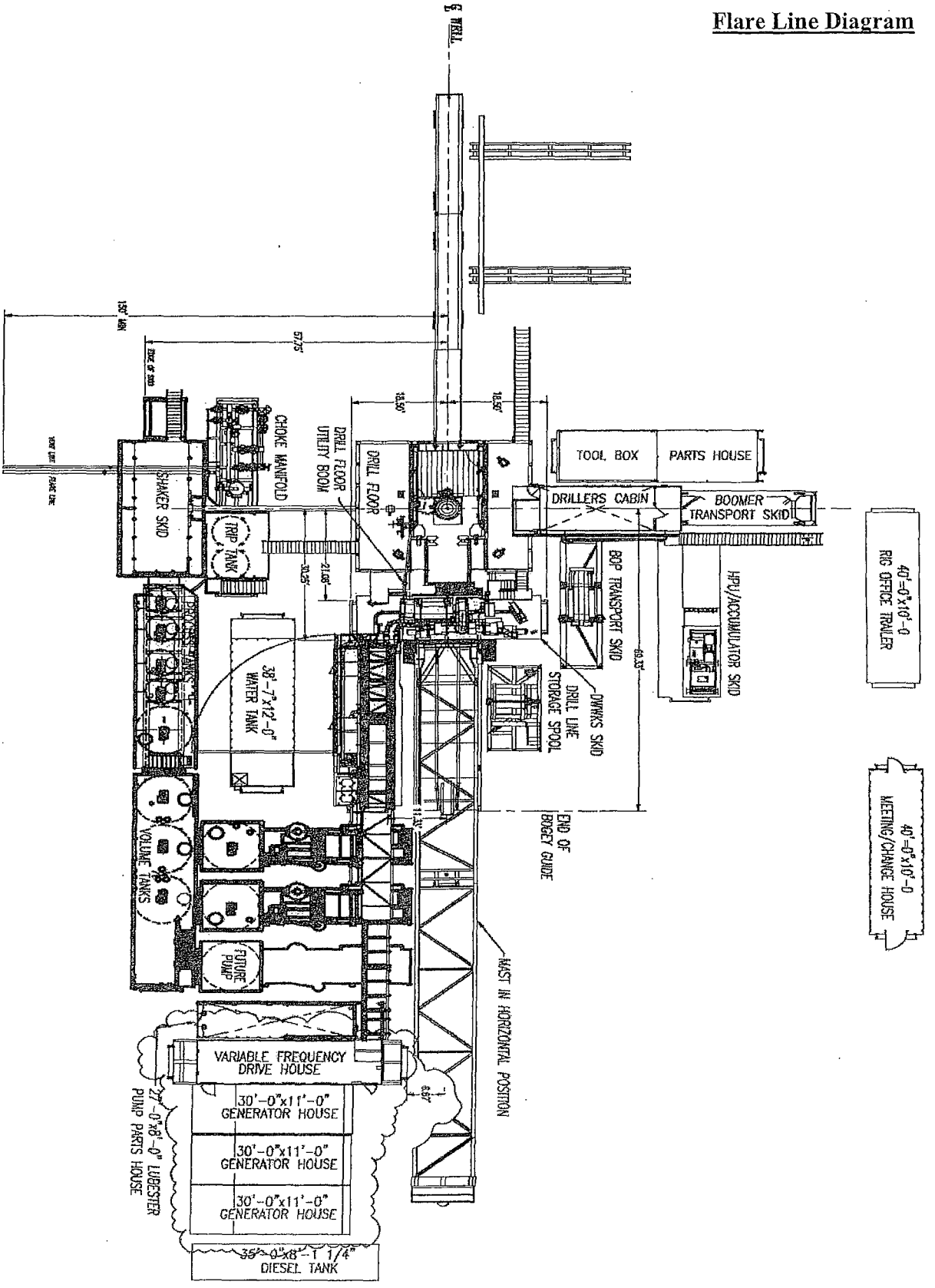
DRAWN: MTS	DATE: 2-28-02	DWG. NO.: 216-P1-05	REV: A
SCALE: 3/4"=1'	SHEET 1 OF 1		

Chk Manifd -3

10M REMOTE KILL LINE SCHEMATIC



Flare Line Diagram



Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

CERT. N°: 1121

PURCHASER:	ContiTech Beattie Co.	P.O. N°:	005123
CONTITECH ORDER N°:	505591	HOSE TYPE: 3" ID	Choke and Kill Hose
HOSE SERIAL N°:	60890	NOMINAL / ACTUAL LENGTH:	10,67 m / 10,72 m

W.P.	68,9	MPa	10000	psi	T.P.	103,4	MPa	15000	psi

Duration: 60 min.

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 20 MPa

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with	9409 9414	AISI 4130	B3018A H2205
4 1/16" Flange end		AISI 4130	144004

NOT DESIGNED FOR WELL TESTING

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 INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

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

Date:	Inspector	Quality Control
05. November 2011.		ContiTech Rubber Industrial Kft. Quality Control Dept. (1)

ContiTech Rubber Industrial Kft.
Budapesti út 10., Szeged H 6728
P.O.Box 152 Szeged H-6701
Hungary

Phone: +36 62 566 737
Fax: +36 62 566 738
e-mail: info@fluid.contitech.hu

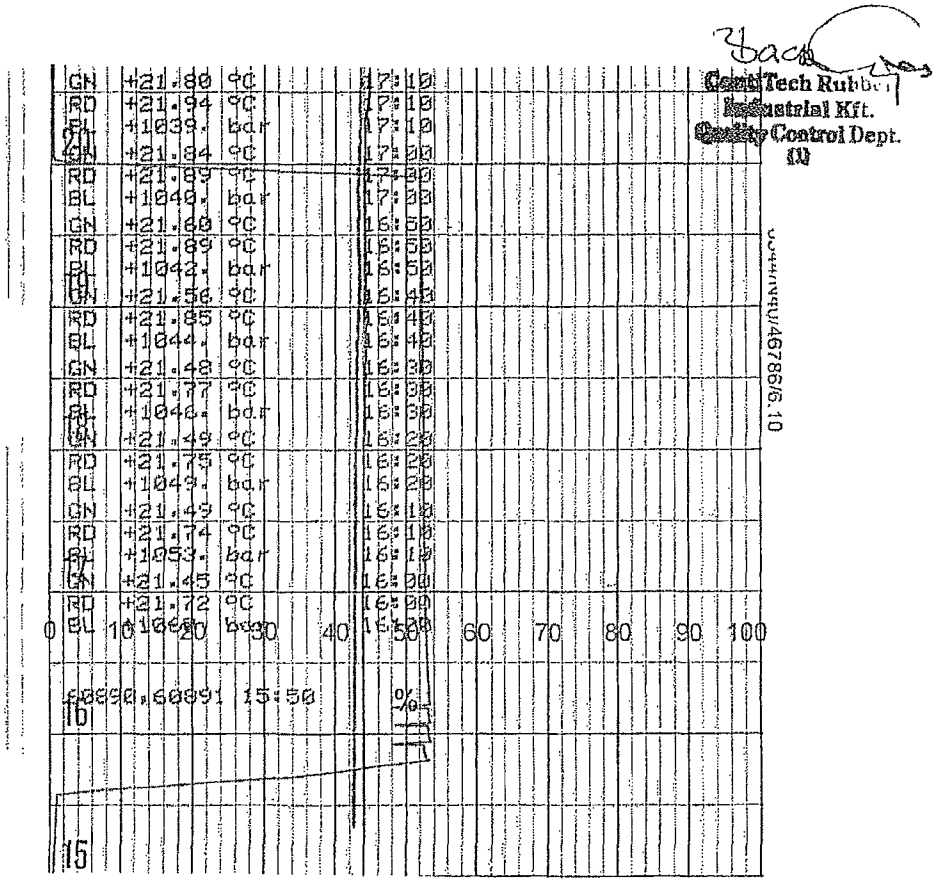
The Court of Csongrád County as Registry Court
Registry Court No: HU 06-09-002502

Bank data
Commerzbank Zrt.
Budapest

FH-2

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE *No: 1121, 1122*

Page: 1 / 1



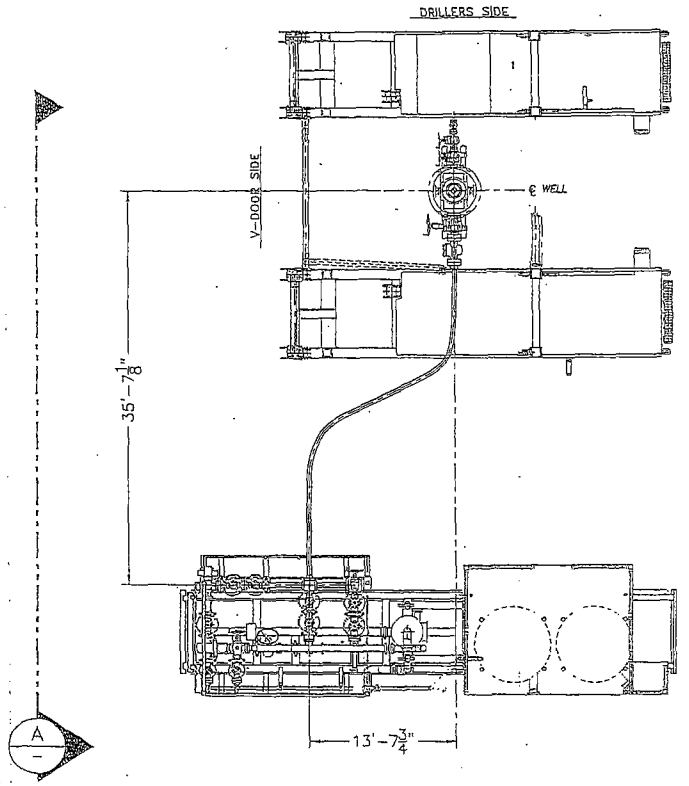
FH-3

Continental CONTITECH

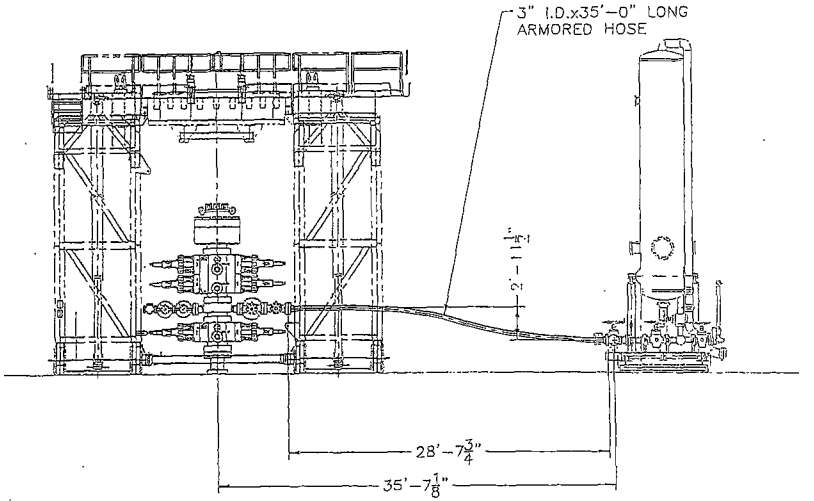
Hose Data Sheet

CRI Order No.	505591
Customer	ContiTech Beattie Co.
Customer Order No	PO5123 STOCK
Item No.	1
Hose Type	Flexible Hose
Standard	**API SPEC 16 C**
Inside dia in inches	3
Length	35 ft
Type of coupling one end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSIBX155 RING GROOVE
Type of coupling other end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSI BX155 RING GROOVE
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	St.steel outer wrap
Internal stripwound tube	No
Lining	OIL RESISTANT
Safety clamp	No
Lifting collar	No
Element C	No
Safety chain	No
Safety wire rope	No
Max.design temperature [°C]	100
Min.design temperature [°C]	-20
MBR operating [m]	1,60
MBR storage [m]	1,40
Type of packing	WOODEN CRATE ISPM-15

Flex Hose-4



PLAN VIEW



SECTION "A"

ISSUED FOR FABRICATION
December-19-2007
DRAFTSMAN
ENGINEER

REV	DATE	DESCRIPTION	BY
A	12/10/07	REMOVED SHEET TOTAL CALLOUT	JAV

ENGINEERING APPROVAL | DATE

HELMERICH & PAYNE
INTERNATIONAL DRILLING CO.

TITLE: CHOKE LINE SYSTEM
FLEXRIG3

CUSTOMER:

PROJECT:

DRAWN: JBG | DATE: 4-10-07 | DWG. NO.: 210-P1-07 | REV: A

SCALE: 3/16"=1' | SHEET: 2 OF 3