

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-101

Revised July 18, 2013

SEP 23 2014
RECEIVED ☐ AMENDED REPORT

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address BOPCO, L.P. P.O. Box 2760 Midland, TX		⁴ OGRID Number 260737
		⁵ API Number 30-015-72672
¹⁰ Property Code 312176	² Property Name Los Medanos 36 23 30 State	¹¹ Well No. 4H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	36	23 S	30 E		330	SOUTH	1940	WEST	EDDY

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
C	36	23 S	30 E		330	NORTH	1940	WEST	EDDY

9. Pool Information

¹² Pool Name WC-015 G-06 S233036D (BONE SPRING)	¹³ Pool Code 97944
---	----------------------------------

Additional Well Information

¹¹ Work Type New Well	¹² Well Type Oil	¹³ Cable/Rotary	¹⁴ Lease Type State	¹⁵ Ground Level Elevation 3408
¹⁶ Multiple N	¹⁷ Proposed Depth 14,995	¹⁸ Formation 2 nd Bone Spring Shale	¹⁹ Contractor	²⁰ Spud Date 7/01/2014
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17-1/2"	13-3/8"	48	800'	730	Surface
Int.	12-1/4"	9-5/8"	40	4,050'	990	Surface
Prod.	7-7/8"	5-1/2"	17	14,995'	2050	Surface

Casing/Cement Program: Additional Comments

--

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5,000	2,500	Hydrill
Double Ram	5,000	5,000	Shaffer

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature: *Whitney McKee*

Printed name: Whitney McKee

Title: Engineering Assistant

E-mail Address: wbmckee@basspet.com

Date: 9/12/14 Phone: 432-683-2277

OIL CONSERVATION DIVISION

Approved By:

T. C. Shepard
"Geologist"

Title:

Approved Date: 9-23-2014 Expiration Date: 9-23-2016

Conditions of Approval Attached

DISTRICT I
1025 N. French Dr., Hobbs, NM 88240
Phone (575) 393-0101 Fax: (575) 393-0780
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 746-1283 Fax: (575) 746-0720

DISTRICT III
1000 Rio Brazos Rd., Artec, NM 87410
Phone (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-42672		Pool Code 97944	Pool Name WC-015 G-06 S233036D (BONE SPRING)
Property Code 312176	Property Name Los Medanos 36 23 30 State		Well Number 4H
OGRID No. 260737	Operator Name BOPCO, L.P.		Elevation 3408'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	36	23 S	30 E		330	SOUTH	1940	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	36	23 S	30 E		330	NORTH	1940	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

N: 461704.1 E: 651707.7 NAD 27 1940' 330' BH PROPOSED BOTTOM HOLE LOCATION Lat - N 32°16'03.58" Long - W 103°50'09.97" NMSPC - N 461448.7 E 653649.8 (NAD-27) N: 461784.4 E: 654387.4 NAD 27	N: 459123.0 E: 651726.0 NAD 27 1940' 3403.3' 3403.6' SL SURFACE LOCATION Lat - N 32°15'17.82" Long - W 103°50'10.52" NMSPC - N 456824.9 E 653981.3 (NAD-27) N: 459000.0 E: 654120.2 NAD 27	N: 459182.3 E: 657079.4 NAD 27 N: 456621.4 E: 657092.6 NAD 27	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Printed Name Whitney McKee Email Address wbmckee@basspet.com SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Surveyed _____ Signature of Professional Surveyor _____ Certification No. 7977 DASIN SURVEYS 0' 500' 1000' 1500' 2000' SCALE: 1" = 1000' WO Num.: 30343
--	---	---	---

BOPCO, L.P.
Poker Lake Unit
CXV JV Los Medanos #004H
Eddy Co, NM



Plan Data for FLU CXV JV Los Medanos #004H

Plan Data Information									
Double Sensitivity Units: 7150,0012		Position offsets from plot centre							
NO	100	20	100	100	100	100	100	100	100
USFE	100	100	100	100	100	100	100	100	100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000.50	0.00	0.00	1500.51	0.00	0.00	4500.50	4500.51	0.00	0.00
1000.50	0.00	0.00	1500.50	474.21	-14.14	4500.51	4500.51	174.40	12.07
1000.50	0.00	0.00	1500.50	1623.90	-31.10	4500.50	4500.50	1623.91	0.00

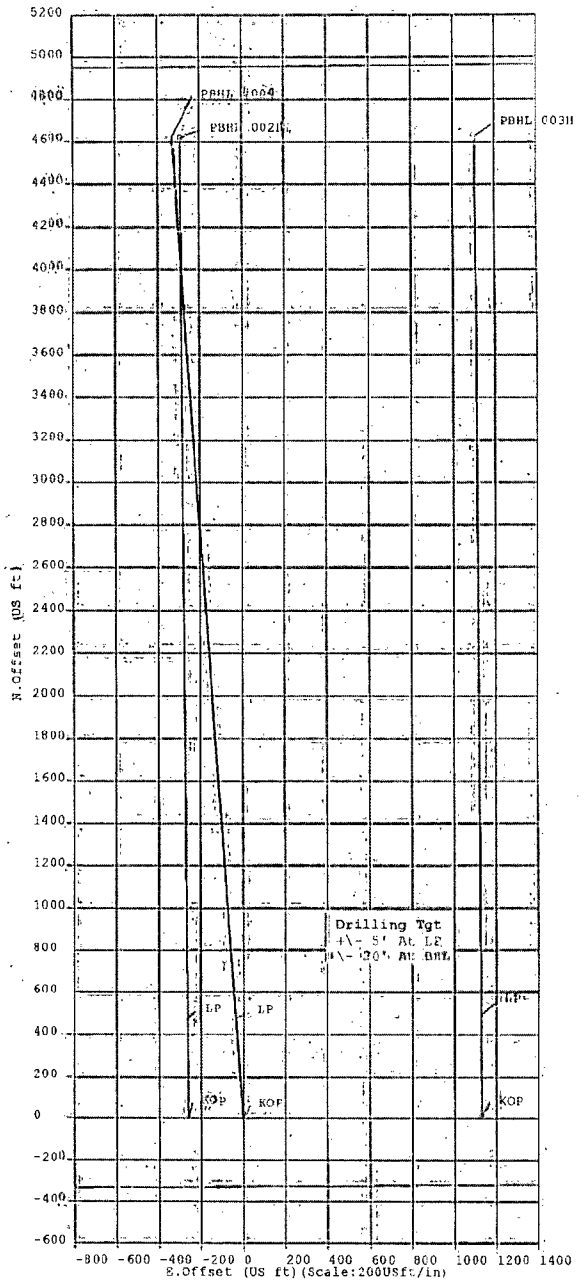
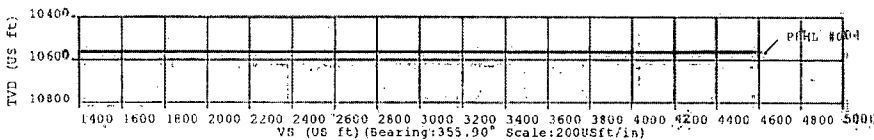
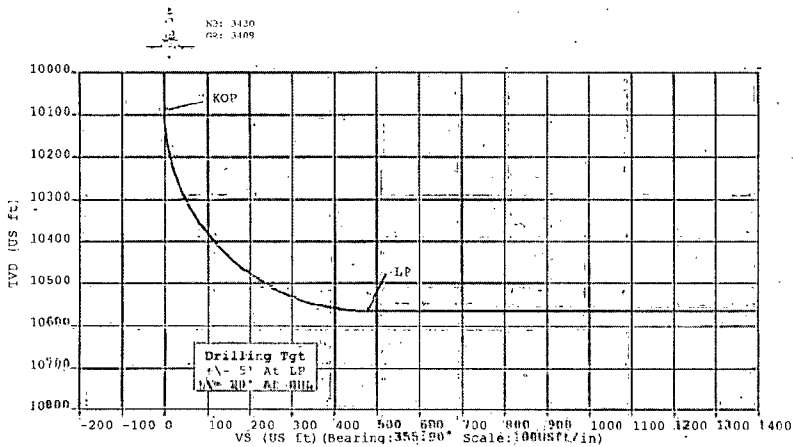
Plan Data for FLU CXV JV Los Medanos #002H

Target Set Information									
Name: Poker Lake Unit CXV JV Los Medanos #002H		Position offsets from plot centre							
NO	100	20	100	100	100	100	100	100	100
USFE	100	100	100	100	100	100	100	100	100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000.50	0.00	0.00	1500.51	0.00	0.00	4500.50	4500.51	0.00	0.00
1000.50	0.00	0.00	1500.50	474.21	-14.14	4500.51	4500.51	174.40	12.07
1000.50	0.00	0.00	1500.50	1623.90	-31.10	4500.50	4500.50	1623.91	0.00

Plan Data for FLU CXV JV Los Medanos #003H

Target Set Information									
Name: Poker Lake Unit CXV JV Los Medanos #003H		Position offsets from plot centre							
NO	100	20	100	100	100	100	100	100	100
USFE	100	100	100	100	100	100	100	100	100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000.50	0.00	0.00	1500.51	0.00	0.00	4500.50	4500.51	0.00	0.00
1000.50	0.00	0.00	1500.50	474.21	-14.14	4500.51	4500.51	174.40	12.07
1000.50	0.00	0.00	1500.50	1623.90	-31.10	4500.50	4500.50	1623.91	0.00

- FLU CXV JV Los Medanos #004H
- FLU CXV JV Los Medanos #002H
- FLU CXV JV Los Medanos #003H



Sign Off: Russell Payne

5D Plan Report**BOPCO, L.P.****Field Name:** *Eddy Co, NM Nad27 NMEZ***Site Name:** *Poker Lake Unit CXV JV Los Medanos #004H***Well Name:** *PLU CXV JV Los Medanos #004H***Plan:** *P1:V1*

16 June 2014



PLU CXV JV Los Medanos #004H

Field Name Eddy Co, NM Nad27 NMEZ	Map Units : US ft		Company Name : BOPCO, L.P.	
	Vertical Reference Datum (VRD) : Mean Sea Level			
Projected Coordinate System : NAD27 / New Mexico East		Comment :		
Site Name Poker Lake Unit CXV JV Los Medanos #004H	Units : US ft	North Reference : Grid	Convergence Angle : 0.27	
	Position		Latitude : 32° 15' 17.81"	
	Easting : 653981.30 US ft		Longitude : -103° 50' 6.83"	
Elevation above Mean Sea Level : 3408.00 US ft		Comment :		
Slot Name Poker Lake Unit CXV JV Los Medanos #004H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft		Latitude : 32° 15' 17.81"	
	+E / -W : 0.00 US ft		Longitude : -103° 50' 6.83"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3408.00 US ft		Comment :		
Well Name PLU CXV JV Los Medanos #004H	Type : Main well		UWI :	Plan : P1:V1
	Rig Height <i>Kelly Bushing</i> : 22.00 US ft		Comment :	
	Relative to Mean Sea Level : 3430.00 US ft			
	Closure Distance : 4635.67 US ft		Closure Azimuth : 355.899°	
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az : 355.90°
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48269.8nT	Dec : 7.48°	Dip : 60.08°
		Date : 30/Aug/2014		

Target Set

Name : Poker Lake Unit CXV **Number of Targets** : 1
JV Los Medanos #004H

Comment :

Target Name PBHL 004	+N / -S : 4623.80 US ft		Position (Relative to Slot centre)	
	+E / -W : -331.50 US ft		Northing : 461448.70 US ft	Latitude : 32° 16' 3.58"
Shape Cuboid	TVD (Kelly Bushing) : 10565.00 US ft		Easting : 653649.80 US ft	Longitude : -103° 50' 10.44"
	Orientation Azimuth : 0.00°		Inclination : 0.00°	
Dimensions Length : 0.00 US ft		Breadth : 0.00 US ft		Height : 0.00 US ft

Well path created using minimum curvature

5D Plan Report

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	R.Rate (%/100 US ft)	T.Rate (%/100 US ft)	T.Face (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10087.54	0.00	0.00	10087.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10837.54	90.00	355.90	10565.00	476.24	-34.14	477.47	12.00	12.00	0.00	355.90
14995.74	90.00	355.90	10565.00	4623.80	-331.50	4635.67	0.00	0.00	0.00	0.00

PBHL #004

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
10000.00	0.00	0.00	10000.00	0.00	0.00	0.00	0.00	456824.90	653981.30	KOP
10087.54	0.00	0.00	10087.54	0.00	0.00	0.00	0.00	456824.90	653981.30	
10100.00	1.50	355.90	10100.00	0.16	-0.01	0.16	12.00	456825.06	653981.29	
10200.00	13.50	355.90	10198.96	13.15	-0.94	13.18	12.00	456838.05	653980.36	
10300.00	25.50	355.90	10293.06	46.38	-3.32	46.49	12.00	456871.28	653977.98	
10400.00	37.50	355.90	10378.17	98.39	-7.05	98.64	12.00	456923.29	653974.25	2nd BS Sane
10430.82	41.19	355.90	10402.00	117.87	-8.45	118.18	12.00	456942.77	653972.85	
10500.00	49.50	355.90	10450.58	166.92	-11.97	167.35	12.00	456991.82	653969.33	
10600.00	61.50	355.90	10507.13	248.96	-17.85	249.60	12.00	457073.86	653963.45	
10700.00	73.50	355.90	10545.33	340.94	-24.44	341.82	12.00	457165.84	653956.86	
10800.00	85.50	355.90	10563.53	438.84	-31.46	439.96	12.00	457263.74	653949.84	LP
10837.54	90.00	355.90	10565.00	476.24	-34.14	477.47	12.00	457301.14	653947.16	
10900.00	90.00	355.90	10565.00	538.54	-38.61	539.92	0.00	457363.44	653942.69	
11000.00	90.00	355.90	10565.00	638.29	-45.76	639.92	0.00	457463.19	653935.54	
11100.00	90.00	355.90	10565.00	738.03	-52.91	739.92	0.00	457562.93	653928.39	
11200.00	90.00	355.90	10565.00	837.77	-60.06	839.92	0.00	457662.67	653921.24	
11300.00	90.00	355.90	10565.00	937.52	-67.21	939.92	0.00	457762.42	653914.09	
11400.00	90.00	355.90	10565.00	1037.26	-74.37	1039.92	0.00	457862.16	653906.93	
11500.00	90.00	355.90	10565.00	1137.01	-81.52	1139.92	0.00	457961.91	653899.78	
11600.00	90.00	355.90	10565.00	1236.75	-88.67	1239.92	0.00	458061.65	653892.63	
11700.00	90.00	355.90	10565.00	1336.49	-95.82	1339.92	0.00	458161.39	653885.48	
11800.00	90.00	355.90	10565.00	1436.24	-102.97	1439.92	0.00	458261.14	653878.33	
11900.00	90.00	355.90	10565.00	1535.98	-110.12	1539.92	0.00	458360.88	653871.18	
12000.00	90.00	355.90	10565.00	1635.73	-117.27	1639.92	0.00	458460.63	653864.03	
12100.00	90.00	355.90	10565.00	1735.47	-124.42	1739.92	0.00	458560.37	653856.88	
12200.00	90.00	355.90	10565.00	1835.21	-131.57	1839.92	0.00	458660.11	653849.73	
12300.00	90.00	355.90	10565.00	1934.96	-138.73	1939.92	0.00	458759.86	653842.57	
12400.00	90.00	355.90	10565.00	2034.70	-145.88	2039.92	0.00	458859.60	653835.42	
12500.00	90.00	355.90	10565.00	2134.45	-153.03	2139.92	0.00	458959.35	653828.27	
12600.00	90.00	355.90	10565.00	2234.19	-160.18	2239.92	0.00	459059.09	653821.12	
12700.00	90.00	355.90	10565.00	2333.93	-167.33	2339.92	0.00	459158.83	653813.97	
12800.00	90.00	355.90	10565.00	2433.68	-174.48	2439.92	0.00	459258.58	653806.82	
12900.00	90.00	355.90	10565.00	2533.42	-181.63	2539.92	0.00	459358.32	653799.67	
13000.00	90.00	355.90	10565.00	2633.17	-188.78	2639.92	0.00	459458.07	653792.52	
13100.00	90.00	355.90	10565.00	2732.91	-195.93	2739.92	0.00	459557.81	653785.37	
13200.00	90.00	355.90	10565.00	2832.65	-203.09	2839.92	0.00	459657.55	653778.21	
13300.00	90.00	355.90	10565.00	2932.40	-210.24	2939.92	0.00	459757.30	653771.06	
13400.00	90.00	355.90	10565.00	3032.14	-217.39	3039.92	0.00	459857.04	653763.91	
13500.00	90.00	355.90	10565.00	3131.89	-224.54	3139.92	0.00	459956.79	653756.76	
13600.00	90.00	355.90	10565.00	3231.63	-231.69	3239.92	0.00	460056.53	653749.61	
13700.00	90.00	355.90	10565.00	3331.37	-238.84	3339.92	0.00	460156.27	653742.46	
13800.00	90.00	355.90	10565.00	3431.12	-245.99	3439.92	0.00	460256.02	653735.31	
13900.00	90.00	355.90	10565.00	3530.86	-253.14	3539.92	0.00	460355.76	653728.16	
14000.00	90.00	355.90	10565.00	3630.61	-260.29	3639.92	0.00	460455.51	653721.01	
14100.00	90.00	355.90	10565.00	3730.35	-267.44	3739.92	0.00	460555.25	653713.86	
14200.00	90.00	355.90	10565.00	3830.09	-274.60	3839.92	0.00	460654.99	653706.70	
14300.00	90.00	355.90	10565.00	3929.84	-281.75	3939.92	0.00	460754.74	653699.55	
14400.00	90.00	355.90	10565.00	4029.58	-288.90	4039.92	0.00	460854.48	653692.40	
14500.00	90.00	355.90	10565.00	4129.33	-296.05	4139.92	0.00	460954.23	653685.25	
14600.00	90.00	355.90	10565.00	4229.07	-303.20	4239.92	0.00	461053.97	653678.10	

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
14700.00	90.00	355.90	10565.00	4328.81	-310.35	4339.92	0.00	461153.71	653670.95	
14800.00	90.00	355.90	10565.00	4428.56	-317.50	4439.92	0.00	461253.46	653663.80	
14900.00	90.00	355.90	10565.00	4528.30	-324.65	4539.92	0.00	461353.20	653656.65	
14995.74	90.00	355.90	10565.00	4623.80	-331.50	4635.67	0.00	461448.70	653649.80	PBHL #004

Formation Points (Relative to Slot centre, TVD relative to Kelly Bushing)									
MD (US-ft)	Inc (°)	Az (°)	TVD (US-ft)	N.Offset (US-ft)	E.Offset (US-ft)	Northing (US-ft)	Easting (US-ft)	Name	Comment
10430.82	41.19	355.90	10402.00	117.87	-8.45	456942.77	653972.85	2nd BS Sane	

5D Anti-Collision Report

BOPCO, L.P.

Field Name: *Eddy Co, NM Nad27 NMEZ*

Site Name: *Poker Lake Unit CXV JV Los Medanos #004H*

Well Name: *PLU CXV JV Los Medanos #004H*

16 June 2014





Weatherford

PLU CXV JV Los Medanos #004H

Field Name
Eddy Co, NM
Nad27 NMEZ

Map Units : US ft

Company Name : BOPCO, L.P.

Vertical Reference Datum (VRD) : Mean Sea Level

Projected Coordinate System : NAD27 / New Mexico East

Comment :

Site Name
Poker Lake Unit
CXV JV Los
Medanos #004H

Units : US ft

North Reference : Grid

Convergence Angle : 0.27

Position
Northing : 456824.90 US ft
Easting : 653981.30 US ft
Latitude : 32° 15' 17.81"
Longitude : -103° 50' 6.83"

Elevation above Mean Sea Level : 3408.00 US ft

Comment :

Slot Name
Poker Lake Unit
CXV JV Los
Medanos #004H

Position (Offsets relative to Site Centre)
+N / -S : 0.00 US ft
+E / -W : 0.00 US ft
Northing : 456824.90 US ft
Easting : 653981.30 US ft
Latitude : 32° 15' 17.81"
Longitude : -103° 50' 6.83"

Slot TVD Reference : Ground Elevation

Elevation above Mean Sea Level : 3408.00 US ft

Comment :

Well Name
PLU CXV JV Los
Medanos #004H

Type : Main well

UWI :

Plan : Working Plan

Rig Height *Kelly Bushing* : 22.00 US ft
Relative to Mean Sea Level : 3430.00 US ft

Comment :

Closure Distance : 4635.67 US ft

Closure Azimuth : 355.899°

Vertical Section (Position of Origin Relative to Slot)

+N / -S : 0.00 US ft
+E / -W : 0.00 US ft
Az : 355.90°

Magnetic Parameters

Model : BGGM

Field Strength :
48269.8nT

Dec : 7.48°

Dip : 60.08°

Date :
30/Aug/2014

Collision / Uncertainty Analysis

Primary Well	Start MD (US ft)	End MD (US ft)	Collision Risk Interval	No. of Std. Deviations in Error Computation
PLU CXV JV Los Medanos #004H (p)	0.00	14995.74	100.00	2

Secondary Well Names

PLU CXV JV Los Medanos #002H (p)

Anti Collision Report Terminology

S.Minor, S.Major : Radii of the ellipse of uncertainty at the current location as seen in the along hole direction.

PHI : Angle between high-side vector and semi-minor axis

TVD Spread : Total TVD range of the ellipsoid of uncertainty at the current location

ES : Distance between the extremities of the primary and secondary uncertainty ellipsoids in the direction Cr-Cr

T.Face to Sec : Angle between the Hi-Side vector of the primary well at the current location and line of closest approach between the two wells

Separation factors calculated using Pedal Curve (Independent Uncertainty). Well path created using minimum curvature.

5D Anti-Collision Report

Anti-Collision Proximity Summary (TVD Relative to)

Secondary Well Name	Pr MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SE	Risk
PLU CXV JV Los Medanos #002H (p)	9673.83	9671.56	9673.83	260.53	216.61	5.93	

Secondary Well: PLU CXV JV Los Medanos #002H (p)	(TVD Relative to Kelly Bushing (Primary)) (All Azimuth Relative to GRID NORTH)								Risk
Pr MD (US ft)	TVD (US ft)	Sec MD (US ft)	Tr Face to Sec (")	S Major (US ft)	S Minor (US ft)	CC (US ft)	ES (US ft)	SE	
0.00	0.00	1.00	270.07	0.01	0.01	259.90	259.18	360.10	
100.00	100.00	101.00	270.07	0.12	0.12	259.90	258.95	274.31	
200.00	200.00	201.00	270.07	0.34	0.34	259.90	258.51	186.50	
300.00	300.00	301.00	270.07	0.57	0.57	259.90	258.06	141.07	
400.00	400.00	401.00	270.07	0.79	0.79	259.90	257.61	113.41	
500.00	500.00	501.00	270.07	1.02	1.02	259.90	257.16	94.82	
600.00	600.00	601.00	270.07	1.24	1.24	259.90	256.71	81.46	
700.00	700.00	701.00	270.07	1.47	1.47	259.90	256.26	71.41	
800.00	800.00	801.00	270.07	1.69	1.69	259.90	255.81	63.56	
900.00	900.00	901.00	270.07	1.92	1.92	259.90	255.36	57.26	
1000.00	1000.00	1001.00	270.07	2.14	2.14	259.90	254.91	52.10	
1100.00	1100.00	1101.00	270.07	2.37	2.37	259.90	254.46	47.80	
1200.00	1200.00	1201.00	270.07	2.59	2.59	259.90	254.01	44.15	
1300.00	1300.00	1301.00	270.07	2.82	2.82	259.90	253.56	41.02	
1400.00	1400.00	1401.00	270.07	3.04	3.04	259.90	253.11	38.30	
1500.00	1500.00	1501.00	270.07	3.26	3.26	259.90	252.66	35.92	
1600.00	1600.00	1601.00	270.07	3.49	3.49	259.90	252.21	33.82	
1700.00	1700.00	1701.00	270.07	3.71	3.71	259.90	251.77	31.95	
1800.00	1800.00	1801.00	270.07	3.94	3.94	259.90	251.32	30.28	
1900.00	1900.00	1901.00	270.07	4.16	4.16	259.90	250.87	28.77	
2000.00	2000.00	2001.00	270.07	4.39	4.39	259.90	250.42	27.41	
2100.00	2100.00	2101.00	270.07	4.61	4.61	259.90	249.97	26.17	
2200.00	2200.00	2201.00	270.07	4.84	4.84	259.90	249.52	25.03	
2300.00	2300.00	2301.00	270.07	5.06	5.06	259.90	249.07	23.99	
2400.00	2400.00	2401.00	270.07	5.29	5.29	259.90	248.62	23.04	
2500.00	2500.00	2501.00	270.07	5.51	5.51	259.90	248.17	22.16	
2600.00	2600.00	2601.00	270.07	5.74	5.74	259.90	247.72	21.34	
2700.00	2700.00	2701.00	270.07	5.96	5.96	259.90	247.27	20.58	
2800.00	2800.00	2801.00	270.07	6.19	6.19	259.90	246.82	19.87	
2900.00	2900.00	2901.00	270.07	6.41	6.41	259.90	246.37	19.21	
3000.00	3000.00	3001.00	270.07	6.64	6.64	259.90	245.92	18.59	
3100.00	3100.00	3101.00	270.07	6.86	6.86	259.90	245.47	18.01	
3200.00	3200.00	3201.00	270.07	7.09	7.09	259.90	245.02	17.47	
3300.00	3300.00	3301.00	270.07	7.31	7.31	259.90	244.57	16.96	
3400.00	3400.00	3401.00	270.07	7.54	7.54	259.90	244.12	16.47	
3500.00	3500.00	3501.00	270.07	7.76	7.76	259.90	243.67	16.02	
3600.00	3600.00	3601.00	270.07	7.98	7.98	259.90	243.22	15.59	
3700.00	3700.00	3701.00	270.07	8.21	8.21	259.90	242.78	15.18	
3800.00	3800.00	3801.00	270.07	8.43	8.43	259.90	242.33	14.79	
3900.00	3900.00	3901.00	270.07	8.66	8.66	259.90	241.88	14.42	
4000.00	4000.00	4001.00	270.07	8.88	8.88	259.90	241.43	14.07	
4100.00	4100.00	4101.00	270.07	9.11	9.11	259.90	240.98	13.73	
4200.00	4200.00	4201.00	270.07	9.33	9.33	259.90	240.53	13.42	
4300.00	4300.00	4301.00	270.07	9.56	9.56	259.90	240.08	13.11	
4400.00	4400.00	4401.00	270.07	9.78	9.78	259.90	239.63	12.82	
4500.00	4500.00	4501.00	270.07	10.01	10.01	259.90	239.18	12.54	
4600.00	4600.00	4601.00	270.07	10.23	10.23	259.90	238.73	12.28	
4700.00	4700.00	4701.00	270.07	10.46	10.46	259.90	238.28	12.02	
4800.00	4800.00	4801.00	270.07	10.68	10.68	259.90	237.83	11.78	
4900.00	4900.00	4901.00	270.07	10.91	10.91	259.90	237.38	11.54	
5000.00	5000.00	5001.00	270.07	11.13	11.13	259.90	236.93	11.32	
5100.00	5100.00	5101.00	270.07	11.36	11.36	259.90	236.48	11.10	

5D Anti-Collision Report

Secondary Well: PLU/CXY JV/Los Medanos #002H (P) (TVD Relative to Kelly Bushing (Primary)) All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T Face to Sec (°)	S Major (US ft)	S Minor (US ft)	CC (US ft)	ES (US ft)	SE	Risk
5200.00	5200.00	5201.00	270.07	11.58	11.58	259.90	236.03	10.89	
5300.00	5300.00	5301.00	270.07	11.81	11.81	259.90	235.58	10.69	
5400.00	5400.00	5401.00	270.07	12.03	12.03	259.90	235.13	10.49	
5500.00	5500.00	5501.00	270.07	12.26	12.26	259.90	234.68	10.31	
5600.00	5600.00	5601.00	270.07	12.48	12.48	259.90	234.23	10.13	
5700.00	5700.00	5701.00	270.07	12.70	12.70	259.90	233.78	9.95	
5800.00	5800.00	5801.00	270.07	12.93	12.93	259.90	233.34	9.78	
5900.00	5900.00	5901.00	270.07	13.15	13.15	259.90	232.89	9.62	
6000.00	6000.00	6001.00	270.07	13.38	13.38	259.90	232.44	9.46	
6100.00	6100.00	6101.00	270.07	13.60	13.60	259.90	231.99	9.31	
6200.00	6200.00	6201.00	270.07	13.83	13.83	259.90	231.54	9.16	
6300.00	6300.00	6301.00	270.07	14.05	14.05	259.90	231.09	9.02	
6400.00	6400.00	6401.00	270.07	14.28	14.28	259.90	230.64	8.88	
6500.00	6500.00	6501.00	270.07	14.50	14.50	259.90	230.19	8.75	
6600.00	6600.00	6601.00	270.07	14.73	14.73	259.90	229.74	8.62	
6700.00	6700.00	6701.00	270.07	14.95	14.95	259.90	229.29	8.49	
6800.00	6800.00	6801.00	270.07	15.18	15.18	259.90	228.84	8.37	
6900.00	6900.00	6901.00	270.07	15.40	15.40	259.90	228.39	8.25	
7000.00	7000.00	7001.00	270.07	15.63	15.63	259.90	227.94	8.13	
7100.00	7100.00	7101.00	270.07	15.85	15.85	259.90	227.49	8.02	
7200.00	7200.00	7201.00	270.07	16.08	16.08	259.90	227.04	7.91	
7300.00	7300.00	7301.00	270.07	16.30	16.30	259.90	226.59	7.80	
7400.00	7400.00	7401.00	270.07	16.53	16.53	259.90	226.14	7.70	
7500.00	7500.00	7501.00	270.07	16.75	16.75	259.90	225.69	7.60	
7600.00	7600.00	7601.00	270.07	16.98	16.98	259.90	225.24	7.50	
7700.00	7700.00	7701.00	270.07	17.20	17.20	259.90	224.79	7.40	
7800.00	7800.00	7801.00	270.07	17.43	17.43	259.90	224.34	7.31	
7900.00	7900.00	7901.00	270.07	17.65	17.65	259.90	223.89	7.22	
8000.00	8000.00	8001.00	270.07	17.87	17.87	259.90	223.44	7.13	
8100.00	8100.00	8101.00	270.07	18.10	18.10	259.90	222.99	7.04	
8200.00	8200.00	8201.00	270.07	18.32	18.32	259.90	222.55	6.96	
8300.00	8300.00	8301.00	270.07	18.55	18.55	259.90	222.10	6.87	
8400.00	8400.00	8401.00	270.07	18.77	18.77	259.90	221.65	6.79	
8500.00	8500.00	8501.00	270.07	19.00	19.00	259.90	221.20	6.72	
8600.00	8600.00	8601.00	270.07	19.22	19.22	259.90	220.75	6.64	
8700.00	8700.00	8701.00	270.07	19.45	19.45	259.90	220.30	6.56	
8800.00	8800.00	8801.00	270.07	19.67	19.67	259.90	219.85	6.49	
8900.00	8900.00	8901.00	270.07	19.90	19.90	259.90	219.40	6.42	
9000.00	9000.00	9001.00	270.07	20.12	20.12	259.90	218.95	6.35	
9100.00	9100.00	9101.00	270.07	20.35	20.35	259.90	218.50	6.28	
9200.00	9200.00	9201.00	270.07	20.57	20.57	259.90	218.05	6.21	
9300.00	9300.00	9301.00	270.07	20.80	20.80	259.90	217.60	6.14	
9400.00	9400.00	9401.00	270.07	21.02	21.02	259.90	217.15	6.08	
9500.00	9500.00	9501.00	270.07	21.25	21.25	259.90	216.70	6.02	
9600.00	9599.48	9600.58	270.67	21.47	21.35	259.94	216.33	5.96	
9700.00	9692.34	9695.61	274.94	21.66	21.11	261.13	217.16	5.94	
9800.00	9770.28	9780.14	281.91	21.85	20.49	267.66	223.47	6.06	
9900.00	9830.79	9851.52	289.58	21.98	19.70	285.05	240.99	6.47	
10000.00	9875.83	9910.14	296.52	22.13	18.99	316.86	273.63	7.34	
10100.00	9908.89	9957.87	307.03	22.28	18.34	362.85	320.93	8.66	
10200.00	9936.56	10002.52	316.56	22.42	17.71	413.95	373.33	10.19	
10300.00	9961.24	10047.96	323.68	22.57	17.12	461.90	422.74	11.79	
10400.00	9982.42	10093.94	328.77	22.76	16.50	503.92	465.84	13.23	
10500.00	9999.69	10140.29	332.32	22.95	16.03	538.28	501.24	14.54	
10600.00	10012.78	10186.89	334.71	23.19	15.64	563.84	527.52	15.53	
10700.00	10021.47	10233.65	336.20	23.43	15.36	579.89	544.15	16.23	
10800.00	10025.63	10280.50	336.94	23.70	15.23	585.97	550.35	16.45	
10900.00	10025.88	10357.62	337.39	24.21	15.35	584.18	548.30	16.28	

5D Anti-Collision Report

Secondary Well : P PLU Cxv JV Los Medanos #002H (P) (TVD Relative to Kelly Bushing (Primary)) (All Azimuth Relative to GRID NORTH)									
Prim MD (US ft)	TVD (US ft)	Sec MD (US ft)	T Face to Sec (°)	S Major (US ft)	S Minor (US ft)	CC (US ft)	IES (US ft)	SP	Risk
11000.00	10025.66	10457.41	337.98	24.95	15.52	581.92	545.63	16.04	
11100.00	10025.45	10557.20	338.58	25.80	15.72	579.72	542.95	15.77	
11200.00	10025.23	10656.99	339.19	26.76	15.95	577.59	540.27	15.48	
11300.00	10025.01	10756.78	339.79	27.79	16.21	575.52	537.61	15.18	
11400.00	10024.80	10856.57	340.41	28.91	16.50	573.52	534.96	14.87	
11500.00	10024.58	10956.36	341.02	30.09	16.82	571.59	532.33	14.56	
11600.00	10024.36	11056.15	341.64	31.34	17.15	569.72	529.75	14.25	
11700.00	10024.15	11155.94	342.27	32.64	17.52	567.92	527.20	13.95	
11800.00	10023.93	11255.73	342.90	33.99	17.90	566.18	524.71	13.65	
11900.00	10023.71	11355.52	343.53	35.39	18.30	564.52	522.24	13.35	
12000.00	10023.50	11455.32	344.17	36.82	18.71	562.93	519.83	13.06	
12100.00	10023.28	11555.11	344.81	38.28	19.14	561.40	517.48	12.78	
12200.00	10023.06	11654.90	345.45	39.78	19.61	559.95	515.21	12.52	
12300.00	10022.85	11754.69	346.10	41.30	20.12	558.57	513.01	12.26	
12400.00	10022.63	11854.48	346.75	42.84	20.64	557.26	510.84	12.01	
12500.00	10022.41	11954.27	347.40	44.41	21.13	556.02	508.75	11.76	
12600.00	10022.20	12054.06	348.06	45.99	21.65	554.85	506.70	11.52	
12700.00	10021.98	12153.85	348.71	47.59	22.19	553.76	504.88	11.33	
12800.00	10021.76	12253.64	349.38	49.21	22.70	552.74	502.90	11.09	
12900.00	10021.55	12353.43	350.04	50.85	23.26	551.80	501.23	10.91	
13000.00	10021.33	12453.22	350.70	52.49	23.84	550.93	499.37	10.69	
13100.00	10021.11	12553.01	351.37	54.15	24.41	550.13	497.57	10.47	
13200.00	10020.89	12652.80	352.04	55.81	25.02	549.41	496.03	10.29	
13300.00	10020.68	12752.59	352.71	57.49	25.59	548.77	494.48	10.11	
13400.00	10020.46	12852.38	353.38	59.18	26.16	548.20	493.04	9.94	
13500.00	10020.24	12952.17	354.06	60.87	26.74	547.71	491.53	9.75	
13600.00	10020.03	13051.96	354.73	62.57	27.32	547.29	490.11	9.57	
13700.00	10019.81	13151.75	355.41	64.28	27.94	546.95	488.73	9.39	
13800.00	10019.59	13251.54	356.08	65.99	28.58	546.69	487.45	9.23	
13900.00	10019.38	13351.33	356.76	67.71	29.22	546.50	486.25	9.07	
14000.00	10019.16	13451.12	357.44	69.44	29.86	546.39	485.14	8.92	
14100.00	10018.94	13550.91	358.11	71.17	30.50	546.35	483.96	8.76	
14200.00	10018.73	13650.70	358.79	72.90	31.14	546.40	482.69	8.58	
14300.00	10018.51	13750.49	359.47	74.64	31.79	546.51	481.51	8.41	
14400.00	10018.29	13850.28	0.14	76.39	32.44	546.71	480.41	8.25	
14500.00	10018.08	13950.07	0.82	78.14	33.10	546.98	479.38	8.09	
14600.00	10017.86	14049.86	1.50	79.89	33.75	547.33	478.44	7.95	
14700.00	10017.64	14149.65	2.17	81.64	34.41	547.76	477.53	7.80	
14800.00	10017.43	14249.44	2.84	83.40	35.07	548.26	476.40	7.63	
14900.00	10017.21	14349.23	3.52	85.16	35.74	548.83	475.34	7.47	
14995.74	10017.00	14444.78	4.16	86.84	36.38	549.46	474.40	7.32	



Weatherford

Weatherford Drilling Services

GeoDec4 v2.0.0.3

Report Date: June 16, 2014
Job Number: _____
Customer: BOPCO
Well Name: Poker Lake Unit CXV JV Los Medanos #004H
API Number: _____
Rig Name: _____
Location: Eddy Co, NM Nad27 NME
Block: _____
Engineer: RWJ

NAD27 / New Mexico East	NAD27
Projected Coordinate System	Geodetic Coordinate System
Datum: North American Datum 1927	Datum: North American Datum 1927
Ellipsoid: Clarke 1866	Ellipsoid: Clarke 1866
EPSG: 32012	EPSG: 4267
North: 456824.90 US Survey Foot	Latitude: 32.254947 Degree
East: 653981.30 US Survey Foot	Longitude: -103.835231 Degree
Convergence: 0.27°	
Declination: 7.44°	
Total Correction: 7.17°	
Datum Transformation: none	

Geodetic Location WGS84

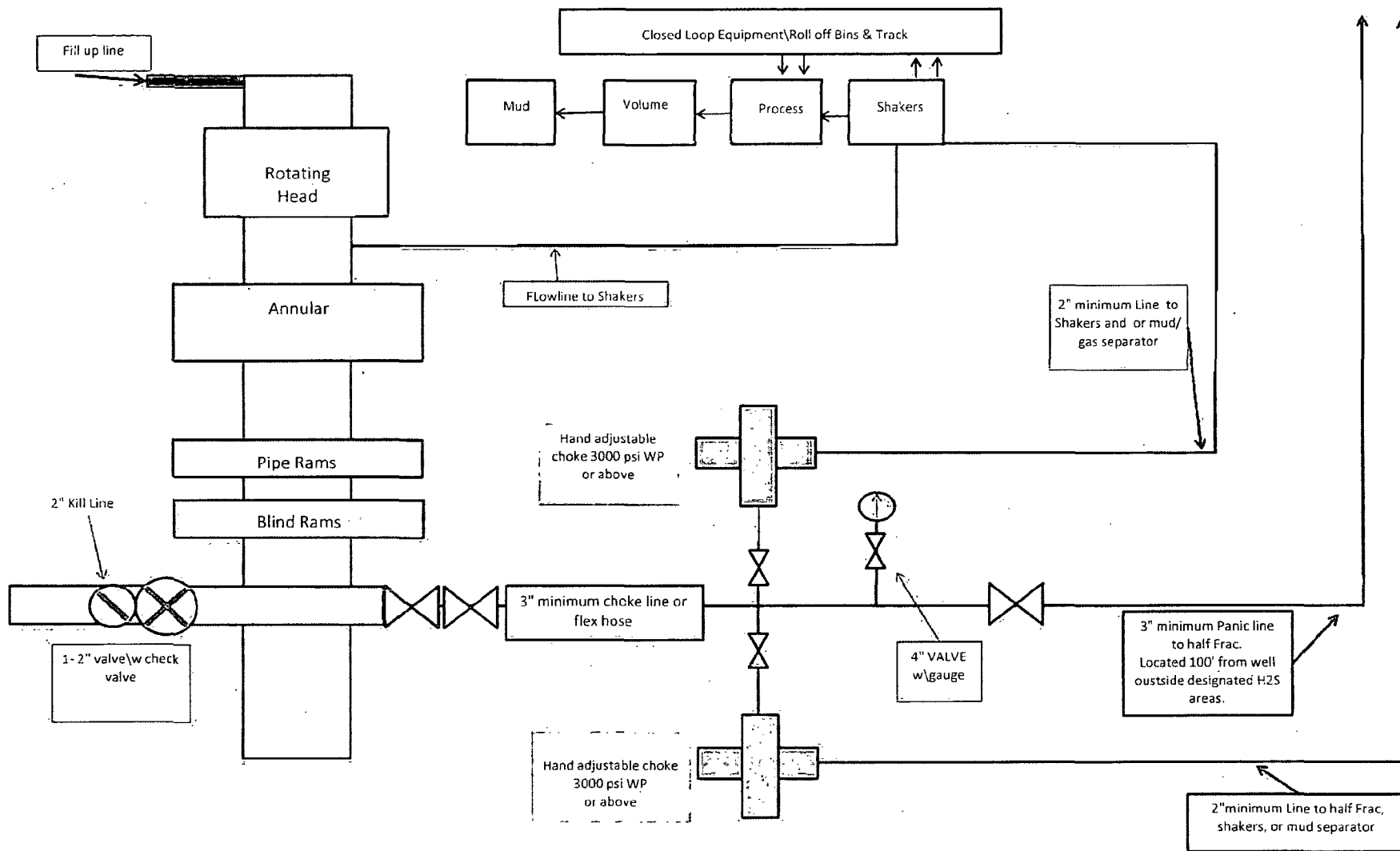
MSL Elevation = 0 m
Latitude = 32° 15' 17.81" N
Longitude = 103° 50' 06.83" W

Magnetic Declination = 7.44 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6587
Local Field Strength = 48281 nT	Magnetic Vector X = 23885 nT
Magnetic Dip = 60.07 deg	Magnetic Vector Y = 3118 nT
Magnetic Model = bggm2013.bgs	Magnetic Vector Z = 41843 nT
Run Date = August 30, 2014	Magnetic Vector H = 24087 nT

Signed: _____ Date: _____

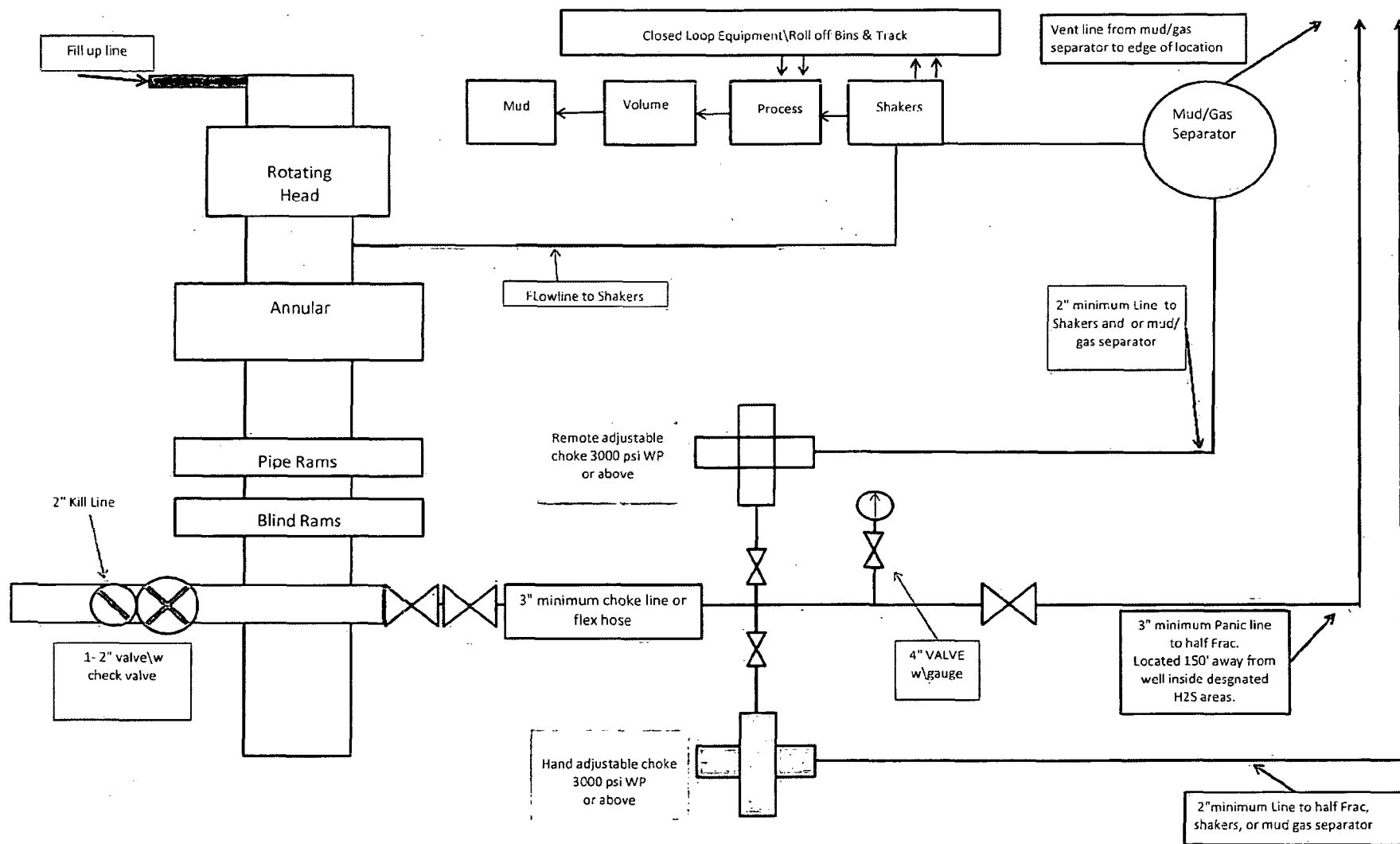
© 2013 Weatherford

Warning: This information is controlled, and any printed version is deemed as uncontrolled unless suitably endorsed by a controlling authority or accompanied by a controlled table of contents in order to ensure adequate revision control.



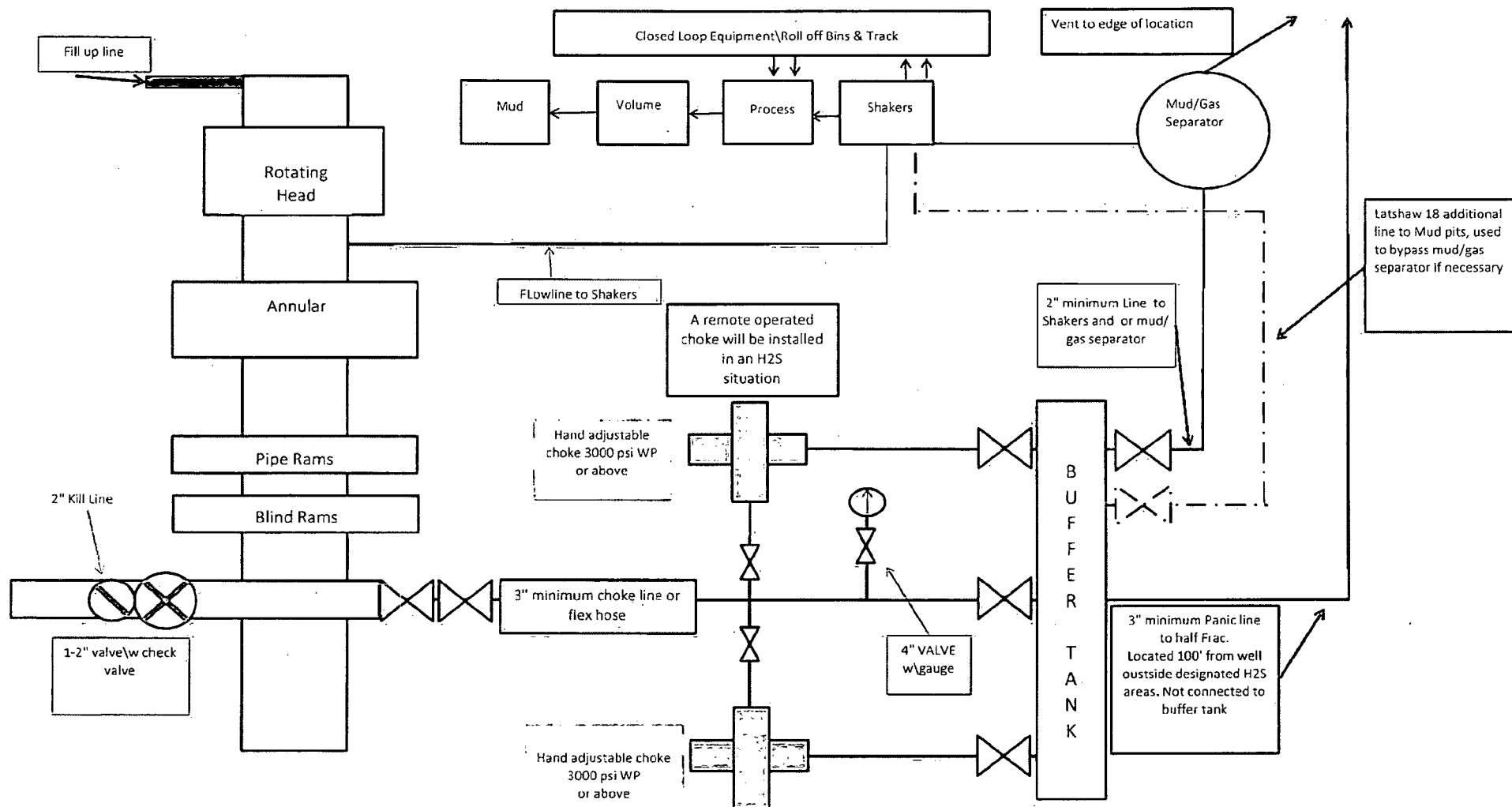
**13-5/8" X 3-M BOPE (2 Rams and Rotating Head) &
Closed Loop System Equipment Schematic
Diagram A**

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



**13-5/8" X 3-M BOPE (2 Rams and Rotating Head) &
Closed Loop System Equipment Schematic
H2S contingency
Diagram B**

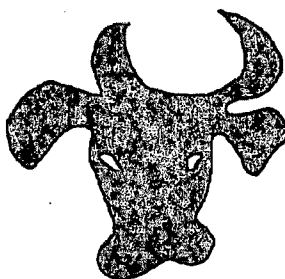
Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



Latshaw 4 closed loop system, with Latshaw 18 addition "clouded."

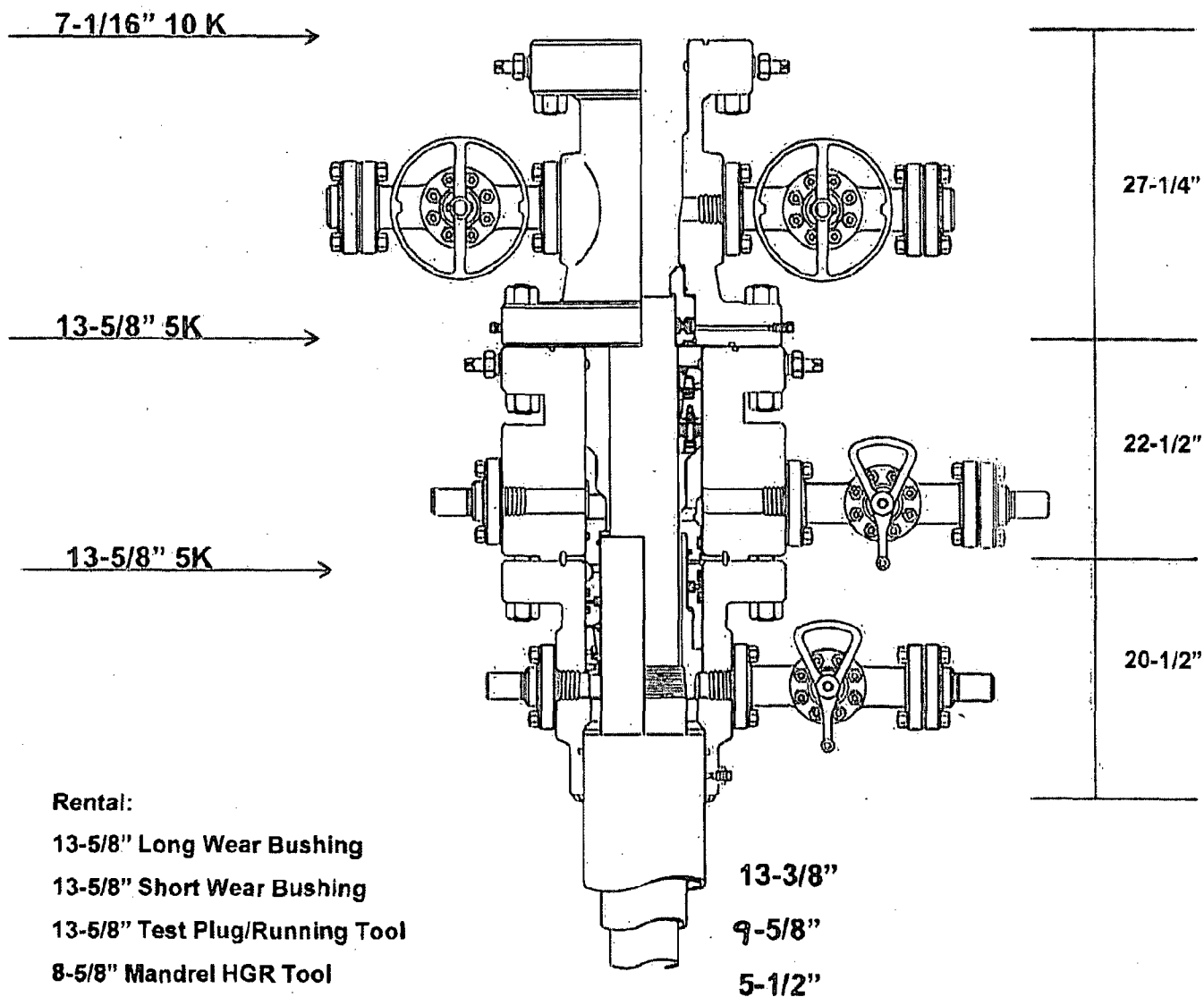
Latshaw 13-5/8" X 3-M BOPE (2 Rams and Rotating Head) & Closed Loop System Equipment Schematic Diagram C

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



CUSTOMER: BOPCO

Diagram "Z"



Rental:

13-5/8" Long Wear Bushing

13-5/8" Short Wear Bushing

13-5/8" Test Plug/Running Tool

8-5/8" Mandrel HGR Tool

Packoff Support Bushing Running Tool

Jetting/Wash Tool





Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

April 4, 2012

Customer: Latshaw

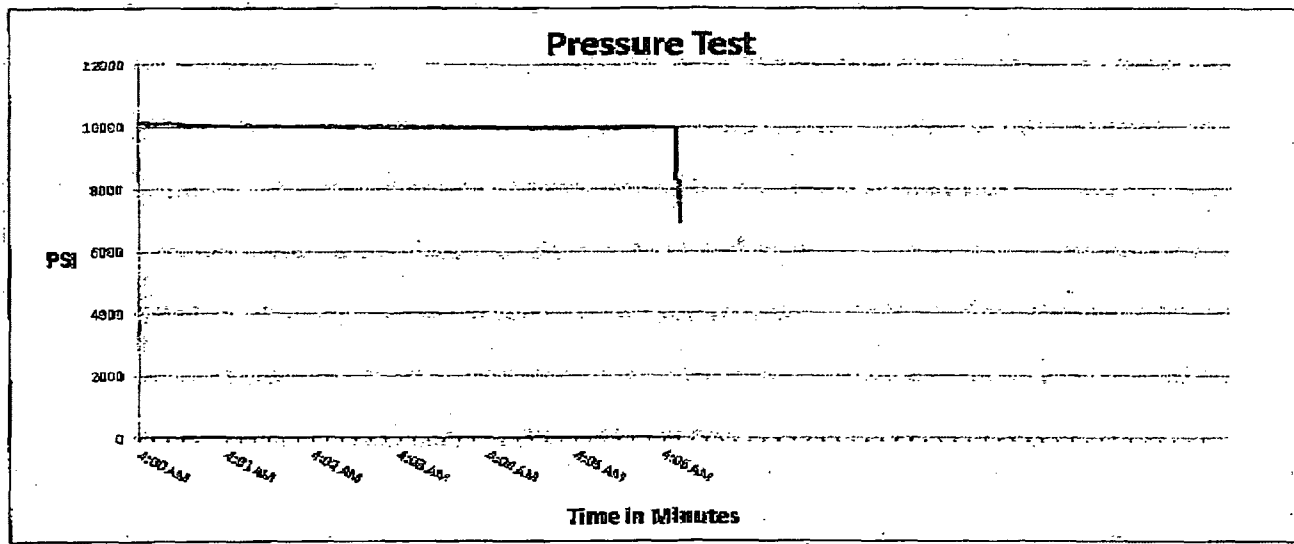
Pick Ticket #: 81610

Hose Specifications

<u>Hose Type</u>	<u>Length</u>
D	30'
<u>I.D.</u>	<u>O.D.</u>
3"	4 15/32
<u>Working Pressure</u>	<u>Burst Pressure</u>
9000 PSI	Standard Safety Multiplier Applies

Verification

<u>Type of Fitting</u>	<u>Coupling Method</u>
41/16 SK	Swage
<u>Die Size</u>	<u>Final O.D.</u>
5.12"	5.16"
<u>Hose Serial #</u>	<u>Hose Assembly Serial #</u>
6884	81610



Test Pressure
10000 PSI

Time Held at Test Pressure
6 1/4 Minutes

Actual Burst Pressure

Peak Pressure
10195 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Donnie Mclemore

Approved By: Bobby Fink

Donnie Mclemore

Bobby Fink

M I D W E S T
HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT			
Customer: LATSHAW DRILLING		P.O. Number: RIG#4	
HOSE SPECIFICATIONS			
Type: CHOKER LINE		Length: 30'	
I.D. 3" INCHES		O.D. 6" INCHES	
WORKING PRESSURE 5,000 PSI	TEST PRESSURE 10,000 PSI	BURST PRESSURE PSI	
COUPLINGS			
Type of End Fitting 4 1/16 5K FLANGE			
Type of Coupling: SWEDGED		MANUFACTURED BY MIDWEST HOSE & SPECIALTY	
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE 1 MIN.		ACTUAL BURST PRESSURE: 0 PSI	
COMMENTS: SO#81610 Hose is covered with stainless steel armour cover and wrapped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes			
Date: 3/2/2011	Tested By: BOBBY FINK	Approved: MENDI JACKSON	

Permit Conditions of Approval

API: 30-015-42672

OCD Reviewer	Condition
CSHAPARD	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string